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# ***JPRS Report***

# **Arms Control**

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# Arms Control

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**United Nations Envoy on Disarmament**  
*OW2911041989 Beijing XINHUA in English*  
*0111 GMT 29 Nov 89*

[Excerpts] United Nations, November 28 (XINHUA)—Chinese Ambassador Yu Mengjia today urged the international community to safeguard international peace and security by making arduous efforts and taking effective measures in four particular areas of common interest.

He said that, for the purpose of maintaining world peace and security, first, the disarmament process must be accelerated and arms race stopped, second, regional conflicts must be fairly and reasonably settled and regional "hot spots" eliminated, third, state-to-state relations must be properly handled, and fourth, a new international economic order must be established.

The ambassador, speaking at the first committee of the 44th UN session on the question of international security, pointed out that, while the international situation is moving from confrontation to dialogue and from tension to relaxation, "the improvement in the world situation does not make it trouble-free and many problems still await solution."

In the field of disarmament, he said, "even if the two superpowers have destroyed all their intermediate and shorter-range missiles, there is still the question of reducing their strategic nuclear weapons and other types of weapons.

"In order to secure international peace and security, no country should seek armament in excess of its defence need" and "the armaments of all countries should be used only for self-defence and not for armed invasion and intervention against other countries," he said.

Regional "hot spot" issues have not been resolved, he continued, and there are still many difficulties to overcome in seeking fair and reasonable solutions to regional conflicts, which have affected world peace and security, inflicting direct damage to a large number of Third World countries.

As to state-to-state relations, the ambassador emphasized that "attempts to interfere in the internal affairs of other countries through various means are still quite evident."

He said that "phenomena of the big bullying the small, the strong domineering over the weak, of interfering in the internal affairs of other countries...are still taking place frequently in international relations," and that if these practices are not stopped, there will be no tranquility and assurance for international peace and security. [passage omitted]

All these phenomena indicate that the factors causing turbulence and tension in the world are still in place, making the safeguarding of international peace and security a major question of universal concern.

He said that China, which is always ready, together with other countries, to fulfill its obligations under the UN Charter and endeavour to strengthen the UN role in safeguarding international peace and security. [sentence as received]

**Journal Views Nuclear Deterrent Force**

*HK2311085589 Hong Kong KUANG CHIAO CHING*  
*in Chinese No 206, 16 Nov 89 pp 64-69*

[Article by Ling Yu (0407 1342): "The Expansion of China's Nuclear Force"]

[Text] China has been in the nuclear club ever since it successfully exploded its first atom bomb on 16 October 1964. Later, with the successful refitting of aircraft capable of carrying nuclear weapons and the launching of nuclear missiles, China's nuclear weapons possessed genuine fighting capacity. China continued to expand its nuclear arsenal step by step, including land-based intercontinental missiles, submarine-launched ballistic missiles, other strategic nuclear weapons, and various kinds of tactical nuclear weapons.

The initial stage of China's research into nuclear weapons began in the late 1950's. It was chiefly taken charge of and conducted by the Fifth Research Institute of the Ministry of National Defense and the Nuclear Weapons Design and Research Institute of the Second Ministry of Machine Building. The scientist held in the greatest esteem at that time was Deng Jiaxian, who was acclaimed as the "founder of China's nuclear bombs." Given that the Soviet Union unilaterally tore up agreements and suspended nuclear technological aid to China, plus the strict blockade enforced on the mainland by foreign countries, Deng Jiaxian, together with his colleagues, succeeded in developing the first atom bomb within a few years. This was indeed not a simple thing to do.

**Overall Planning by the Seventh Ministry of Machine Building in 1964**

In November 1964, the CPC Central Committee and the State Council decided to set up the Seventh Ministry of Machine Building by taking the Fifth Research Institute of the Ministry of National Defense as the foundation and transferring some factories and units from the Third, Fourth, and Fifth Ministries of Machine Building, and the relevant departments, provinces, and municipalities. The ministry administered in a unified way such work as scientific research, design, trial production, and capital construction for the missile and rocket industry. In January 1965, President Liu Shaoqi appointed Wang Bingzhang as minister of the Seventh Ministry of Machine Building and in June of the same year, the State Council appointed Liu Youguang, Qian Xuesen, Liu Bingyan, Gu Guangshan, Zhang Fan, and Cao Guanglin as vice ministers.

Although China's nuclear-weapon-related technology (such as aircraft for carrying nuclear weapons) was not

advanced, the Chinese military authorities still devoted themselves to promoting the development of nuclear weapons so that they could become an effective second strike force.

China's nuclear deterrent force consists chiefly of land-based ballistic missiles but now Beijing is also vigorously developing the submarine-launched system. Moreover, the Air Force also has the means of using nuclear weapons on a small scale.

### The '2d Artillery's' Equipment

At present, the Chinese Air Force possesses about 120 "Hong-6" medium-sized old fashioned bombers which constitute the pillar of the airborne nuclear weapon delivery force. Moreover, a small number of refitted "Hong-5" bombers and a number of "Qiang-5" ground attack planes can also carry tactical nuclear weapons and execute nuclear bombing missions.

China's strategic missile units are called the "2d Artillery." Its leading body was set up on 1 July 1966, with Xiang Shouzhi as commander and Li Tianhuan as political commissar.

The existing weapon systems in the 2d Artillery include "Dongfeng [East Wind]-2" (CSS-1) medium-range ballistic missiles and "Dongfeng-3" (CSS-2) intermediate-range mobile ballistic missiles, and "Dongfeng-4" (CSS-3) limited-range intercontinental ballistic missiles [ICBM] and the "Dongfeng-5" (CSS-4) fixed-site ICBM. Because they are of 1960's or early 1970's technology, these missiles use liquid propellant and each missile carries only one warhead. Of these, the "Dongfeng-5" is the most powerful and has the longest range. With a range of 12,000 km, it can carry a hydrogen warhead with an equivalent of 4 million tons of TNT. Launched in a full-range test on 10 May 1980, the "Dongfeng-5" missile landed in the South Pacific. The successful test greatly increased China's nuclear deterrent force.

With the successful launching of three space sounding satellites into orbit using a "Fengbao [Windstorm]-1" carrier rocket in September 1981, China became the fourth country in the world with the technology to "launch multiple satellites using one rocket." This also meant that China had the technological conditions to develop multiple independently targeted reentry vehicles [MIRV].

China is currently developing the next generation of nuclear missiles. According to a Western analyst, China will equip the 2d Artillery with MIRVs using solid state propellant in the mid-1990's. These missiles have a longer range and higher accuracy.

The carrier rockets for tactical nuclear weapons include those similar to the Soviet "Frog" series long-range missiles and the U.S. "Pershing 1" short-range nuclear missiles. China is also strengthening its tactical missile force. According to a Chinese press report, China is developing a type of "supersonic, minimum altitude,

autonomic" cruise missile "with over-the-horizon attack capability and guidance system."

### Successful Development of Submarine-Launched Missiles

When a nuclear submarine carrying tactical ballistic missiles cruises in the vastness of the sea, it is difficult for the enemy to locate its exact position. For this reason, it can take good cover and has a strong survival capability. When it attacks an enemy target with rockets it also has the benefit of surprise. Therefore, nuclear submarines carrying ballistic missiles are a very important component part of a nuclear deterrent force. They also pose the most dangerous threat to the enemy.

In mid-October 1957, Marshal Nie Rongzhen signed the "Agreement on New Technology for National Defense" with the Soviet Union on behalf of China. According to the agreement, Moscow would supply China with an atomic bomb teaching model and in the field of naval strategic weapons, the manufacturing technology of G-Class conventional-powered ballistic missile submarines and the SS-N-4 "Shirt" [chen yi 6000 5902] submarine-launched ballistic missiles and the nuclear warheads. In 1958, however, Moscow proposed to Beijing the setting up of a Sino-Soviet "Joint Naval Fleet" in the headquarters of which it wanted to hold absolute authority. But Beijing refused to sacrifice its state sovereignty. Thereupon, the Soviet Union suspended the transfer of advanced military technology to China, including nuclear technology. By 1964, Sino-Soviet relations had completely broken down. China had to rely on its own efforts and, at the same time, increase its fighting force to deal with the encirclement by the United States and the Soviet Union.

Given the lack of Soviet technological aid, China utilized the blueprint of the G-Class missile submarine which had been obtained before the breakdown of relationships. Building of a submarine of this class started at Dalian Red Flag Dockyard in the middle of 1962. The submarine was launched in 1964 and started trials in 1965. So far, China has built only one G-Class submarine. It has been used for research, development, testing, and platform assessment relating to submarine-launched ballistic missiles. However, before unilaterally tearing up agreements and withdrawing its experts, the Soviet Union had not transferred the technology on the SS-N-4 "Shirt" missiles to China. Therefore, China could only rely on itself to develop submarine-launched ballistic missiles.

In mid-1982, China successfully underwater-launched its own "Julang [Huge Wave] No. 1" submarine-launched ballistic missiles from the G-Class submarine. It had taken China 25 years altogether, from starting the submarine-launched strategic missile project to successfully launching the "Julang No. 1" missile from underwater.

The most significant underwater launch test was successfully conducted in September 1988, when a "Xia" [1115]

class ballistic missile nuclear submarine launched a "Julang No. 1" missile. This indicated that China's submarine-launched strategic ballistic missiles had entered the practical stage and had genuinely developed into an underwater nuclear deterrent force. In the view of Western analysts, because China had faced important technological difficulties in developing missile nuclear submarines, especially the problem of stabilizing the submarines during missile launch, the development plan was delayed.

Although China's submarine-launched ballistic missiles have entered the stage of actual combat, Western analysts do not expect that the main strength of China's strategic nuclear force will shift from land-based to submarine-launched missiles. This is because, in the course of developing nuclear weapons over the past 3 decades, Beijing has invested vast resources in the land-based system and cannot bear the expense of rebuilding a nuclear force with submarines as the main strength.

#### Development Trend in Chinese Nuclear Submarines

China will build four to eight "Xia" class nuclear submarines to maintain two to four submarine routinely on patrol. China will also further develop the "Julang" series submarine-launched missiles and make particular efforts to increase their range. Because a "Julang No. 1" missile has a range of only 2,000 to 3,000 km, a "Xia" class nuclear submarine will have to approach the coastal waters of the other party—the Soviet Union or the United States—in order to launch the missiles. But since the Soviet Union and the United States have both mastered advanced anti-submarine technology, it will be difficult for Chinese submarines to come so close to enemy coastal waters.

#### Tactical Nuclear Weapons Receive Growing Attention

While gradually improving its strategic nuclear force, Beijing has also started investing in the research and development of tactical nuclear weapons. As early as the early 1980's, JIEFANGJUN BAO carried an article saying that in a future war (against the Soviet Union), in order to attain the aim of a "blitz" war of quick decision, the enemy (the Soviet Union) will probably resort to nuclear weapons and, if we (China) also use nuclear weapons in counterattacks, we shall have a corresponding force to contend with the enemy. The article also pointed out: The use of tactical nuclear weapons can be confined to battlefields and, because both parties have strategic nuclear weapons to deter each other, the enemy will probably not start an all-out nuclear war rashly. This article showed that some people in the Chinese military had realized the practicality of tactical nuclear weapons and, at the same time, hinted that China already had tactical nuclear weapons.

In fact, in recent years China has shown to the outside world the successful development of its "M Series" tactical missiles. It has also indirectly disclosed that

Beijing possessed tactical nuclear weapons and urgently wanted to obtain delivery platforms. Western analysts pointed out that China's recently detected underground nuclear tests included low equivalent-level nuclear tests of less than 20,000 tons TNT.

The low equivalent-level underground nuclear test conducted in September 1988 was even regarded as proof that China is developing a neutron bomb. This is because Beijing's GUANGMING RIBAO used the words "nuclear weapon of the third generation" when reporting this nuclear test.

The neutron bomb is a nuclear weapon of the third generation, which pollutes a small area in a short time and which can kill people without destroying things. It is especially suitable in partial battlefields. In the early 1980's, Zhang Aiping, who presided over the work of the State Commission for Science, Technology, and Industry for National Defense, wrote a poem, saying: "There is nothing difficult about neutron bombs." This remark gave people much food for thought.

There is still dispute in China on whether it is necessary to equip with neutron bombs. Those with an affirmative view hold that if China wants to develop neutron bombs, there will not be any great technological difficulties and, if they are used to cope with large-scale offensives by Soviet armored troops, the effect will be very good. Moreover, neutron bombs cause little radioactive pollution and the radioactive effect on Inner Mongolia and Xinjiang, which will probably become a battlefield in the future, will also be limited. If we equip a small unit with neutron bombs, we can save the expense of building thousands of tanks, which would come to several billion yuan in total.

Those of the opposing view hold that developing neutron bombs will incur huge expense. Moreover, once neutron bombs are used, they will probably lead to all-out nuclear war.

Over the past 5 years, China's 2d Artillery Unit has conducted over 120 exercises of all kinds, big and small. These exercises have all been conducted with the Sino-Soviet border war in mind. The Shenyang Military Command, which protects China's heartland of heavy industry, has also shifted to the study of defensive operations at the divisional level under a nuclear war environment, including how to protect fortifications when subjected to nuclear attack. These exercises show that the Chinese military authorities believe that in future large-scale war, a large-scale nuclear theater will be there from the very beginning.

Since the 1950's, China has concentrated its limited resources on the development of a strategic nuclear force which can play a deterrent role. This strategy has been successful. China's ability to use "Dongfeng-5" intercontinental missiles and "Julang-1" submarine-launched missiles in actual combat has also made the Soviet Union and the United States pay more attention to China's strategic force.

## INTRABLOC AFFAIRS

**Delegation Head on Vienna CFE Talks**

*AU1311091789 East Berlin NEUES DEUTSCHLAND  
in German 8 Nov 89 p 5*

[Interview With Ambassador Klaus-Dieter Ernst, head of the GDR delegation at the negotiations on conventional forces in Europe, by Olaf Standke: "Vienna: Hopes and Obstacles"; date and place not given]

[Text] Question: The signals from Vienna's Hofburg Conference Center are contradictory. On the one hand, there is the intention to put a complete treaty on the table in 1990; on the other, so far it has not even been possible to agree on the definition of a tank. How do these things fit?

Answer: First of all, the positive things: I think that we have a sensible working structure and a sensible atmosphere—businesslike, subject-oriented, and very specific. Both sides have submitted numerous working papers and have moved toward each other in conceptual questions. One example: The Warsaw Pact proposed six spheres of reductions. Originally, NATO wanted to exclude airplanes, helicopters, and personnel strengths and to limit itself only to tanks, armored combat vehicles, and artillery systems. Now we are negotiating on all categories. A common definition has already been found for artillery.

Question: Moving toward each other—this also means readiness for compromises by our side.

Answer: Correct, and this readiness exists, of course. Thus, with the recently presented working paper on the question of combat planes coming under the tactical or frontal aviation and combat helicopters, we have tried to take into consideration the positions of the NATO states and their security interests. NATO conceded this, but it is not yet satisfied. In this field we have to have further negotiations.

Question: And the reverse side of the coin?

Answer: In short, if we want to present a treaty next year, the current speed of negotiations is not sufficient. The details of what is to be reduced and how these reductions are to be carried out involve a number of still open, complicated questions.

Question: You paid tribute to the other side's steps, which promote negotiations. On the other hand, one has repeatedly gained the impression that NATO wants one-sided advantages.

Answer: In particular, from NATO headquarters we hear: An agreement? This is possible immediately, but on our conditions. NATO is a purely defensive alliance, and thus the demand for ensuring an inability to attack does not apply to it at all.

Question: What will be most important at the fourth round of negotiations, which will start on 9 November?

Answer: There are still differences of opinion on the question of planes. We still have considerable contradictions concerning troop strengths; among other things, NATO wants to exclude the 150,000 soldiers from NATO states who are stationed in the FRG. Concerning the agreement on regional thresholds, NATO wants to ignore the technical equipment in its depots. And it is also important to find solutions for the regional differentiation of the reduction area between the Atlantic and the Urals. These are the main problems now. At the same time, the five definitions of the elements of reduction, which are still lacking, have to be found. Finally, we have to bring the existing proposals on verification, information, and stabilizing measures closer to each other.

Question: These almost seem to be too many issues for one round.

Answer: It is difficult to say whether all this can be managed within 6 weeks. The entire process certainly also needs political stimuli. Therefore, we proposed a meeting of the foreign ministers at the beginning of next year.

Question: An important problem in Vienna is verification. While in the past the socialist countries have practically been accused of "being afraid of verification," it is now shown that some Western countries are intensively resisting far-reaching inspections in armament enterprises.

Answer: Our opinion is: Those who say yes to comprehensive arms reductions, to a new security structure in Europe, also have to say yes unreservedly to the verification of such agreements. We need a sensible, effective, and also financially realistic verification system, with on-site inspections, observation posts, the use of technical means, etc.

Question: It is also striking that the Western side often speaks about a first agreement in Vienna.

Answer: First of all, we want an agreement that covers the six categories I mentioned at the beginning. However, this certainly does not reach the goal of the entire negotiations—both sides' inability to attack. Thus, we will have to think about further steps.

Question: We spoke about differences within NATO. Are there not also specific national interests within the Warsaw Pact?

Answer: Yes, of course; this is normal. They arise from the geographical location, historical experiences, political priorities, etc. The clearer the interests of every member state become, the easier it is, in my view, to formulate common positions. The GDR, for instance, is not very happy about the NATO proposal to concentrate 60 percent of all allowable tanks in the Western part of central Europe. We are the first to be confronted with them. Expressing our interests in this connection is not

only our right but our duty if we want to pursue a sensible policy for our citizens. However, despite all the problems, cooperation among the seven alliance states is in general proceeding well.

#### **Pact Experts Discuss CW Control Measures**

*LD2711224989 East Berlin ADN International Service in German 1902 GMT 27 Nov 89*

[Text] Berlin (ADN)—Experts from the Warsaw Pact countries met in Berlin today for an exchange of experiences and opinions on their countries' efforts to control the export of chemicals which are designed for peaceful purposes, but which could also be used for the manufacture of chemical weapons. Such measures were part of the endeavors to bring about swift agreement on a treaty banning chemical weapons, according to a communication from the GDR Foreign Ministry. The experts had apparently welcomed the results of the conferences against chemical weapons held this year in Paris and Canberra.

#### **Pact Defense Ministers Meet in Budapest**

##### **Hungarian Defense Official Interviewed**

*LD2711184189 Budapest Domestic Service in Hungarian 1730 GMT 27 Nov 89*

[Text] The Warsaw Pact defense ministers are conferring in Budapest. Since it is a very topical meeting, the participants will probably discuss updating the 20-year-old military treaty. Laszlo Gardai interviews Colonel Gyorgy Keleti, staff member of the Defense Ministry:

[Begin recording] [Gardai] Have all the ministers arrived?

[Keleti] All except one. From Czechoslovakia it is not the defense minister but the highest ranking deputy of the defense minister who has come to Budapest.

[Gardai] To what extent is the fact that this body is conferring precisely at this time connected with the events taking place in East Europe?

[Keleti] There is no connection whatsoever from the standpoint that this corporate session would be directed toward assessing changing events. It must be known in this regard that the individual countries follow in sequence according to the Russian alphabet. Last December it was Bulgaria's turn; now it is Hungary's turn.

[Gardai] So there is nothing extraordinary in this. What will they talk about? What will they discuss?

[Keleti] Of course, like every year—after all this body has been functioning for 20 years—they will debate the topical issues concerning cooperation and the Warsaw Pact. I said just now that the consultation has nothing to do with their trying to change anything; nevertheless, I

would say that it is, after all, to a certain extent, connected with changes in East Europe. It is expected that the modernization of the Warsaw Pact's military organization will come up for discussion. This is new. It is also expected that the points on the agenda will be examined from aspects such as the joint defense doctrine. This, too, is an idea that is somewhat more than 2 years old. The ministers will also take into consideration the results of the discussions that are in progress in Vienna and that are expected to lead to an Armed Forces reduction. [end recording]

#### **Meeting Participants**

*LD2711212189 Budapest MTI in English 1942 GMT 27 Nov 89*

[Text] Budapest, November 27 (MTI)—Participants at the forthcoming 24th session of the defence ministers' committee of Warsaw Treaty member states arrived in Budapest on Monday afternoon.

They include Army General Petr Lushev, commander-in-chief of the United Armed Forces of Warsaw Treaty member states and Army General Vladimir Lobov, chief-of-staff of the United Armed Forces, Army General Dobri Dzhurov, minister of national defence of the People's Republic of Bulgaria, Emil Liska, engineer lieutenant general, first deputy minister of national defence of the Socialist Republic of Czechoslovakia, Army General Florian Siwicki, minister of national defence of the Republic of Poland, vice-admiral Theodor Hoffmann, minister of national defence of the GDR, Colonel General Vasile Milea, minister of national defence of the Socialist Republic of Romania, and Army General Dmitri Yazov, minister of defence of the Soviet Union.

The delegations were met at Ferihegy Airport by Colonel General Ferenc Karpati, minister of defence, as well as members of the Hungarian delegation participating in the talks.

#### **Meeting Opens 28 Nov**

*LD2811144989 Budapest MTI in English 1244 GMT 28 Nov 89*

[Text] Budapest, November 28 (MTI)—The session of the Warsaw Treaty Defence Ministers' Committee opened in Budapest Tuesday. Attending are Army General Pyotr Lushev, commander-in-chief of the Warsaw Treaty United Armed Forces, and Army General Vladimir Lobov, deputy commander-in-chief.

In his opening, Colonel-General Ferenc Karpati, minister of defence, pointed out the gaining ground of favourable tendencies in international life and the easing of East-West relations. He expressed his conviction that the transformation of international relations was primarily due to the new political thinking adopted by the Soviet Leadership, its greater spirit of compromise and

higher flexibility, accompanied by the constructive foreign policy of Warsaw Treaty members and the change in Western attitudes.

The defense minister was of the opinion that the international image of the organization and the credibility of its disarmament intentions had improved in the wake of proposals, compromises and unilateral measures which did not affect their security interests and mitigated traditional Western fears of military threat from the Warsaw Treaty.

The colonel-general noted with satisfaction that the alliance, including the Soviet Union, had retained the initiative in the disarmament process up to the present. As the danger of mutual and complete annihilation continues to exist, efforts should be made to gradually reduce the vast nuclear arsenals. The Warsaw Treaty members consistently work to render disarmament lasting and irreversible.

For this reason, the Warsaw Treaty members take a resolute stand against the endeavours of forces demanding compensatory military measures, as they are aware that rearmament with new types of weapons may reduce or even invalidate the favourable effects of the agreement on the abolition of medium and shorter-range nuclear weapons.

Mr Karpati stressed Hungary's conviction that all countries of the alliance are interested in reaching a comprehensive agreement in the Vienna talks which would help to eradicate the elements of suspicion and hostility from East-West relations, and contribute to a new security relationship and partnership between the countries.

Mr Karpati said that the agreement on the concrete reduction of armed forces and armaments in Europe requires profound changes in the doctrines of both the NATO and Warsaw Treaty, and stemming from this are the demand and possibility that the new security policy concept and statements of principle of the socialist countries should be reinforced not only from the political side of doctrines but also from military-technical aspects.

In conclusion, Mr Karpati said that, on the basis of the Bucharest Resolution of the Warsaw Treaty Political Consultative Committee in July 1989 and the previous decisions of the Defence Ministers' Committee, the sides are to put forward and discuss five important and topical issues that serve the modernization of the joint armed forces and their defensive doctrine, and the cooperation of brothers-in-arms. The consultation is to end with the acceptance of a closing document on Thursday.

#### **Hungary's Lushev on 'Depoliticization' of Pact**

*LD2911185289 Budapest Domestic Service in Hungarian 1730 GMT 29 Nov 89*

[Text] [Announcer] First, on the detailed political reports, we broadcast a despatch by Laszlo Gardai from the Warsaw Pact defense ministers news conference:

[Gardai] The consultations ended earlier than planned but the news conference started later than envisioned because, before it, [USSR Defense Minister] General Yazov acquainted Miklos Nemeth with the negotiations in the Budapest Parliament. In return, the Hungarian prime minister informed the commanders of the Warsaw Pact armies about the country's political and economic situation. Miklos Nemeth said, among other things, that the Warsaw Pact must be strengthened both politically and militarily.

During the 2 days of consultation, an agreement on the technical details of implementing the so-called defense doctrine was signed. The condition of the change is that this should take place in the spirit of mutual security, equality, and with the necessary guarantees, General Lushev [commander in chief of the Warsaw Pact joint armed forces] said at the news conference. Despite the fact that political changes in the various East European countries are different, there is a need for cooperation, he said.

In reply to a question, Defense Minister Ferenc Karpati said that the defense ministers had exchanged views about the East European changes too, but all of this took place only outside the agenda. The Hungarian defense minister did not mention difference of views.

On the other hand, the meeting discussed the celebration of the Warsaw Pact's 35th anniversary planned for next year.

Regarding the question of whether the depoliticization process, which has already begun within the Warsaw Pact, is being felt yet, the Soviet commander in chief answered with a decisive no, while the Hungarian defense minister put it this way: In this respect, significant differences still exist between the individual countries.

At the same time, the condition for a united Warsaw Pact can only be an army that is independent of national ideologies, General Lushev said.

## **CZECHOSLOVAKIA**

### **75,000 Soviet Troops To Withdraw From CSSR**

#### **Soviet Forces Commander Speaks**

*LD0112000189 Prague Domestic Service in Czech 2300 GMT 30 Nov 89*

[Text] Lieutenant-General Eduard Vorobyev, commander of the Central Group of Soviet Forces in the CSSR, has said that some 75,000 members of the Soviet Army are to leave the CSSR definitively. However, he did not give any precise date.

In an interview for British television, Gen Vorobyev also said that the Soviet units did not intend to interfere in internal developments in the CSSR.

### RUDE PRAVO on Withdrawal

LD0112092389 Prague CTK in English  
0753 GMT 1 Dec 89

[Text] Prague Dec 1 (CTK)—The question of the stay of Soviet forces in Czechoslovak territory as raised by Premier Ladislav Adamec last Wednesday is topical and must be dealt with. RUDE PRAVO wrote today.

The daily added that the whole problem of the stay of foreign forces on the territory of foreign states has been discussed for already a long time and the time has come now for a solution to be found.

The stationing of a group of Soviet forces on Czechoslovak territory is the consequence of the military solution of the situation in Czechoslovakia in August 1968. The Soviet government of Premier Aleksey Kosygin and the Czechoslovak government of Premier Oldrich Cernik signed an agreement on a temporary stay of Soviet forces in Czechoslovakia, i.e. with a time limit. And now already more than twenty years have passed, the daily said.

The Czechoslovak side has as yet held the stand that the announcement of the number of Soviet armed forces in Czechoslovakia is the affair of the Soviet side. Therefore no official figure has been given to date. Foreign sources estimate the number of Soviet soldiers and army officers staying now in Czechoslovakia at some 80,000.

The paper pointed out that at the time of the policy of confrontation European states considered the presence of foreign forces on their territories as an irreplaceable means to ensure their own security. "However, the situation has changed. The sound idea that security must be ensured first of all by political means and our own armed forces is gaining ground. Every reasonable and sober man understands that an agreement of all states is necessary, i.e. that political preconditions on the basis of a legal agreement must be created for the withdrawal of foreign forces," the daily said.

### Peace Committee Asks for Withdrawal

AU0112144989 Prague RUDE PRAVO in Czech  
30 Nov 89 p 6

[Text] Prague (CTK)—The Presidium of the Czechoslovak Peace Committee has sent to the highest Soviet representative, Mikhail Gorbachev, a telegram which states:

We are turning to you—during your meeting with President Bush to take a joint step and focus attention on bridging the differences between the blocs and on dissolving at least the NATO and Warsaw Pact military organizations, on the simultaneous removal of any foreign military presence and foreign military bases.

We are calling on you, on the Soviet Union to take a step in that direction and withdraw all its troops from CSSR territory in the shortest possible time.

### Jakes Resigns as State Defense Council Chairman

LD2811142589 Prague Domestic Service  
in Slovak 1400 GMT 28 Nov 89

[Text] Gustav Husak, president of the Republic, accepted the request of Milos Jakes today to be released from the post of chairman of the State Defense Council in accordance with the Constitutional law on the State Defense Council.

## GERMAN DEMOCRATIC REPUBLIC

### Academics, Officers Call for Military Reforms

LD2911185389 East Berlin ADN International Service  
in German 1652 GMT 29 Nov 89

[Excerpts] Berlin (ADN)—Six well-known GDR peace researchers favor military reforms in the GDR. A statement conveyed to ADN today underlines that this should be linked with the already introduced reduction and restructuring of the National People's Army (NVA) toward a defensive character. "If the character of our society is radically democratized then our armed forces must change equally radically. The military reform presupposes from the beginning openness and accepting the ideas of all the democratic parties and movements. [no closing quotemarks as received]

Essentially the aim must be to redefine the function of the NVA and its position in society. It must be an army of the entire people and its state, free of ties with a single political party and a single ideology. The peace researchers see the function of the NVA exclusively in making a contribution to ensuring the GDR's external security and preserving peace in Europe. In view of the opposing military blocs this is only possible within the framework of the Warsaw Pact.

The authors proceed on the basis that the GDR Armed Forces will be subordinate exclusively to the People's Chamber and the organs it forms and controls. [passage omitted]

The experts call for the preservation of the military service anchored in the Constitution as a democratic form of military peace preservation. However, in the event of drastic disarmament agreements between the East and West, they see a reduction of military service to 12 months as expedient. At the same time, they support the introduction of a constitutional right to alternative civilian military service, while taking social and civilian requirements into account. [passage omitted]

The statement is signed by Dr Klaus Benjowski, secretary of the Scientific Council for Peace Research of the Academy of Sciences; Professor Dr Bernhard Gonnermann, Humboldt University; Major General Prof Dr Rolf Lehmann and naval Captain Prof Dr Wolfgang Scheler, both of the Friedrich Engels Military Academy; Colonel Prof Dr Wilfried Schreiber, Wilhelm Pieck

Military Policy College; and Dr Wolfgang Schwarz, GDR Institute of International Politics and Economy.

### **New Defense Minister Examines Goals**

*AU2911153289 East Berlin NATIONAL-ZEITUNG  
in German 22 Nov 89 p 3*

[News conference by Minister of National Defense Admiral Theodor Hoffmann following a commanders' meeting in Berlin on 20 November: "A Defense Minister to Whom You Can Talk"]

[Text] [Question] Mr. Minister, when did you hear about your good luck?

[Hoffmann] It came as a surprise. I was called by the minister of national defense last Wednesday [15 November] when I was just instructing the chiefs and commanders who are assigned to me on their further work. He said that I should get into my car and come to the Ministry of National Defense. I got into my car and left unsuspectingly. Army General Kessler then told me that I had to meet the chairman of the National Defense Council in the afternoon for a talk. The chairman informed me about my future tasks.

### **I Know What a Sailor Talks About in the Lavatory**

Well, I did not have much time to consider the proposal, and I think that in such a situation you do not take such a position out of military ambition, but I decided to face this responsibility. In doing so, I assumed that I could rely on a very good collective of deputy defense ministers as well as on the chiefs of the armed services. That was the starting point. Much is new to me, because I am an officer who started as a sailor 37 years ago, an officer who has never worked at the ministerial level, but who knows life in the forces, and who knows what a sailor talks about in the lavatory. I think that this is also very important.

[Question] In your address to the commanders, you discussed the desolate—if we may say so—state of the Armed Forces. How was such a development at all possible?

### **Assess the State of Affairs Realistically**

[Hoffmann] I would not describe the state of the Armed Forces as desolate; however, I advocate a realistic assessment. I would also like to stress that the National People's Army [NVA] is part of our people and does not live in a vacuum. Whatever concerns the GDR citizens also concerns the NVA members. There is one more thing: The members of the Army, specifically the professional cadres, are worried that occasionally they meet with a hostile attitude, which they think is unjustified. That worries us very much. Nonetheless, their readiness to protect our country is considerable, as is their preparedness to help in our national economy wherever this is necessary—and they are even doing so on their days

off and without pay. This is an experience from my time in office as chief of the People's Navy.

[Question] In the government statement of the new prime minister, the possibility of a civilian substitute service is mentioned. Are there any concrete ideas in this respect?

[Hoffmann] For the defense minister, the government statement is the starting point of his whole work. That is the basis on which we organize our work. I can state here that we have already worked out a proposal for the civilian substitute service. It will be submitted to the People's Chamber for resolution very soon.

### **Use the Experiences of Others**

Then commissions will have to be founded in the kreises, which will decide on who will do civilian substitute service. It is not possible at this point to define the percentage of those who will do this service. We expect about 85 percent of the young men to do basic military service or military service for a specific period of time. Time will tell.

[Question] What time schedule to you envisage regarding the democratization process and reforming our Army?

[Hoffmann] The concept of military reform will be worked out in December. Then it can be discussed by the public, before the reform program is given definite shape. This program will contain short-term measures, and the main part will be defined by the end of 1990, after the training year has been concluded. Then the Army will be restructured. In doing so, we must not act rashly; everything must be well considered. Nonetheless, we must act quickly.

Regarding democratization, I would say that the principle of individual leadership of the Army and the units on the basis of collective discussions will remain. That has proved successful, as have many official decrees and commands. However, they must be discussed with those who have to fulfill them. I believe that life in the Army will be oriented at the development of democracy in our country. Everybody is called upon to turn toward man.

[Question] You stressed that military reform will be publicly discussed. How about the GDR's military doctrine?

[Hoffmann] Military doctrine will be submitted for discussion to the People's Chamber very soon, as will problems of military legislation and disarmament. If we assume that the Vienna negotiations will be crowned with success, our highest people's representation must think about what the servicemen resigning from active military service will do. Decisions are necessary in this respect.

[Question] In connection with the military reform, how will cooperation of the units with the respective territory develop?

[Hoffmann] In my view, it is necessary to raise this cooperation to a higher level. I propose achieving agreement on a local level, defining the NVA's possible contribution to the development of the respective territory. I mean by this also a better utilization of NVA facilities by the citizens.

I can say from my former work that I have good experiences regarding cooperation with combines that have to do with merchant shipping, or cooperation with the maritime office; I will use my experience for my new office. By the way, this will also help strengthen the relationship between the people and the Army.

[Question] At the commanders' meeting, the possibility of extending the annual leave for soldiers in basic military service was discussed. Could you tell us anything concrete in this respect? Is the NVA possibly also considering a reduction in basic military service?

#### **A Reduction in Military Service Depends on the Vienna Negotiations**

[Hoffmann] The possibility of reducing military service depends on the continuation of the Vienna negotiations and on the number of men who are ready to do military service. We will study such a reduction; however, it would be too early yet to definitely say, "Yes, we are going to reduce." I can say that a reduction has been carried out in the People's Navy. In the past, it had different periods of service than the NVA. Now they have been adjusted. Now means as of 1990. I cannot say anything about changes regarding annual leave.

[Question] Regarding disarmament, how do you view the state of disarmament efforts, and how will they continue in 1990?

[Hoffmann] Our Armed Forces are absolutely fulfilling the plan regarding disarmament measures. They will be concluded by the end of November 1990. There will be more reductions. Meanwhile, we also hear that the FRG and the United States have announced considerable reductions. That makes us optimistic. However, no concrete steps have been taken.

[Question] Are you interested in holding talks with FRG Defense Minister Stoltenberg?

[Hoffmann] Of course, I am. However, I must say in this respect that an offer for talks was made by our side. As you know, my predecessor stated his readiness to organize a meeting here or there. I state very clearly: The offer is still valid.

[Question] Does that mean that you are waiting?

[Hoffmann] I have been in office for only a few days. Why do you not ask me this question in a week from now....

#### **Almost Everybody May Travel**

[Question] GDR citizens have been allowed since a few days ago to travel to the West unhindered. Does that also hold true for servicemen?

[Hoffmann] Everybody may travel, including soldiers in basic military service. Only those who are in charge of special secrets cannot travel. That is so in every army.

[Question] With what travel document can servicemen go to the West, with the military identity card?

[Hoffmann] No, every serviceman can get his personal identity card and can get a visa.

[Question] Do you have any problems with the formulation "world without weapons" or "peace without weapons"?

[Hoffmann] No, I would not have any problems with this formulation. However, that depends not only on us.

[Question] Regarding the reform of political education, are there any plans to give parties outside the SED more leeway of action than they have had in the past?

[Hoffmann] Basically, there have never been any restrictions. All parties have the same right to work in our country. For instance, shortly before I entered office in the Ministry, I received the Rostock Bezirk leadership of the National Democratic Party of Germany at our officers' college.

We discussed the military-political situation, and the guests made themselves familiar with the officers' training. We continue to be open to such examples. It is also conceivable that members—no matter of what party—get together at regular meetings in their units.

[Question] A question on terminology: So far, there has always been talk about the SED's military policy; now you are talking about the GDR's military policy. What does that mean?

[Hoffmann] You have rightly noted that the terminology has also changed. In this case, every party pursues its military policy. The SED is doing so, too. However, as the ministry, we fulfill our tasks on the basis of the GDR's military policy. Therefore, I must stress once again that we orient ourselves by the government statement and nothing else. I am only accountable to my prime minister and to the People's Chamber.

[Question] We had considerable difficulty in the past in using certain terms. Do we speak about the reform of the Armed Forces or about military reform?

[Hoffmann] The only important thing will be the substance. Military reform is perhaps not a bad term, considering the military reformers in history, such as those of the wars of liberation.

[Question] You said that it would be necessary to use science to a larger extent, to take scientific know-how

more into account and to implement it, and to think about alternative solutions. Does that mean that scientific work has not been considered sufficiently?

#### Use Scientific Papers to a Larger Extent

[Hoffmann] What I mean is that the many scientific papers and theses should not be locked away in drawers but should be filled with life.

We have a major offer from scientists, which I want to make use of. In this respect, we should not only approach the military but also civilian scientists.

[Question] Peace researchers, for instance?

[Hoffmann] Yes, we do not intend to work out the military reform first, and ask scientists afterwards if it is good or bad. It must be the other way around.

[Question] Are you a friend of military parades?

[Hoffmann] Military parades entail a lot of work and expense. Strictly speaking, they have always been held for the people.

#### Parades Are Not Necessary

But I think that the chairman of the National Defense Committee and spokesman of the SED group in the People's Chamber, Wolfgang Herger, made clear statements on this issue in the People's Chamber session. I fully back his statements. Parades are not necessary for our self-representation. We will simply not hold such parades any more. Maybe every 10 years, like the fleet parades which have always appealed very much to the people. Be that as it may—I do not have to decide this; that is the state leadership's business.

[Question] You said in your speech that the Armed Forces will be open to the people. What does that mean?

#### Meetings To Get Acquainted

[Hoffmann] It may mean a lot, including explaining military policy, opening the gates of the barracks to create possibilities of meetings to get acquainted with the soldiers' life and training, and possibly the common use of cultural and sports facilities for common leisure-time activities.

[Question] This opening of the Army certainly also includes the fact that the minister meets the press in an as unbureaucratic and relaxed way as he has done today....

[Hoffmann] I not only meet the press very unbureaucratically; I will also meet the members of the Army and the people very unbureaucratically. My doors will be open to anyone who wants to see me. I gave the head of my secretariat relevant instructions this morning. I want to be a defense minister to whom you can talk.

[Question] Will you visit the troops?

[Hoffmann] I will use my time in the best possible way to get acquainted with the troops. I plan to visit the border troops in the Berlin region on Thursday [23 November], because they were exposed to particular stress in the past. I want to acquaint myself further with their conditions of service and life, and I want to express my appreciation for the work they have done.

However, I am equally certain that I will not visit the People's Navy very soon, because I am sufficiently familiar with the Navy.

[Question] Prime Minister Modrow moved from Dresden to Berlin and is now temporarily living in the guest house of the Council of Ministers. Have you found an apartment here in Strausberg?

[Hoffmann] I am still looking for an apartment.

[Question] Who is dealing with your application?

[Hoffmann] The housing administration of the National People's Army. For the time being, I still live in Rostock, and here in Strausberg I have also been put into a guest house.

By the way, I am very much a family man, and I attach considerable importance to moving soon. Whether that will be the case before Christmas, I do not know at this point. Currently, I do not think it is bad that my family is not here, because I have to make myself familiar with so many things.

#### Defense Minister Reasserts Role of Army

*LD2211223589 East Berlin ADN International Service in German 1704 GMT 22 Nov 89*

[Text] Rostock (ADN)—The members of the National People's Army [NVA] of the GDR are firmly resolved to fulfill their constitutional mission and to securing peace by means of a high state of defense readiness, for their own people and for neighboring peoples, GDR Defense Minister Admiral Theodor Hoffmann told ADN this today. Reacting to a demand from New Forum in Rostock for a demilitarization of the GDR, Hoffmann stated: "We start from the position that the defense of the GDR must be guaranteed and that the NVA, as the pivot of national defense, fulfills the task arising from that in the socialist military coalition." He also referred to the government statement by Premier Hans Modrow, which confirms that the GDR supports each and every disarmament initiative, strives for rapid successes at the Vienna negotiations, and supports the safeguarding of defense readiness according to the principle of equal security. If NATO reduces its armed forces, the minister said, then the Warsaw Pact will also further reduce its potential. "That also applies to the GDR. In this connection we must, however, stress that there have yet been no practical reactions from NATO to the unilateral concessions implemented by the socialist states in the sphere of disarmament." In Hoffmann's words, the military-political situation is now not so tense, but this

is not irreversible either. "And we have to face this." It remains the NVA's main task to guarantee the secure protection of the GDR externally. It is precisely the current complicated situation that requires high security.

### **Genscher Calls for Disarmament in GDR Interview**

*AU1611165789 Hamburg DPA in German  
1533 GMT 16 Nov 89*

[Text] Bonn—Foreign Minister Hans-Dietrich Genscher expressed the view on East German television that the changes in the GDR also open up new possibilities in foreign policy for cooperation between the two German states. This applies particularly to initiatives aimed at advancing the disarmament process in Europe, Genscher stated in an interview prepared in the Foreign Office in Bonn on 16 November for the GDR Television 1 "Objektiv" program.

All sides must be interested in seeing that disarmament does not lag behind political, economic, and human developments, the minister stated. The FRG and GDR should see to it in their alliance system that new impulses are provided for the disarmament process.

According to a Foreign Office spokesman, this was the first interview that the GDR television conducted with Genscher. Members of GDR Television 1 approached Genscher in Brussels on 6 November to ask for an interview.

### **Spokesman Supports Nonproliferation Treaty**

*AU0311112289 East Berlin NEUES DEUTSCHLAND  
in German 1 Nov 89 p 2*

[ADN report: "GDR in Favor of Full Universality of Nonproliferation Treaty"]

[Text] East Berlin—The spokesman of the GDR Foreign Ministry, Ambassador Wolfgang Meyer, used the fact that the GDR ratified the Nonproliferation Treaty (NPT) exactly 20 years ago as an occasion to stress the topicality of the obligation to hold talks on disarmament, particularly in the nuclear field, included in the treaty.

The GDR will not only continue to consistently support the observance and the strengthening of the NPT, but will also, in the spirit of Article IV of the treaty, advocate further measures to achieve arms control and disarmament, the spokesman pointed out. The GDR considers a 50-percent reduction of strategic offensive weapons as well as a comprehensive halt to nuclear tests to be very urgent. It views the USSR's initiative for the unilateral stop of the production of highly enriched uranium for military purposes as a practical step toward nuclear disarmament.

In addition, the GDR supports the proposal submitted at the 44th meeting of the UN General Assembly aimed at concluding an international agreement on a halt and a ban of the production of fissionable material for military

purposes and at using the extensive experiences of the International Atomic Energy Authority to verify this. Mikhail Gorbachev's most recent initiative to rid the Baltic Sea from nuclear weapons has also met with a positive response in the GDR.

In connection with the NPT, the GDR considers it absolutely necessary to ensure its full universality. Above all, it is important to include the states with significant nuclear activities—such as South Africa and Israel. The close cooperation between these two states in the nuclear-military sphere has been a cause of serious concern for quite some time, the spokesman stressed.

## **HUNGARY**

### **USSR's Yazov Briefs Nemeth on Pact Talks**

*LD2911223389 Budapest MTI in English  
2049 GMT 29 Nov 89*

[Text] Budapest, November 29 (MTI)—Miklos Nemeth, president of the Hungarian Council of Ministers, met members of the Warsaw Treaty Defence Ministers' Committee in Parliament on Wednesday.

Army General Dmitriy Yazov, minister of defence for the Soviet Union, briefed him on the work and progress of the discussions.

The Hungarian Government head stressed that Hungary would remain a member of the Warsaw Treaty in future, too.

At the same time, he pointed out that the organization needed modernization.

He said that the Hungarian Government looked forward to the imminent Gorbachev-Bush summit, and trusted that the talks would bring about some major decisions in connection with the Soviet Union and the United States, the Warsaw Treaty and NATO.

### **Karpati Returns From Visit to Czechoslovakia**

#### **Gives Arrival Statement**

*LD2311073589 Budapest MTI in English  
0033 GMT 23 Nov 89*

[Text] Budapest, November 22 (MTI)—Colonel-General Ferenc Karpati, Hungarian minister of defence, returned to Budapest from Prague on Wednesday evening, Mr Karpati was heading a military delegation on a three-day, official friendship visit, at the invitation of Army General Milan Vaclavik, Czechoslovak minister of national defence.

In his press statement on arrival in Budapest, Colonel-General Karpati said the visit was not unexpected but a return for the visit of a Czechoslovak military delegation to Hungary four years ago. This remark was made as there have been rumours that Roland Antoniewicz

requested military and financial assistance from Czechoslovakia. The minister of defence said that Prague was aware of a request for financial assistance, but it termed it a provocation.

Mr Karpati said he informed his Czechoslovak colleague about the Hungarian Armed Forces reform under preparation. Their talks also included the conference of ministers of defence of the Warsaw Treaty member states, to be held in Budapest next week.

In answer to a question on the opinion of the Czechoslovak Army about the political developments taking place in that country, Mr Karpati said he experienced temperateness and level-headedness, but tension could also be felt.

Milos Jakes, general secretary of the Central Committee of the Communist Party of Czechoslovakia, met the Hungarian minister of defence. Mr Karpati reported on the Hungarian political processes.

With respect to Lajos Czineges renouncement of his rank of army general, Mr Karpati said that, according to information to date, Mr Czinege had every reason to do so.

#### Cited on Talks in CSSR

*LD2311130889 Prague Domestic Service in Czech  
1200 GMT 23 Nov 89*

[Text] Hungary—Defense Minister Ferenc Karpati, after his return from Czechoslovakia, refuted rumors that his visit to Prague was unexpected. He stated that his talks in Czechoslovakia dealt among other things with the coming meeting of Warsaw Pact defense ministers, which will take place in Budapest next week.

Asked by the media for the view of the Czechoslovak Army leadership of the current development in the country, he answered that he witnessed calm and deliberation [uvazenost], but that at the same time certain tension could be felt.

During his meeting with Milos Jakes, Ferenc Karpati briefed him about political processes in Hungary, about the coming referendum, and about preparations for the presidential elections.

#### POLAND

##### Defense Minister Discusses Military Service

*LD2411151389 Warsaw Domestic Service in Polish  
1029 GMT 24 Nov 89*

[Remarks by Defense Minister Florian Siwicki in response to deputies' questions at the Sejm session in Warsaw—live]

[Text] [Deputy Marek Rusakiewicz, citizens parliamentary floor group] Madame Speaker, may it please the House! The Minister of National Defense has publicly announced the curtailment of basic military service from 24 to 18

months. He mentioned 1991 as the date this decision would be put into effect. In view of this, I would like to ask the minister what were the reasons behind the decision to present the proposal to shorten basic military service to 18 months and not, for instance, to a shorter period of 12 months; and, secondly, what conditions would have to be fulfilled to bring forward the date of implementation of this change [word indistinct] not by the end of 1991, but at an earlier date? Thank you very much.

[Sejm Deputy Speaker Olga Krzyzanowska] Minister of National Defense Florian Siwicki will reply.

[Siwicki] Citizen deputy, may it please the House! I am convinced the question addressed to me by citizen Deputies Janusz Okrzewski, Marek Rusakiewicz, and Radoslaw Gawlik was dictated by concern for the supreme interests of the state, expressed in the search for the most effective solutions concerning the operation of the Armed Forces.

Proceeding to a specific answer, I would like to inform the chamber that the need to shorten the length of basic military service remains the subject of detailed analysis by the Ministry of National Defense, about which I personally and also ministry representatives informed the public. I would like to stress that the length of basic military service depends on many mutually conditioned factors, mainly on the numbers in successive years of conscripts, enabling the Army to be brought up to strength: the Army's numbers; the degree of professionalization of the Army; the appropriate system of deferring conscription for economic reasons. Given the Army's present personnel figures and a 24-month basic military service, the annual need for conscripts amounts to 155,000. If military service were to be shortened to 18 months, it would be necessary to rotate intake more often and, by the same token, the annual need for conscripts, given the Army's present numbers, would increase to about 204,000. The current annual number of conscripts, with the application of a broad system of deferralment, would not allow these increased needs to be met.

I would like to inform the chamber that we only call up about 55 percent of the population of a given conscript year. One in four conscripts does not meet the health conditions; and one in three has his service deferred for various reasons. To give an idea of the scale of these deferrals, I will quote some statistics, if I may: During last year, deferralment of military service was granted to 28,000 private farmers; 5,000 sole breadwinners with more than two persons to support; 2,500 people caring for Group One invalids; 60,000 secondary and post-A-level students; 35,000 conscripts in professions of particular importance for the national economy i.e. miners, steelworkers, communications workers, bakers, transport and shipping employees, etc.

In all, in 1989 this means that over 130,000 deferrals were granted. Over and above that, in the group called up for military service, the structure of general and professional preparation is unfavorable. For instance,

last year among those entered into the ranks only 21 percent had had a secondary education; 59.4 percent had technical education; and as many as 19.5 percent had only primary education. Such a qualitative cross-section does not favor the shortening of training periods that is indispensable for their preparation for the servicing of modern armaments and military technology. Only in 1991, when on the one hand as a result of restructuring the numbers of soldiers doing national service will be reduced to around 190,000 and the degree of professionalization of the Army will be increased to around 40 percent, and on the other hand there will ensue an increase in numbers in cohorts subject to national service, and surely an improvement in their level of preparation, will it be possible to commence the process of shortening the time of national service to 18 months.

Thus, I do not see the possibility, with the current staffing in the Army, demographic conditions, and the accepted system of deferrals, and also the degree of professionalization of the Army, of shortening the period of service to 18 months at this time. As a hindrance to this there also stands the problem of assuring the appropriate training of soldiers so that they may serve in very often complicated (?regiments), demanding the appropriate technical preparation. It is (?important) to notice that in armies with a high degree, that is over 50 percent, of professionalization, soldiers doing national service fulfill only straightforward, almost service, tasks. On the other hand, in our Army, with 33 percent professionalization, the same soldiers are in great measure allocated to posts commanding modern tanks with systems involving optical-electronic direction of fire, armored vehicles, medium- and long-range radio communications, to the servicing of rockets and other areas of armament and contemporary technology. There is a 6-month period during which they train for these tasks. With a 12-month period of service, this would not leave much time for their integration in the framework of teams and platoons in military fighting units.

Such an organizational solution would not guarantee the indispensable fighting efficiency of the Army, and over and above that the doubled exploitation during the preparation of successive annual intakes, the exploitation of costly technology as a result of the increased rotation in the training of young specialists would clearly burden the budget of the Army.

May it please the House! The current and planned global organizational solutions, which favor shortening of the period of basic military service take into account, in our view, all the conditions ensuing from the need to assure the fighting efficiency of the Army, social expectations, economic needs, and simultaneously the decreasing and not increasing state budget payments allocated to the defense of the country. Every Army with a low degree of professionalization demands such solutions as I have presented. I trust that the esteemed House will share the efforts of the Ministry of National Defense in the matter at hand. Thank you for your attention.

[Krzyzanowska] Thank you, Mr Minister. Does the deputy wish to address the [words indistinct]? Please, go ahead.

[Rusakiewicz] I cannot altogether agree with the statements of the minister. This results from the conviction that today already it is possible, and we know of many cases, for soldiers to do a national service that is not just one that is precisely limited to military training, to military exercises, but often this is a service based mainly on work in industrial work enterprises, where soldiers work as cheap labor, and in sum I think this is one, this is one of the factors that must also be taken into account and of which it is necessary to be aware, which takes place. I would ask the ministry, if this is possible of course, and I think that it is, take in to account precisely the fact that military training has with certainty a varied character, and in certain cases, in many units, such a long cycle of military training is not necessary. The minister here mentioned a 6-month period, and after that it varies, in the next part of the doing of national service. That is the first thing. The second thing, I have a question. Can changes not be made today with the aim of increasing the professionalization of the Army and thereby limiting the numbers? Not just through this, for this is as if my third postulate, so as to go in the direction of limiting the numbers in the Army [as heard]. Do we currently need such numbers, as the minister here mentioned, or can these numbers be reduced? And, I think, that would in fact be all.

[Krzyzanowska] Mr Minister, please.

[Siwicki] Citizen speaker, may it please the House! Regarding the first question, I wish to clarify that in the structure of our armed forces there are operational forces, these are those that have fighting equipment and are allocated for defensive activities, and there are also military units called by us training-production units [jednostki szkoleniowo-produkcyjne]. There are non-combatative units. They were created in the previous period, when a significant surplus of national servicemen in the period of this great demographic high induced the usage of these national servicemen, and the economy then recognized that it is worthwhile having such a mobile force. These training-production units exist to this day, although already this year they are in part dissolved and in part are converted to Civil Defense Units, or sections, as they are termed. That is, these are no longer military units, and these are no longer soldiers, but labor brigade members [junacy].

It is true that these units have worked for the needs of the national economy, and this could have created the impression that the Army continues to work in work enterprises. For instance, in the enterprises in Bielsko-Biala, in the small car factory, in the pressing shops and other areas of our production enterprises where this in fact does take place. Currently, as a result of our further (?steps) and through listening to social opinion we are examining this problem.

In the immediate future, we will be proposing it to the Council of Ministers' Economic Committee, so the national economy can adapt. Military organizations like civil defense detachments, militarized units: Are they necessary or will the economy do without them? The Ministry of National Defense is not interested; it is no concern of ours whether these detachments function in our state.

The next problem is the issue of the professionalization of the Army. The restructuring of the Armed Forces assumes the professionalization of the Army. We are doing this, increasing the Army's (?professionalism), in this way: by decreasing the number of military units, by reforming them. By the same token, the cadres of those units, which have specific professional training and which express agreement, will be transferred to units which remain in the Army system and therefore we will gradually increase the number of cadres in those units. All in all, then, we will professionalize the Army to a greater extent than has been the case up to now.

Our calculations indicate that in 1991, that is next year, after the restructuring has been carried out and reductions have been effected in the Army in the preceding years, in the current year and next year, the professionalization of the Army will increase to about 40 percent and the Army will decrease to numbers in the region of 300,000. If it numbered 347,000 at the beginning of this year, then by 1 November it will have been reduced by about 33,000. We are carrying out further changes and restructuring and next year, it will be decreased by [word indistinct] 14,000. In sum, then, we are going in the direction which the citizen deputy (?asked about) and had doubts whether we were or not.

Now I will address the issue of the 6-month training period and discuss whether the Army will train itself. Well, in operational armies, in military units, to be able to detail a lance corporal or a corporal to service complex technology, we have to train him for about 6 months in an non-commissioned officer training center or a junior specialists' training center. There, on the basis of the professional capabilities and knowledge the young person has already obtained in civilian training, or in carrying out a profession before he was called up, we teach him to operate missiles, medium-range radio stations. He becomes a specialist of a kind, to carry out these very complex tasks.

In Western armies, please note, which are more highly professionalized, such as the Bundeswehr, which has over 55 percent professionalization, or the French or Danish armies, which have over 60 percent,—those things which in our Army are fulfilled by a senior private [starszy szeregowy] or a corporal [kapral] are fulfilled there by professional soldiers or contract soldiers who are engaged for military service for many years. Thus, our solutions are cheaper, although more troublesome for us, but we have no other way out at the moment. On the other hand, during a soldier's stay at a military unit, when he passes on to the servicing of this new technology

for 1 and ½ years, there are indeed laxer periods. One cannot, after all, constantly train, for this costs a great deal, the constant introduction of such technology. We must economize, and thus too, its exploitation is very strictly enumerated in hours and kilometers. Thus too, indeed, in the later period, the burden of the private, this corporal, in national service is not so intensive, but the matter rests on the fact that he is constantly ready, in case of higher need, to use this technology.

#### **Military Units Disbanded in Lubusz Land**

*LD2411134389 Zielona Gora Domestic Service  
in Polish 1500 GMT 23 Nov 89*

[Text] Three military units have been reformed this week in Lubusz Land, Ziemia Lubuska. On 20 November, in Krosno Odrzanskie, the 11th Zlotow Mechanized Regiment, and in Slubice, the 23d Medium Tank Regiment; and in Zagan yesterday, the 3d Medium Tank Regiment. During the ceremony in Zagan, in accordance with the order of the minister of national defense, the regimental standard was handed over to the Silesian Military District and by the same token, the unit has ceased to exist. It is to be completely reformed by March of next year. Some soldiers will return to civilian life; some of the equipment will be auctioned off. The rest will go to augment the equipment of other military units.

#### **Uzycki Discusses Size, Strength of Army**

*AU2411122289 Warsaw TRYBUNA LUDU  
in Polish 17 Nov 89 p 2*

[Interview with General of Arms Jozef Uzycki, chief of the General Staff of the Polish Army and vice minister of national defense, by Stanislaw Reperowicz: "How Big Are Our Armed Forces?"—date and place not given]

[Text] [Reperowicz] Our Army has been a center of special attention by opinion-forming circles recently. Both the foreign and the Polish press have been carrying increasing amounts of information, often contradictory, about the size of our Armed Forces, their technical equipment, offensive capability, and so on. It is claimed that, compared to other European countries, Poland's Army is incommensurately large and excessively armed. The NEW YORK TIMES said recently that in terms of the number of men, the Polish Army is the third largest in Europe after the USSR and FRG. How much truth is there in this?

[Uzycki] Those statements do not correspond to the truth and exaggerate the size of our armed forces. They also clash with the official data, whose credibility has not been questioned. Let me refer to the generally accessible documents of both military-political alliances, in other words the 30 January 1989 "Statement by the Defense Committee of the Warsaw Pact Member-States," the NATO publication "Conventional Forces in Europe—The Facts" of 25 November 1988, and "The Military Balance 1987-88." Of Polish sources, I would like to mention this year's statement by Army General Florian

Siwicki, minister of national defense, on the subject of the restructuring of the Polish Army.

[Reperowicz] So how big are our Armed Forces?

[Uzycki] They are certainly not among the biggest in Europe. They comprise, or did comprise at the beginning of the year, 347,000 men, which put them in seventh place in Europe after the USSR (2,485,000 men), Turkey (654,000 men), France (547,000 men), the FRG (488,000 men), Italy (388,000 men), and U.S. forces in Europe and adjoining waters (380,000 men). Following the reduction in the size of the Polish Army by another 33,000 men by the end of the year, we will move to ninth place behind Spain (325,000 men) and Great Britain (319,000 men).

[Reperowicz] Are these 347,000 men of ours, or rather the almost 314,000 men, a little, or a lot?

[Uzycki] That is a modest quantity. Poland occupies 5 percent of Europe, which puts it in eighth place. Its population comprises 5.5 percent of the population in Europe, which puts it in seventh place in this regard. When we compare the size of the population with the number of soldiers, we conclude that the soldiers make up 0.91 percent of the population. We used to be in 10th place in this regard, behind Greece (2.09 percent), Bulgaria, Czechoslovakia, Turkey, the USSR, the GDR, Hungary, France, and Belgium. But thanks to the restructuring envisaged by the end of the year, we will be in 12th place, with a figure of 0.83 percent, behind Norway and Spain.

These are enlightening figures. We reach a similar result when we calculate the Army's size per square kilometer. Belgium has the greatest number of soldiers per square kilometer, 2.98. After Belgium come the Netherlands, the FRG, GDR, Greece, Czechoslovakia, Great Britain, Italy, Hungary, and only then Poland, with a figure of 1.11 soldiers per square kilometer.

[Reperowicz] And what about the "excessive" armaments?

[Uzycki] That is also a fantasy. Many countries are ahead of us in the quantity of, weapons, including the USSR, FRG, and Great Britain. The little Netherlands has eight tanks per 1,000 square kilometers. Neutral Switzerland has 20, the FRG has 17, and Poland has only 10. We are far behind other countries in the number of warships (17th place), combat helicopters (15th place), armored transporters (9th place), and so on.

Those are the facts. However, they do not exhaust the subject. The highly developed and prosperous Western countries modernize the equipment of their armed forces relatively frequently. We cannot afford that. We conserve our valuable combat equipment so that it may function as long as possible. Of course, that affects its modernity. Therefore one should consider not just the quantity of combat equipment, but also its quality. One

aircraft is not like another, and some of our aircraft have been in service for many years.

[Reperowicz] Therefore our Armed Forces are not the third largest in Europe. Instead they are modest in every respect. They realize the country's dramatic economic situation, and cooperate with the authorities and society in order to improve it.

[Uzycki] We are doing all we can to alleviate the situation. For this purpose, and on our own initiative, we are considerably reducing the size of the army. We have reduced quantities of primary armaments (tanks, cannon, aircraft, and so on); reduced imports of military technology; converted part of the defense industry to the production of market commodities; made the system of training for the military reserve less expensive; introduced many austerity measures to the army; and so on.

We are doing all this in the hope that the NATO states do likewise. However, they have still not done so. They are not only maintaining their armed forces at the previous levels, but also improving their quality. In other words, they are making them more efficient by introducing new types of weapons. This is not reducing the material basis of danger in Europe at all, and is making us fearful for the country's security.

[Reperowicz] In that case, would a further unilateral reduction in the size of the armed forces not disturb the country's defense capability?

[Uzycki] We are aware of that, but we cannot take any major step in this direction until the Vienna disarmament talks have brought the expected bilateral decisions. Until then, we will go ahead with the plans of restructuring that we have announced. We want to guarantee the country and people security at the lowest possible cost. However, the galloping inflation is making that extremely difficult. The military budget, which is decreasing as a result of devaluation, has forced us to establish priorities in spending. We have given first place to providing food for soldiers and safeguarding their health. We have also considerably reduced the cost of training. We have reduced the number of exercises, flights, tank movements, and so on. We have increased the use of simulators, which are cheaper than the real equipment. But here as well there are limits that cannot be exceeded. The Ministry of National Defense leadership is considering subsidiary economic activity by the army, which could provide us with a certain amount of income to compensate for the devalued budget.

After all, we cannot rely on the charity or mercy of economically and militarily strong countries. Weak countries are forced to the sidelines of international life, and no one thinks about them.

Neither should we completely rely on help from our allies. They have their own problems, and can rely on us the way we rely on them. Each military-defense alliance requires from its members a certain level of contribution to the work of joint defense.

To conclude, I would like to underline our consistent aim toward a further reduction to the armed forces, with a simultaneous preservation of the essential minimum defense potential. This minimum should

correspond to the state's economic possibilities, and should guarantee its sovereignty at the same time. Our history tells us that the country's fate cannot be left to providence.

## PALESTINIAN AFFAIRS

### **PFLP-GC Claims Possession of U.S. Missiles**

*JN2511123489 (Clandestine) Al-Quds Palestinian Arab Radio in Arabic 1205 GMT 25 Nov 89*

[Text] Brother strugglers, we have just received the following: Sources close to the Popular Front for the Liberation of Palestine-General Command [PFLP-GC] have reported that the PFLP-GC is now in the process of forming a technical committee of specialists comprising PFLP-GC engineering elements and experts from sisterly and friendly countries to study new surface-to-air missiles of an advanced generation. It is known that PFLP-GC engineering elements have succeeded in moving these American Zionist missiles to safe places. The PFLP-GC experts have also succeeded in eliminating the possible detonation of these missiles, which an official PFLP-GC source describes as the most modern U.S. missiles that were manufactured this year.

The experts committee will certainly uncover the designs and mechanisms of these missiles, as well as their advanced technology, a matter which will help determine the way to confront them. This will also directly reveal the United States' collusion in testing every weapon it produces in our area against our Arab nation in general and our heroic Palestinian people in particular.

### **Further on U.S. Missiles**

*JN2511205489 (Clandestine) Al-Quds Palestinian Arab Radio in Arabic 1700 GMT 25 Nov 89*

[Text] The correspondent of the Al-Quds Palestinian Arab Radio on the Road of the Liberation of Land and Man in al-Biqa' has reported that Zionist enemy artillery began shelling Popular Front for the Liberation of Palestine-General Command [PFLP-GC] positions at 1125 today, Saturday 25 November. The correspondent adds that a primed air-to-ground missile fired by Zionist enemy aircraft detonated at 1205 without causing casualties.

In addition, a military spokesman for the PFLP-GC has made the following statement:

Following our earlier communique on Zionist air raids against our positions in the Ghaza Lusi region in the western al-Biqa' this morning, Saturday 25 November 1989: At exactly 1125 the Zionist enemy artillery, in conjunction with their Air Force, shelled and strafed the perimeter of the area with 175-mm artillery. The raiding enemy aircraft fired numerous primed missiles on our positions in Ghaza Lusi: At 1205, one of the primed missiles exploded in the area while the search was going on for other unexploded rockets. The enemy is thought to have dropped them around our positions. The enemy air raids and artillery shelling and primed missiles have not caused any loss of life within the ranks of our fighters. But there have been many civilian casualties.

Later, a spokesman for the PFLP-GC issued the following statement:

The PFLP-GC is forming a committee of experts comprising engineering personnel from the front and experts from sisterly and friendly countries to study the new, advanced-generation air-to-ground missiles left behind by repeated Zionist raids on PFLP-GC bases on Thursday 23 November 1989 and Saturday 25 November 1989. The front's engineering personnel succeeded in moving these American-Zionist missiles to safety. PFLP-GC experts have also managed to defuse the missiles, described by one of them as being among the most up-to-date the Americans have produced this year 1989. The committee of experts is sure to learn the secret designs and mechanisms of these missiles as well as their advanced technology, which will help in neutralizing them. This will also prove first-hand the U.S. collusion in testing every newly manufactured weapon in our region against our Arab nation in general and against our heroic Palestinian people in particular. We pledge to pursue the struggle along the road of liberating land and man.

## MALDIVES

### **Report of Defense Treaty With India Denied**

*BK1011063089 Islamabad Domestic Service in Urdu 0200 GMT 10 Nov 89*

[Text] The Maldives foreign minister, Mr Fathulla Jameel, has said that his country—being a nonaligned nation—has not allowed any superpower to have bases on its soil and it would not have a defense pact with any country. In an interview, he said Maldives was strengthening its own security system by getting more modern equipment and providing advance training to its defense forces with the cooperation of various countries.

The Maldives foreign minister denied a U.S. journal's report that his country and India are expected to sign a defense treaty after the Indian general elections.

## PAKISTAN

### **Comment on Armed Forces' Familiarization Program**

*BK2811090289 Islamabad Domestic Service in English 1600 GMT 27 Nov 89*

[Mohammad Yamin commentary]

[Text] As part of the Pakistan Armed Forces program of familiarizing the national media on the defense matters, a series of briefings were given to journalists by the senior commanders of the three forces. The sum total of the briefing was that Pakistan was fully capable of defending its territorial integrity. The journalists visited various facilities of the three wings and had a close look

at the high-level of planning and defense orientation of the troops. Their peacetime planning is excellent with full gear motivation.

To meet any adversary's numerical strength and weaponry, it is essential to train the troops on the modern lines and to introduce high technology and computerization within the constraints of the resources. Mindful of this factor, the Armed Forces have started the process. Reorganization of the armored troops has been carried out with the objective of giving more clout to their striking power. This will be tested during the "Zarb-e Momin" [Impact of Muslims] exercise—the first large-scale military exercise to be undertaken by the Pakistan Army sometime next month.

Army's Defense Air Command is Pakistan Army's latest and most developed arm which was formed on October 22 this year. It has the high tech and state of the art equipment and weaponry over and above the traditional equipment. The new arm is capable of responding to any threat in the air in an efficient and effective manner.

During visits to the troops in the border areas, the journalists found them at alert and keeping round-the-clock vigilance. The visit to the normal exercise areas revealed the troops top fitness.

Pakistan Air Force [PAF] is keeping a bird's eye on its eastern and western borders. There is round-the-clock air patrolling along Pakistan's borders on a regular basis. As a result of top class vigilance, Pakistan has the capability of responding to the air violations of its air space by the Afghan aircraft quickly. In the course of the briefing, the deputy chief of the air staff told newsmen that PAF is fully capable for providing cover for the nuclear facilities at Kahuta and the PAF carries on its exercises as a matter of routine.

Pakistan has a modest Navy. Dissecting the comparative strengths of the naval outfits of India and Pakistan, a senior officer of the Pakistan Navy told a group of journalists recently that Pakistan Navy is capable of defending the coastline and protecting its trade routes. The Pakistan Navy spokesman said that a 25-year plan for modernization of the Navy had already been approved in order to strengthen it and enable it to face any future challenge.

What emerged from the candid briefings given by the senior officers of the Armed Forces to the newsmen is that Pakistan is taking proper care of its defense requirements. Pakistan has drawn out toward indigenization of equipment and weapons to some extent. Pakistani-made tanks modelled after the Chinese tanks are expected to be inducted into Army in 2 to 3 years time. Manufacturing of Pakistani-made Anza [shoulder-fired surface-to-air missile of Stinger type] has already started. High technology and computerization is gradually being introduced. Overhauling of tanks and [word indistinct] Mirages and some other aircraft is being done locally. Pakistan Navy is better off than it was in the past. The

forthcoming "Zarb-e Momin" exercise will go a long way in improving capabilities of the Armed Forces.

#### **Air Force Officer on Kahuta Security, Exercises**

*BK2711014689 Hong Kong AFP in English  
2301 GMT 26 Nov 89*

[Text] Islamabad, Nov 27 (AFP)—Pakistan has beefed up security at a key nuclear facility to safeguard it from external threats, a top official said here.

Air defences have been "sufficiently strengthened" around the Kahuta plant near here, said Air Vice Marshal Baharul Haq on Sunday [26 November].

He said though Pakistan and its traditional rival India had agreed not to attack each other's nuclear installations, "the Air Force was alert around the clock to check any intruder." The Kahuta nuclear facility holds a uranium enrichment plant.

He also briefed reporters on Air Force exercises due to start next month in conjunction with the Army's large-scale "Zarb-e Momin" [Impact of Muslims] wargames. He said the exercise would demonstrate the capacities of Pakistan's recently acquired Chinese-made F-7/P aircraft.

The official ASSOCIATED PRESS OF PAKISTAN (APP) quoted him as saying that Pakistan had acquired 40 such planes out of a total of 100 to be supplied by China over a three-year period.

He said Pakistan was not threatened from the west but that "due to peculiar nature of the border we have combat air patrols to check incidents of air violations from the Kabul regime aircraft."

He said 2,215 sorties were made in 1987 to check such violations. During 1986-89 nine intruding Afghan government planes were shot down by the Pakistan Air Force, he added.

From 1984 to 1989, he said, Kabul regime planes violated Pakistan's air space 1,635 times, killing 327 people and wounding 721.

Between 1985-1989 eight Kabul pilots defected to Pakistan with their aircraft, including two helicopters. Pakistan still kept the aircraft, he said.

He said Pakistan's Air Force would "never catch up" with India's three-to-one advantage in numbers. But he maintained that in skill and training, Pakistan's Air Force was superior.

#### **Air Force Chief on 'Major' Exercise**

*BK2611163589 Islamabad Domestic Service in English  
1600 GMT 26 Nov 89*

[Text] The Pakistan Air Force [PAF] has begun its major exercise High Mark-89 to test its capabilities. In his order of the day on the commencement of the exercise,

the chief of the Air Staff, Air Chief Marshall Hakimullah, said it would demand the highest standard of performance and professional competence from the entire PAF personnel. The exercise, which is an annual feature, has a special significance this year as it is being held in conjunction with the large-scale Army exercise Zarb-e Momin [Impact of Muslims]. Among the planes, the newly-inducted F-7P, a modified version of MiG-21 acquired from China, will feature for the first time in the exercise.

Briefing newsmen in Islamabad today, a PAF spokesman said we have better technology, fighting tactics, and training. We have a good safety record which matches the world level. The spokesman said adequate air defense for Kahuta nuclear facilities has been ensured to safeguard it from external threats. The infrastructure of the air defense has been sufficiently strengthened for the purpose.

#### **Pakistani, Canadian Defense Officials Meet**

*BK2611041489 Islamabad Domestic Service in English  
1600 GMT 25 Nov 89*

[Text] The Canadian deputy minister of defense, Mr (Robert Falmer), met the minister of state for defense, Retired Colonel Ghulam Sarwar Cheema, in Rawalpindi today. They reviewed prospects of expanding Pak-Canada defense cooperation, particularly following Pakistan's rejoining the Commonwealth.

#### **Stinger-Type Missiles, Other Weapons Produced**

*BK2411144489 Karachi DAWN in English  
21 Nov 89 p 1*

[Text] Lahore, Nov 20—Pakistan is manufacturing a highly sophisticated shoulder-fired missile which will be better than the Stinger missile in performance but its cost will be only one-fourth of its rate in the international market, it was learnt through official sources.

This missile will be ready by the middle of next year after which it will be provided to the armed forces, the sources said.

Pakistan is also trying to make anti-tank missiles to bolster the defence capability of the armed forces. A good deal of work has already been done on these missiles and their regular supply to the armed forces will begin within a year.

The sources said that manufacture of various defence equipment locally was a part of the Government policy to achieve self-sufficiency in the field of defence and minimise dependence on imports. Efforts are being made to import only those items which are not possible to produce at home.

Pakistan, it may be pointed out, has already achieved self-sufficiency in small arms and, in fact, is exporting them to other countries. The foreign exchange earned from the export of such arms is used to import sophisticated arms required for national defence.

According to the sources, the time is not far off when Pakistan will have its own multi-barrel rocket launchers, an equipment which is badly needed by the defence forces. The authorities have been trying to import it from various countries but the response has not been very encouraging. Ultimately, Pakistan decided to make its own efforts to solve the problem for good.

Some scientific research institutions have also made considerable contribution in strengthening the country's defence capability. One such institution has developed the capability to recondition missiles while another has succeeded in developing local laser range finders. The local finders have a range of 1,000 metres which can be increased by replacing the transmitters.

Another organisation is developing an anti-tank munition which will be as effective as a radioactive warhead.

The sources hoped that with all these achievements, Pakistan's dependence on imported arms will be reduced considerably.

## Comments on Conclusion of First Stage of INF Treaty

### SS-20 Launchers Eliminated

90WC0018A Moscow NEW TIMES in English  
No 45, 7-13 Nov 89 pp 5-6

[Article by Sergei Babusenko: "Silent Echo"]

[Text] How to get to the missile base? It's simple. You fly from Moscow to Minsk, Byelorussia, then board a commuter train to the station of Koidanovo, and from there take a bus to Stankovo compound. Here we are. Behind the fence is the former "top-secret facility," alias the missile base, and now the site where SS-20 launchers are being eliminated. These "shorter-range toys" could carry their lethal cargo to a distance of 500 to 1,000 kilometres. They could, but they never will. It's over. The first stage of the Soviet-American INF treaty has purged them from the two superpowers' nuclear arsenals and raised hopes for real disarmament. The main thing now is to go ahead with this disarmament and not to cherish futile illusions as to the irreversibility of the process. The years that predated this day were too long. But the day has come.

#### 'Liquidator' Igor Gerus

Major Igor Gerus, the likeable chap from the Missile Corps who showed me round the premises, was used to the frequent visits from newsmen and had already mastered the skills of a professional guide. "In here we cut the rears of launchers by 85 cm" he explained. Why 85? That's what the experts decided. Taken off along with the rear end of the launcher are the gadgets that actually make it a launcher: the erector and hydraulic supports. Stripped of them, the vehicle is nothing but a harmless cross-country truck. Two hundred thirty seven emasculated vehicles have already been lined up outside the outfit and fenced in. Now it's the turn of the 238th and last, launcher. The liquidators dealt with it in a leisurely and businesslike way. Four U.S. observers watched the plasma knife cut off everything that held, directed and unleashed the monstrous killer. The process was controlled by several officers. A bored sergeant was sitting in the cab waiting for the command to drive the now harmless vehicle out of the hangar. The vehicle itself was decorated all over with the signatures of those who had performed the final operation.

Oddly enough, I didn't feel any pity for the powerful machine that owed its birth to prodigious investments and a heavy outlay in scientific minds. The professional servicemen of a new caste—the liquidators who destroy their own hardware—didn't look tormented by remorse either. Did they understand what this state-of-the-art weapon was when they learned to operate it and do they understand what they are doing now? Where is the logic of this illogical situation where weapons are created only to be destroyed later? First we approach the fatal brink, straining our intellectual and industrial potencies, and then withdraw, leaving the fruits of our efforts to the four winds.

As I watch sparks of melted metal, the agony of the world's last shorter-range missile launcher, I realized clearly what the tragic climax of "nuclear deterrence" could have been. And I felt no pity.

#### General Medvedev

General Vladimir Medvedev, Head of the Soviet National Centre for the Reduction of the Nuclear Threat, arrived at Stankovo from Moscow to conclude the first stage in the implementation of the INF treaty. The Americans had done it a bit earlier. The last Soviet missiles are being destroyed 33 days ahead of schedule. This is only logical. It's always easier to destroy. Of course. However, the prompt destruction is good news. Perhaps we will live to see a "disarmament race?"

"We are realists. The process of disarmament is a necessity. The world has become too fragile lately. The military understand that the elimination of nuclear missiles is an objective necessity," said the general.

Medvedev is not what we usually describe as a typical soldier. When he answered my questions he sounded like a professional politician or even a philosopher. Perhaps that's what generals should be like in the nuclear age? They must be able to give orders and control their timely and accurate execution, but they must also be able to cancel orders whatever the price.

"The military alone are efficient enough to undertake the elimination. No one but the military could find the least costly way to convert the vehicles to civilian use. Pity? You know, Gogol wrote: 'I gave birth to thee, and now I shall slay thee.' I think it's only just."

General Medvedev looked calm, although I saw that no one at the Stankovo facility was able to remain indifferent to the news that the last missile had been eliminated in remote Saryozek by 9 a.m., Moscow Time. The heap of cigarette butts in the ash-tray on Medvedev's desk was indicative of the fact that the general wasn't immune to the universal agitation either. All in all, 169 U.S. and 957 Soviet missiles have been eliminated. The likelihood of the nuclear tornado has been reduced by 6 per cent. The figure might seem negligible, but it implies that nuclear disarmament is feasible and has become a reality.

#### Lt. Col. Brock

Thomas Brock is the leader of the team of U.S. observers, whose number in Stankovo totals eight men. He likes his job. "Soviets are OK, they know their business and they are sticking to the accords." He is satisfied. Brock speaks fairly good Russian and displays the wide American smile. He is soldierly, fit and likeable. "It's good to be a soldier on great days like this," answered the American when asked about his feelings at the time of the final elimination. He is confident that the two peoples have reached a level of confidence that makes his job as an observer quite secure. He is not going to change jobs and hopes to monitor the elimination of

the "big" missiles. As a soldier loyal to the Oath of Allegiance, he would carry out any order. But the one he was carrying out in Stankovo appealed to him specially. "Our soldiers in Vietnam and yours in Afghanistan felt how formidable a weapon a simple automatic rifle can be. These things are far more serious. And that's why the slogan 'Farewell to arms' appeals to me," he said.

I took a picture of them both—the Soviet liquidator Igor Gerus and the U.S. observer Thomas Brock standing together. Nothing of the kind would have been possible only two years before, or in all the time that has elapsed since the meeting on the Elbe. Two allies standing by the slain enemy of Humanity. The last SS-20 launcher was being dismantled, and meanwhile General Medvedev, officers and U.S. observers showered autographs on the "remnants" of the nuclear killer. Their faces gleamed with joy....

#### In the City

On the evening of October 27 the Byelorussian television news briefly mentioned the great accomplishment in Stankovo. That was all....

The missile base 40 kilometres from the capital of Byelorussia, the very existence of which was top secret, made the city a nuclear hostage. A "public" meeting was held in Stankovo, but in Minsk people were feverishly preparing for the weekend. Crowded shops and everyday anxieties overshadowed the occasion, which merited the attention not only of progressive humanity but also of the city authorities. Why not bring the last launcher into the city? Why not arrange a peace festival? Has it already been forgotten that arsenals are still full of nuclear toys? That the remaining missiles can incinerate everything on the planet hundreds of times over? Not just the Byelorussian leaders, but also the Popular Front and the Chernobyl Committee should have realized the significance of the events unfolding not far from the city. I say this because the people of Byelorussia had the misfortune of experiencing radioactive fall-out from Chernobyl. One should have seen the faces of the Soviet and American servicemen when the last missile was destroyed in Saryozek on 9 a.m. The soil of Kazakhstan trembled and many a heart missed a beat. There was the overwhelming joy that my sons, and the children and grandchildren of others would be able to live in a more secure world. And the city that had ceased to be a nuclear hostage should have shared this joy.

But the leaders were attending a parliamentary session. Popular Front activists were busy erecting a concrete cross for Remembrance Day and rank-and-file Byelorussians were hunting for soap and sausages. The echo from the blast that destroyed the world's last nuclear killer died away forty kilometres from Minsk.—  
MINSK-STANKOVO-MOSCOW

#### Impact of INF on East-West Relations

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No 45, 7-13 Nov 89 pp 6-7

[Article by Karl Lamers, head of the disarmament and arms control group of the CDU/CSU faction in the Bundestag: "The Rules of Trust"]

[Text] The deployment of a great number—well over 400—of state-of-the-art missiles, including SS-20s, carried out by the Soviet Union in the 1970s and early 1980s without any military need was a manifestation of the policy of force conducted by military means. This policy brought East-West relations to the height of confrontation and the Soviet Union to an impasse. The West regarded the deployment not only as a global threat to its security but primarily as an attempt to decouple West European security from that of the United States, to turn Western Europe into a nuclear hostage and to subordinate it to the will of the Soviet Union. The Western response, however, demonstrated that the West was able to resist the pressure. Nonetheless, East-West relations were dominated by the diktat of military might. Politics was reduced to strategy. Confrontation ousted mutual understanding. Soviet-American relations were in a state of stagnation. The foreign political dead-end into which the Brezhnev team ushered the Soviet Union was also a domestic political dead-end: the paralysis of a foreign policy based on nuclear overkill was combined with depressing stagnation at home.

In this light, the elimination by the Soviet Union of the SS-23 missiles in the presence of U.S. observers seems at once the manifestation and the symbol of a U-turn that nobody thought possible after the disruption of the INF talk in 1983.

It is possible to discuss and speculate as to how profound, guaranteed and long-lived the change in Soviet foreign and domestic policies will be. To this question history will provide the answer. Our task, the common task of the East and the West, the Soviet Union and the United States, of all Europeans is to do everything possible to make this change consistent and irreversible for the sake of creating a new and peaceful order for Europe, an order whose stability can be based on mutual understanding between nations.

Europe will arrive at this peaceful order characterized by cooperation and not confrontation only if military structures continue to be reduced and transformed at the same time. The INF treaty was only the beginning of the road, and not the best possible departure from the point of view of its specific content. But psychologically the treaty was a breakthrough. This is attested to primarily by the degree of confidence it created between the two sides, it is enough to recall the radically new verification procedures and the scrupulousness with which they are being observed.

Trust is the most important and valuable thing in relations between people. This is also true of interstate

relations, especially when it comes to peace. Without this mutual trust, it is unlikely that the U.S. would have gone as far as it did in the sphere of chemical weapons, because in this sphere, as everyone knows, control and verification is especially complex. If compared with the verification measures needed to monitor reductions in conventional armaments, those undertaken in the case of the INF are much simpler. Nonetheless, the two sides are confident that an agreement on conventional armaments will be concluded in Vienna after 1990. If the situation in Europe changes radically as is planned by both NATO and the Warsaw Treaty, this will be a breakthrough on the way to solving a problem that continues to be decisive in shaping the political landscape in Europe.

Some people may doubt the feasibility of such radical changes in so short a period. In fact, everything that has been started today could well collapse tomorrow. The existing prerequisites, however, are fairly favourable, and it is our duty to make every effort to realize the hopes that have been raised.—BONN

### INF: A Good Starting Point

90WC0018C Moscow NEW TIMES in English  
No 45, 7-13 Nov 89 p 7

[Article by Andrei Kortunov: "Symbols and Politics"]

[Text] Putting paid to the INF question is a good starting point for a discussion. One can also take the opportunity to recite another eulogy to the new political thinking.

I, for one, am concerned with the "happy ending" to the missile-elimination process in a broader context. The elimination of the Euromissiles demonstrated the relative and even conditional nature, of many key notions in the modern political lexicon: "parity," "security," "unilateral concessions," etc.

I well remember how in the early 1980s highly placed Soviet political and military figures asserted that the elimination of the Soviet intermediate range missiles in Europe was bound to undermine European stability, jeopardize the security of the Soviet Union and disrupt the East-West balance (it should be noted for the sake of objectivity that in the West too voices were not infrequently heard to the effect that NATO wouldn't be able to function without Pershings and cruise missiles and that the "zero option" meant decoupling Western Europe from the United States).

Later events showed that these fears were not justified and the calculations were, in fact, groundless. The elimination of Euromissiles hasn't jeopardized the security of either the Soviet Union or the NATO countries, and ties between the United States and Europe continue to develop normally. Now, Europe is much more concerned with other problems—the turbulent sociopolitical shifts in the East and the no less important integration processes in the West. The problem of intermediate-range

missiles turned out to be nothing but a political symbol—a symbol both sides took pains to inflate out of all proportion and which had nothing to do with real life.

This political symbolism could well be the most dangerous phenomenon in contemporary politics, as I see it. The symbols appear gradually—from the moment a designer finds the best possible technological solution to the day when political leaders start to make declarations—"the USSR (or the United States) will never permit..." "We will never agree to..." The process can be quite lengthy, in fact. It is difficult to say at which stage the ends and the means change places. But this substitution occurs gradually: first military programmes ("ours" and "theirs") become symbols, then the symbols start living lives of their own. The inertia of once-declared positions increases and every step sideways, to say nothing of backwards, becomes more and more difficult. As a result, the negotiating parties paint themselves into a corner from which they will later retreat in embarrassment.

Naturally, it's very tempting to say that the new political thinking is a dependable guarantee against "symbolism" in politics. But the past few years have demonstrated that the disease of symbolism is far from cured. The question of the SDI programme nearly became one such symbol. Another potential symbol is the modernization of European-based NATO tactical nukes....

I believe the conclusion is that we mustn't paint ourselves into corners, or declare our "final" stands on issues of vital interest. The more so, as we still have rather a vague idea of what we really need for security and of the balance of forces that might threaten this security.

One further point: the Euromissile saga showed that our military potential has a wide margin of safety: even asymmetrical cuts can't seriously disrupt the balance of forces. The marginal imbalances in various fields are more than compensated for by political gains. This means that we can go ahead with drastic reductions of nuclear and conventional armaments even on a unilateral basis.

Last but not least, the Euromissile saga confirms the opinion that fundamental military programmes must be subject to extensive preliminary discussion participated in by independent experts. The decision-making process in the military sphere must be changed: it must not be a case of the public, MPs, scientists and journalists criticizing the military for earlier decisions: the military must prove to society that the programmes they propose are really needed. That is the practice in all civilized countries. Otherwise it could happen that the next commentary will deal with scrapping Tupolev-160 strategic bombers and the solemn ceremony of sinking the newest Soviet aircraft-carrier in the Black Sea. The determined struggle against symbols merits respect, of course. But it's better not to create such symbols at all.

### Case for Military Cuts: Reduced Threat, Economic Constraints

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No 8, Aug 89 pp 5-19

[Article by Sergey Yevgenyevich Blagovolin; doctor of economic sciences; department head, IMEMO, USSR Academy of Sciences: "The How and Why of Military Power"]

[Text] The reappraisal of what the Soviet Union has done and is presently doing in the area of military preparations occupies a special place among the infinite multitude of problems confronting the nation today. This reappraisal, an important contribution to which was made at the Congress of USSR Peoples Deputies, is extremely complex and even torturous because in the very recent past, they tried to convince us (and almost succeeded): the greater our military might the better, the greater our peace of mind, the greater our security. No matter what it cost, any price was incomparable with its "product": security in a world where we had so many enemies for whom military victory was virtually the only chance for the survival of "their" social system. All this was superimposed on very understandable historical reminiscences.

Of course, even in the past the questions had been raised: why did the imperialists not attack us when they had a monopoly on nuclear arms and why did they not do so after they lost this monopoly but still retained overwhelming superiority in nuclear weapons? Why did they not exploit the sharp reduction of conventional armed forces by N. S. Khrushchev at that time? Finally, why was it that more weapons did not in any way mean greater security and why was the end of this insane race nowhere in sight? We also began to realize that the West's economy would not soon collapse "under the burden of excessive military spending" (as was the customary expression), but that our own economy was deteriorating as time went on.

But it was not until 1985 that we could speak about all this openly and pose the actual problem of analyzing the organizational development of our military and the parameters of our military power.

The new political thinking demanded new approaches to the security problem (they were formulated at the 27th CPSU Congress), a critical view of what we are doing in this area and of our picture of the realities of today's world. Specifically realities and not the picture, created by the joint efforts of numerous politicians, scientists, journalists, and military leaders, that is far from the truth—the picture of the victorious procession of our ideas, the indestructible might of the armed forces, and the unsurpassed quality of our weapons against the background of the current stage in the general crisis of capitalism and total spiritual and material disintegration in the enemy camp (specifically the enemy camp!).

The reappraisal naturally also incorporates the entire complex of problems associated with the determination of the role and place of the military factor in foreign and domestic policy.

The resolution of the 19th Party Conference quite clearly notes that only a political approach to the resolution of the contradictions of world development will open up to the USSR the possibility of winning its historically ordained role in securing the survival of mankind and in future progress; that foreign political activity must make an ever greater contribution to freeing up the nation's resources for the needs of peaceful construction; and that the organizational development of our defenses must strictly accord with our defense doctrine. This raises the question of military power in general and the question of what the military power of our country should be in particular. Naturally, the appraisal of what we need cannot be made in isolation from the appraisal of the situation outside our country.

The aim of this article—in addition to many well known publications by a number of specialists—is to make at least a modest contribution to the examination of certain timely questions regarding the current and prospective development of military power.

We believe that the analysis should be focused in three principal directions: military power and security (more precisely, the part that is secured by military means); military power and the economy; and military power and the foreign political situation. Naturally, there is a considerable degree of overlapping in this rather arbitrary division, but nevertheless there appear to be specific features characteristic of each of these directions.

#### I

Thus I shall initially attempt to answer the question of the degree to which Soviet military power ensures the nation's security and vital interests, the degree to which it corresponds to the situation existing in the world. Its quantitative parameters are very impressive: the USSR has approximately tanks, armored personnel carriers, and infantry fighting vehicles in commission as all the rest of the world; three times more multipurpose submarines than the USA (and more than NATO as a whole), two-plus time more tactical aircraft, etc.<sup>1</sup> Finally, and this is especially important, it has stable parity with the USA in nuclear missiles. No other single country has or, honestly speaking, can have such parity. I believe that the USSR is no exception, having what it cannot have and what is to a considerable degree connected not with the task of national security (if, of course, we understand this to mean the inviolability of the state's basic, vital interests). The result is that we have unbeknownst to ourselves long ago resolved this key task in the organizational development of our military and have continued to follow the path of increasing our military power which, in my deep conviction, is already "divorced" from this, its initial purpose.

It should be immediately emphasized that no serious specialist has the slightest doubt that military power will for a very long time continue to be a necessary element that is vitally important for securing our country's national interests. But military power, if it is not optimized with respect to the entire complex of external and internal conditions (such is probably attainable only in theory), at least takes them into account to the maximum possible degree and adapts to rapid change. However it appears that our military power does not by any means answer these demands and that serious grounds exist for doubting that it can be sufficiently effective tomorrow.

I will try to show why this is so. There are several aspects here. One of them is the scale and structure of our preparations. Until parity was reached in nuclear missiles, the USSR did not have the full guarantee of security at the highest, strategic level independently of the practicability of plans for attacking us. During this period, many efforts seemed justified. But parity was attained and this truly became a historical landmark in the entire international situation. Did this become the turning point in our military preparations? Alas, it did not. They continued in unabating tempo in all the same directions as in the "pre-parity" period. In our view, this was a serious—economic and political—miscalculation. Of course, the decisions were made by the political leadership of the time and not by the military. But this misfortune of that leadership (and of the entire country to an even greater degree) was that with rare exceptions it thinking did not rise to the necessary qualitative level, to the ability to see the interrelationships and interdependences that to a very great extent determined its situation. And this frequently meant the inability to resist military technical thinking. The race for tank, artillery, chemical, etc., "superiority" essentially continued despite the fact that it was no longer necessary from the standpoint of the nation's security and that it was fraught with grave economic consequences and, what is no less important, with the entirely negative perception of the sense and substance of our preparations in both the West and the East and with the growing fear of Soviet military power.

Hardly anyone will now deny the existence of a number of serious asymmetries in Europe in our favor, including not only various quantitative indicators but also the offensive structure of Warsaw Treaty Organization armed forces, their deployment and a number of other factors (this has already been written about by both Western and Soviet specialists). Here we will not discuss the case of the SS-20 missiles—one more illustration of same ideas about ways and principles of enhancing power.

During the same "post-parity" years, the buildup of the navy—a factor that in our view played a very substantial role in what can be called the development of events at the geopolitical level—acquired special scope. Between 1978 and 1987, we even built almost as many large surface ships and twice as many multipurpose submarines as the USA. The construction of the largest ships of the latest type—aircraft carriers, atomic cruisers—began.<sup>2</sup>

The fleet—a special type of armed force with most clearly expressed political and "demonstration" functions—is an ideal means of what is called "power projection" in the West. The impression was created that the reference was to the creation of a fleet capable of opposing the U.S. Navy and its allies on the ocean, of operating on their sea lanes, and, in addition, of successfully operating in remote regions of the world with the aim of resolving a number of political problems. In other words, a fleet was built to ensure our global military presence. Everything was done without regard to whether such goals were actually posed or the degree to which they were actually attainable: this was the subject of discussion not only by those wishing us ill in NATO countries, Japan, etc.

Admiral S. G. Gorshkov characterized the situation as follows: "The Navy has acquired the ability to open new directions of struggle for the Armed Forces that since ancient times were considered beyond our reach."<sup>3</sup> He writes further that the creation of a Soviet ocean fleet is comparable in significance to such most important events in the recent past that have influenced world politics as the USSR's development of nuclear arms.<sup>4</sup>

It is also written that we have become a most influential world power and that our striving to pursue foreign policy, including military policy, in all directions of world development, is therefore entirely natural.<sup>5</sup>

We are beyond question a great country and it hardly need be proven that we now have and will in the future have economic and political interests in all corners of the world. But what is the nature of these interests and how can what was discussed above be related to them? After all, it was not for nothing that our greatest military figures—A. A. Svechin, M. V. Frunze, and M. N. Tukhachevskiy—emphasized that we need a fleet that is oriented toward defense, that takes the specifics of the country's geographical location and its economic situation into account. One might object that more than a half-century has passed and that much has changed during that time. Yes, that is true, but one fundamental principle has remained the same: we have remained a primarily continental power and have not acquired such transoceanic political and economic interests that would require the globalization of our military presence and the creation of a fleet to support it (all the moreso because this is obviously the costliest part of military preparations).

It is obviously unnecessary to argue countless times that expansionism, arrogance, etc., are frequently present in American politics. All this is unquestionably true. But nevertheless the American globalization of its military presence reflects existing realities. Unfortunately, the Soviet Union has not become a country with global economic ties. The volume of Soviet foreign trade (even in value terms without regard to its character) is many times less than the corresponding indicators of the leading Western countries, to say nothing of other forms of economic cooperation. But as regards the USA, its NATO allies, Japan, and many other developed and

developing countries (given all differences between them), their interdependence is enormous and is constantly increasing, and ocean communications are truly vitally important arteries. Any threat, albeit hypothetical, is perceived not only by the USA but also by the other countries that have been mentioned as a threat to its/their existence.

This circumstance has been very purposefully exploited by the USA to create what was at one time called the "total military power" [TMP] of imperialism. A paradoxical situation developed: the more impressive the Soviet Union's military preparations were, the more intensive did centripetal processes within TMP develop, and the greater was the number of potential enemies appearing on the horizon. There were obviously sufficient arguments to view Soviet military power as offensive power oriented not so much toward the protection of its own global interests (bearing in mind their limited nature) as toward the acquisition of the possibility of influencing the interests of others. And, frankly speaking, from time to time its use (directly or "through representatives") reinforced this perception. Suffice it to recall Afghanistan and not only Afghanistan.

But let us ask: what happened during that time to the military threat to us from the West and in general to the role and place of military force? Were the efforts to create such colossal "nuclear-nonuclear" military power perhaps justified in the "post-parity" period as well? Should we perhaps, at the "risk of our life," continue this policy? Should we fear a 1941-type military catastrophe and therefore, in particular, extend the perimeter of our defense to a global scale? I do not believe that the answer to all these questions can be found in the conventional solutions. Fundamental changes in all spheres of life have radically altered the usual ideas about the nature of the military threat and the security role of military power.

The basic thing that must be noted is that war between East and West has become inconceivable as a conscious act. The inevitability of the fatal consequences of nuclear conflict is, strictly speaking, at the basis of so-called nuclear deterrence. In the opinion of D. G. Yazov, USSR defense minister, the development of the productive forces, the intensification of economic relations of the entire system, and the improvement of conventional weapons over time have resulted in a situation where the massive use of non-nuclear weapons will also inevitably lead to global catastrophe.<sup>6</sup>

The wholeness of the world we live in, which is manifested to an ever greater degree, has become another important factor that determines the growing understanding of the danger of military conflict and the senselessness of the arms race. Ecological and medical problems know no boundaries. Other problems—raw materials, energy, etc.—will inevitably arise in the relatively near future. All of them, to say nothing of the preservation of life on the planet, can only be resolved through common efforts. And it is by no means the

intellectual elite alone that now understands all this and the inadmissibility of military conflict. The entire civilized world is now essentially keenly aware of the new realities. It is specifically the ability to perceive them and to act in accordance with them that becomes the yardstick of civilization to an enormous degree.

Most profound changes have taken place in the living standard and the quality of the life of the broadest strata of population in the West in the postwar decades. It is well known that aggressive wars in the past usually started with the support of a considerable part of society which viewed them as a means of acquiring living space, resources, and thus of resolving their own urgent problems. Now—I have already had occasion to write about this—the scientific-technological revolution in combination with flexible social policy has made it possible to solve a large part of them in a completely different way. No one would any longer think of equating territorial size and resource availability with national well-being and prosperity (which is, alas, largely connected with our experience). All the more so, in no single developed country is there any kind of solid social base for carrying out aggressive actions against the USSR or in general for implementing a policy that could lead to a big war. There is a combination of factors here: tight controls by legislative bodies over executive bodies; developed civilian society (which has placed militarism under quite stable control); and awareness of the deadly danger of such actions. Frankly speaking, there are no very discernible factors that might encourage someone to engage in military conflict with us as some kind of last, desperate step—"to go down with a fanfare!"

It is specifically by virtue of what has been said that where Western countries are concerned, war with the USSR is impossible as a means of resolving political and other problems. Does this mean that we have no need for military power whatsoever? Does this no contradict what was said at the beginning of the article? By no means, because in order to exclude surprises connected with technical, political, or any other reasons, the Soviet Union must have the guaranteed ability to inflict unacceptable damage on the attacking side.

It is obvious that we have such ability and therefore as long as the technical reasons on the basis of which all existing weapons—nuclear and conventional—exist, as long as the age of fundamentally new weapons has not dawned (this will be discussed in greater detail below), the USSR will have a guaranteed "window of vulnerability" or "period of guaranteed military security." It lasts roughly 10-15 years, whereupon a situation requiring different evaluation criteria may develop.

There is no doubt—and there is daily practical confirmation of this point—that the existing realities are also perfectly well understood in the West. As already stated, the West is not looking for a ruinous, no-win conflict. It is therefore impossible to understand the logic that the condemnation of nuclear war in the political lexicon and

Western military doctrines is nothing more than a declaration to soothe the public, that has not and does not play any kind of restraining role in NATO military activity<sup>7</sup>, that we will now have to prepare to repel possible NATO aggression involving both nuclear and conventional arms. Of course, the professional load of military leaders is very heavy. But in such evaluations one nevertheless sees the desire to apply old criteria to a new situation. But this may seem extremely unfavorable both from the standpoint of seriously improving the entire international situation and of resolving specific national security problems. Obviously, the existence of such a "period of security" that is bestowed upon us by history and the logic of world development must be used with maximum effectiveness in all spheres, including the military sphere, which is presently the subject of discussion.

It seems especially important to secure such changes in the scale and structure of our military power that would bring it into line with the situation that actually exists today and that would pave the way for its future evolution. It is first of all necessary to continue to restructure our armed forces in accordance with the adequate defense concept, which is discussed in party documents, in materials of the Political Advisory Committee of Warsaw Treaty member-participants, etc. The unilateral reduction of armed forces and conventional arms, as is the case in the USSR, brings us closer to specifically this type of power. But structural balance is also very important. Of course, the Vienna talks and all other negotiations are very important. But it is unquestionably true that the Soviet Union should not connect its steps to optimize military power exclusively with them. There is much that we not only can but should do unilaterally to make our "grandiose war machine" (as Corresponding Member O. N. Bykov called it) more compact and flexible. The reference here is above all to those of its clearly hypertrophied elements that create well known asymmetries, without adding anything to our security, and that "subtract" from it on a long-term, strategic basis. Of course the reference is to those of its elements (and trends in their development) that, while not creating asymmetries in a physical sense, seriously yields to the combined power of the West but nevertheless create a serious "asymmetry" of a military-political nature, that willy-nilly give Soviet military activity features that are very undesirable for us. This is first of all the fleet or more precisely part of its composition and operational activity that is specifically oriented toward the performance of those "global" functions that only multiply economic and political difficulties.

Finally, in the structure of our military power there are also elements that are "exotic" according to modern concepts, such as the nation's enormous PVO [anti-aircraft defense] system (A. Arbatov also wrote about this recently<sup>8</sup>). Expenditures on it comprise—once again according to Western estimates—up to 15 percent of the military budget, while its effectiveness, as experience shows, is none too high. At the same time, even its

routine modernization swallows up tens of billions of rubles. Naturally, we must make a sober evaluation of the kind of PVO system we need today with due regard to the decisive role of nuclear missile weapons. But the fact that we produce seven times more ground-to-air missiles than the USA (four times more than NATO as a whole) and have 30-plus more PVO fighters than NATO countries in Europe is in itself quite eloquent. What is more, all the armaments and several thousand radars are operated by 0.5 million service personnel.

Optimization is also directly connected with armed forces manpower acquisition and with the level of combat training. It can hardly be denied that sophisticated equipment, especially in the future, will require an increasing degree of professionalism. According to available Western estimates, the combat training received by our tank crewmen in a year is one-tenth the training received by their American counterparts (at the same time that we have five times more tanks); our fliers receive one-third the flying time<sup>9</sup> [of American fliers] (at the same time that we have almost three times more tactical aircraft), etc. If this is the case, the situation must be altered starting with armed forces manpower acquisition and ending with their size and structure. The effectiveness—military and economic—of the induction system is steadily declining. I will add that the twice-a-year callup, which each time results in the relocation of a large number of people, is in itself a very complex and controversial measure when we consider ethnic problems. It is of course possible to replace the analysis of the situation with announcements in the press that all citizens must be ready to be trained in the Homeland, otherwise as Marshal of the Soviet Union S. F. Akhromeyev wrote in the pages of the newspaper SOVETSKAYA ROSSIYA on 14 January 1989, social justice will be violated. But this does not reduce the urgency of the problem.

It is not the purpose of the present article to analyze the problem in detail. Many complex questions arise here and the discussion will not center on decisions with the simplicity and clarity that are so dear to our heart. But whatever the case, it is necessary to bear in mind the following: when the USA made the transition to a professional army, personnel maintenance costs did not increase (in constant 1987 prices, they totaled \$79 billion in the 1968 fiscal year and \$72 billion in the 1988 fiscal year).<sup>10</sup> As regards total real economic costs, they unquestionably declined primarily because of the higher skill level of the professional army. It is therefore entirely impossible to understand the estimate that a professional army would cost us 5-8 times more than an army of draftees. This is only possible if we keep the structure, scale and quantity of equipment of the armed forces the same and raise pay if not to the U.S. level then in any event to the level of the West European countries.

The thrust of what has been said is that there is need for in-depth military reform (as an element of the entire complex of reforms in our society) starting with the public formulation of the concept of national security, the role and place of military power in its realization, the

assessment of real current and future threats, the identification of what is connected with the East in Western military preparations, what is connected with problems of North-South relations, etc. As in all developed countries, military activity in our country is an integral part of all economic and political activity, and as in all countries, the determination of its scale, structure, and trends in its development must be the prerogative of the corresponding institutions, particularly of the new Supreme Soviet.

This does not mean disbanding our armed forces or reducing them by 50 percent (or by 30 or 70 percent) or "moral disarmament." Everything is much more serious and complex: our military power must see to the nation's security at a minimum cost so that its parameters would correspond to the Soviet Union's new look, without which it would be quite difficult for us to find our proper place in the world.

The determination of these parameters is one of the most important tasks of the military, of politicians, and of economists. The new political thinking—inter alia, in the military sphere—is not Manilovism [smug complacency], is not starry-eyed idealism, is not wishful thinking. Quite to the contrary, this is, the unfortunately long years overdue "hour of truth" that made it possible for us to understand more or less clearly the entire depth of problems and the total difficulty of their solution. And military power that in any case will cost less must become one of the clearly expressed features of our society that attest to the force, to the reason, and to the clear understanding of its interests, and to the realization that we are driven not by dull enmity, but by the striving to resolve together with others world problems of great complexity, without of course forgetting the very difficult problems that have accumulated at home.

## II

Among these problems, there is hardly a problem that is more important than the resolution of the country's economic crisis. The relations between military power and the economy, which are always acute and contradictory, have therefore acquired many new alarming features of late.

What has been the price of creating the power that we now possess? What is the price we have paid for attempting to compete with virtually the entire world by ourselves? First several figures. The Soviet Union's GNP is roughly one-fifth that of the USA, the European NATO countries, and Japan. Let us also add to this Canada, Australia, South Korea, and certain other countries that have very strong military ties with the United States and Great Britain. Let us attempt to introduce here a qualitative coefficient that takes our threatening scientific-technical lag into account. According to American estimates, we lag behind the USA in 14 out of 20 of the most important, basic branches of technology, have rough parity in only 6, and do not lead in any branch.<sup>11</sup> And after all there is also Japan and Western Europe.

The real correlation of economic power also appears to be such. I think that it is difficult to doubt that the reference is to a gap that is measured as an order of magnitude. My only fear is that there will not be a 1 in front of the 0. One of the main answers (I most definitely emphasize—not the only answer) to a question that millions of people ask themselves every day—how can it be that tens and hundreds of billions of rubles are underinvested in literally all branches of the economy—from railroads to health care—clearly suggests itself. Given such a correlation of potentials, in the last decade we have produced 2.2 times more tanks than all NATO countries and Japan (and over 3 times more than the USA), 2 times more infantry fighting vehicles and armored personnel carriers (4.5 times more than the USA), and 4 times more artillery pieces (8 times more than the USA). We have already mentioned submarines, surface-to-air missiles, and basic classes of surface ships (these are the only things that we have built appreciably less of than all the aforementioned countries combined). I would like to see information of "domestic" [Soviet] origin that refute these figures and provide a fundamentally different picture. But it does not exist and the entire experience of the past shows that given the sophisticated technical means of intelligence and analysis, errors of this type in Western estimates are quite minor.

One would like to see different—entirely different—figures because they are totally stupefying. Let us try to imagine what they mean. According to the most common estimates, military spending accounts for 9-17 percent of our GNP (for the sake of comparison: less than 6 percent of the U.S., approximately 3 percent of the West European, and 1 percent of the Japanese GNP). Even if we leave all the conditionalities of calculating GNP, ruble-dollar comparisons, etc., aside, I do not believe that these figures give the full picture of the burden borne by the USSR national economy. Indeed, the best resources, the best equipment, and the best personnel are used to satisfy defense needs. This is even the subject of discussion today.<sup>12</sup> But it is also a fact that our economy's military sector is wont to live "outside the economy": materials are centrally allocated, equipment is made or "obtained" overseas at any price, and wages are also very different from the generally accepted norms in the national economy. The enduring penchant of our military industry and obviously its clients as well for practically never completing the deployment of a weapons system before embarking on the development of the next generation of the system (unlike the USA and other Western countries who do not do so for economic reasons) also costs enormous additional sums that no one has evidently even attempted to calculate up until now.

Let us try to solve a simple arithmetical problem ("arithmetical" because qualitative and certain other parameters exceed the framework of the problem). Approximately 3.2-3.4 million persons (15-16 percent of the work force in the manufacturing and extractive industry) in the USA are employed in the production of weapons

and military equipment. Let us assume in round figures that the Soviet Union produces only two times more [weapons and military equipment] than the USA and that its labor productivity is approximately one-half of the American level. The Soviet manufacturing and extractive industry employs 38.2 million persons. Consequently about one-third of them are employed in the production of weapons and military equipment. Let us subtract from this the work force in the extractive, light, local, printing, and other branches of industry. And let us imagine that the machine building complex and chemistry—the fundamental basis of the entire economy, without the decisive restructuring of which absolutely nothing can be accomplished—are left to the “nonmilitary” sector! This is truly the leftover principle [*ostatochnyy printsip*] but in an unexpected, maximally hypertrophied form. Here they are—the railroads and health care, at least a considerable part of them. Was everything that these millions of people did even after parity in nuclear missiles was attained really necessary for security, for defense?

I agree entirely with those who say that the conversion of military production in itself cannot produce the so earnestly desired economic effect if it is carried out like a political campaign. Of course, there is need for precise analysis: which plants should be converted to the production of a given product, which plants should be mothballed, what to do about the principle that we cannot have a manpower surplus, how to give manpower a mobility even remotely resembling that of American manpower, how to avoid generating additional social tension, etc.

Nevertheless, something else here is entirely clear: unless the military sector of the economy is substantially reduced, unless normal economic relations are introduced here, no matter how brilliant the people carrying out the economic reform are, no matter how favorable the conditions to its implementation, they will hardly succeed in their effort because unless these conditions are met there will simply be little left to reform! Consequently, in the process of military organizational development, it is also necessary to take the state of the economy fully into account. Our reduction of our military production by almost 20 percent is unquestionably an important step in the right direction. But only thorough analysis of the situation and a review of priorities in the course of the military reform will make it possible to create conditions for major structural changes in the national economy.

However this aspect of the problem is directly connected with another: what does the present state of the economy mean for military preparations—especially in the future, for the solution of the problem that has already been discussed above?

It appears that the new state of the scientific-technological revolution is destroying every vestige of the “enclave” system of functioning of the war economy, including, first

and foremost, the production of arms and military equipment and, of course, R&D. There are already a sufficient number of indications that advances in the “civilian” sphere can decisively alter the qualitative characteristics of conventional arms and increase their effectiveness 10-20-fold. New areas of science—biotechnology, superconductivity, further breakthroughs in the development of computers—are in general opening up such promising directions in the development of the means of armed struggle (or their functional elements) that can hardly be evaluated at present. The inevitable result of the breadth of the front of the scientific-technological revolution and its immediate impact on literally all spheres of activity is that in the military area it is no longer possible to compensate for quality by quantity, to compensate for general backwardness by a crash program to concentrate material resources and brainpower in one or two directions (as was done in the USSR initially in the development of nuclear arms and subsequently in the development of missile and space technology). The question is now posed on the following plane: a country either does or does not have the ability to keep in step with the advances of the scientific-technological revolution. A choice no longer exists. Of course, there may be lag in some respect, but if there is lag in all or almost all respects, it will be inconceivable to maintain our defensive military might even at a merely adequate level in the future.

It is very important to appreciate this new quality of the situation. Our truly self-sacrificing people are even now ready to make all the customary material sacrifices required to maintain the country's defensive capability. I will not dwell on what is also on our—international affairs scholars'—conscience: the reasons why people still have this “siege” mentality. But whatever the case may be, they are as usual prepared to make sacrifices. But it is essential that everyone understand that no kind of sacrifices, no kind of material deprivation can change anything in the existing situation. Academician L. I. Abalkin was absolutely correct when he recently expressed deep concern over the fact that it is very difficult to get the kind of personnel that are required by the modern level of technology without raising the general level of interpersonal, consumer service, engineering, etc., culture. Naturally, this also applies to the armed forces proper (it is a paradox that the nation's military spending is enormous but the working and living conditions of both privates and officers and their families are often simply unacceptable; this is one more facet of the military reform). For this reason, the low standard of living begins to reproduce itself in a certain sense and becomes a serious obstacle on the road to resolving the problems that arise. But the search for a solution along extensive lines is hopeless.

In a word, a situation has finally developed in which the economy has become a key component of the strategic balance (in the broad sense of the term). This means not merely the dependence of the armed forces on the economy, which was described by F. Engels, but rather the emergence of an irremediable situation in which—

without the dramatic acceleration of the country's overall scientific-technical development, without serious positive change in the economy—the armed forces run the risk of finding themselves in a situation where they simply cannot perform their functions effectively. Therefore the period of “guaranteed security” should be used in such a way that would, by large-scale maneuvering of resources, constantly move its frontier so that it would not end as long as the need exists for such a military guarantee.

I suggest that there are those who may construe this as an appeal for an arms race but only in a new quality, at a new technological level. I would like to explain my position clear. I encountered such evaluations several years ago at the time when work started on the study of “aggregate military power” and the first publications appeared. But already then I attempted to prove that we—if we continued our previous policy—would ultimately encounter unsolvable economic (and political) problems that objectively overwhelm us in all parameters of power, but did not by any means try to convince anyone that all we had to do was allocate twice as much of our GNP to military needs and everything would be wonderful. The issue continues to be that we must secure the qualitative and quantitative parameters of military preparations that are written into the conception of defensive sufficiency and no more!

And if someone in a certain time studies these problems after us and possibly in place of us, they will decide that the situation has changed and that the economy that—God willing!—has been put in order again makes it possible to once again create something that is “comparable in importance” but that does not correspond either to the character of threats or to the geopolitical interests, or finally, to the country's potential, once again to promise to “bury” someone—this will be an irremediable mistake. The only result can be a new cycle in the formation of the “aggregate military power” opposing us. It will be much more “aggregate” and much more “powerful” that it is at present because of the continuously increasing interrelationship between its potential participants and the increase in the number who are capable of making a quite substantial independent contribution to its functioning with all its consequences. To be sure, no one wants to think about this. After all, in the quite near future, this would mean the return to economic stagnation, the rejection of the rise of the living standard that has been so long awaited and necessary from various points of view for the sake of goals that primarily unnecessary, to say nothing of the fact that they are totally unattainable and will be even moreso tomorrow than yesterday and today. Finally, this would mean international isolation, I fear, much harsher than what we have encountered to date.

### III

Thus we come to the next aspect in the examination of the problem: military power and foreign policy. The

problem of proportionality of development of the military component, one of the three (economic, political, and military) that determine to an overwhelming degree the role and place of individual countries and their associations in the world<sup>13</sup>, is by no means of a theoretical nature. The importance of the correct application of this correlation to the economy was discussed above. But where the political aspect is concerned, proportionality or the expedience of the level of development of the military component is determined predominantly, at any rate, by the degree to which the scale and structure of military power correspond to the long-term political interests of the state and the degree to which they promote (or hinder) the creation of a maximally favorable “environment.”

Japanese researcher H. Seki notes that “global militarization is focused on an international “power structure” in which the hostility of superpowers is prevalent and extends to the horizontal and vertical forms of struggle between countries, encompassing both the intermediate and peripheral parts of the world.”<sup>14</sup> This is unfortunately quite an accurate picture and the present place of Soviet military power in this picture is clearly seen. I think that this position must be changed on the basis of long-range political interests. Military power must correspond to the geopolitical realities. In other words, it seems very important to me to strive for a situation in which Soviet military power will be directed not *a priori* against someone and shoulder to shoulder with someone (which usually has virtually a mystical nature and is quite remote from corresponding to reality), but will become an equal element of our new flexible but purposeful foreign policy, that is oriented toward lowering the level of the military threat and toward the creation of truly constructive international relations.

It is obviously also necessary to take a new look at the problem of alliances. Military power cannot in any way be replaced by natural alliances, i. e., alliances that are based on long-term interest in one another's stability and prosperity irrespective of the degree of the external threat. All postwar alliances (especially NATO and the Warsaw Treaty Organization) have specifically been created under its influence since then. But it must not be concluded on this basis that they are unnatural. If positive changes continue but the level of military confrontation in Europe substantially diminish, there will inevitably be profound changes in the hierarchy of NATO and Warsaw Treaty Organization tasks that may also affect their structure, nature, and configuration. In NATO, for example, there are many who think that the political significance of this union will grow as the role of the military factor diminishes. I think that the same path would also be correct for the Warsaw Treaty. Under the new conditions, timely evolution of such a type could play a very positive role. Of course, perestroika in Soviet military preparations will also have to take this turn of events into account. There is absolutely no necessity that military collaboration be a “central” point of joint activity. What will take its place is another problem requiring special analysis.

I would like to note that the time has come in both Eastern and Western Europe to discontinue brushing aside the term "Finlandization." While this suits some countries and not others, Finland's experience—both politically and economically (especially under the new conditions) appears indisputably positive and deserving of the most attentive analysis. But we should also not forget the reliability of the Finnish border and the lack of numerous torturous problems in respect to this country.

The new structure of international relations may lead to *de jure* and *de facto* alliances while not necessarily changing the composition of military power in the process and hence not every trend of this type will immediately tell upon the Soviet Union's military activity. The reference point will not by any means be whether or not the USSR will be a participant in one or another alliance.

Generally speaking, the awareness that by no means everything that is done in the military sphere in the world is always directed against us, is geared toward us, or is solely connected with us is one of the very important considerations from the standpoint of the nation's foreign policy interests. Such a view is a kind of anachronism, a rudiment of a bipolar world that has disappeared into the past for all time. This is how it always is or almost always has been. To accept this situation in such a way today means ignoring many obvious realities.

For example, as has been entirely correctly noted, West European military integration (we will not go into its other characteristics here) is connected not only with East-West relations, but with West-West relations and, on an ever increasing scale, with North-South relations as well. The possibility is not excluded that the lower limit to the military activity of West European countries will be determined by this line.<sup>15</sup>

The situation in the Asian-Pacific region (ATR: aziatsko-tikhookeanskiy region) also requires serious reappraisal. Naturally, there are certain elements that alarm us about the American military presence in this region. But in my view they are entirely offset by the previously discussed factors that deter any large conflict. Indeed it is difficult to imagine that the West is not making preparations for an aggressive war but that the East is making such preparations. It is entirely obvious that with such a state of affairs, Europe (or conversely, Japan) would simply be in the position of hostages. It is also necessary to take something else into account. Ya. Nakasone was entirely right when he defined the military balance in the ATR as an eastern miniature—"several thin and indeterminate strokes with an empty space between them"<sup>16</sup> (unlike the existing situation in Europe). The rapid development of many countries in the region may be accompanied by many different variants for filling this void. Is it important to maintain stability here? It is extremely important. But after all, the American military presence specifically performs certain functions in this regard. This is explicitly stated, for example, by Lee Kwan Yew, Singapore's prime minister. Nor can one ignore the view that the formation of a "vacuum" in the ATR might mean the

rapid doubling or even trebling of Japan's military spending. But would this in turn mean an increase in instability in view of the general picture in the region? What is more dangerous to the USSR? Where is the threat more real? And above all, must we tortuously and hopelessly attempt to fill the void in the military balance?

Therefore our military power in the ATR must to a much greater degree correspond to our real positions in this part of the world.

Of course, the list of situations requiring a new approach to the evaluation of the impact of "external development" on USSR military preparations is by no means confined to the cited examples.

And so there is one more area where we must abandon stereotypes (which, of course would be desirable in general). We must do so without going from one extreme to another but with a clear understanding of the relative pluses and minuses.

This is directly adjoined by one more problem—the degree to which military power can compensate other "components of influence" and serve as the basis for the long-term strengthening of positions in the world. Judging by everything, our experience in the '70's created a very distorted view of its potential. At one time it seemed that the true means of strengthening our influence had been found: directly or "through representatives." But the time has come to pay the bills. And how incredibly difficult it is to make these payments! The lesson must be remembered—military might can never take the place of economic and political components and its foreign political potential is ultimately very limited in our time. It is also necessary to draw further practical conclusions from what has happened and hence to reduce not only the military presence but the arms trade as well. Even its purely instantaneous benefits are questionable and the general losses—economic and political—are enormous. The fact that according to Western estimates, the Soviet Union is the world's largest arms supplier does not make us more influential and does not win us reliable friends, because they need not only weapons but also loans, technology, and food. But when all these are combined, it is another matter. Generally speaking, the sale of weapons and licenses for their production must be eliminated altogether (except for certain special cases) from this list before it is too late, before the situation gets entirely out of hand.

This is one more facet of the military reform in our country and it is one more very important point on the agenda of negotiations with the West.

When we speak about the problem of "military power and foreign policy," we inevitably encounter the degree to which interaction between them considers the fact that the postwar era has ended.

Naturally this does not mean the virtually automatic repudiation of all agreements and realities, that are

discussed by H. Kissinger, for example, associated with the end of World War II.<sup>17</sup> But a fundamentally different, political, and military "space" has been unquestionably created (after all, it is itself in large measure the result of the war), in which the division into victors and vanquished is of a very conditional nature if only because it is entirely inappropriate to the concepts "strong" and "weak" in their modern interpretation that necessarily includes the category of economic prosperity and scientific-technical leadership. I believe that if we seek the reference point of the end of the postwar era, it will prove to be specifically the period in which this inadequacy appeared and strengthened in combination with the irreversibility of West European integration and the advent of other new growth poles in the world.

Therefore, military power which formed over decades in our country and in the West according to the "postwar" scheme must invariably undergo serious structural and vector changes in order that it also become an organic element of the new space.

What are the main properties of this power? What does it need to acquire such organic nature? I think that the answer already exists: defensive sufficiency. Moreover this is sufficiency that is based not only on the new evaluations of the required number of divisions, equipment, etc., which are, of course, very important. But as historical experience shows, no government, no general staff since the beginning of the century has been able to correctly calculate the forces that are really required or, above all, to correctly understand the significance of the political situation, the significance of what is "written" into it, and how military preparations influence the situation. Therefore the discussion must be of defensive sufficiency in which the restructuring of the armed forces is in full unity with the most important reality of our time—the impossibility, senselessness, and criminal nature of military conflict between East and West.

I do not belong to the number of optimists who believe that peace and tranquility will reign on earth in the foreseeable future. The road to this will probably be long and tortuous. Therefore it is so important that the country approach already existing, extremely acute global problems and possible aggravated situations as a fully equal, active participant in a community of many highly developed countries, including the military aspects of its activity. Foreign policy in the post-April period has been oriented toward attaining this—it can be said without exaggeration—important historical goal.

The period of guaranteed security must be used in the foreign policy sphere to effect this "integration," this decisive change in the character of interrelations. Then all development during and beyond the 10-15-year period of time will look different and the boundaries of security will be expanded (on a continuing basis) not only by our internal conditions that were discussed above, but by the general change in our international position and status as well. Military power should be a help rather than a hindrance (albeit occasionally involuntarily) in this area.

Thus the characterization of power, the content and form of the decision-making process—all this must correspond to the goals, tasks, and priorities of foreign political activity. Otherwise the erroneous impression—fraught with grave consequences and failures—might be created that military power has a political function of its own and this, of course, is inadmissible.

In the relatively recent past, the struggle between the two systems was considered the basic content of the epoch and the so-called class nature of foreign policy led us into impenetrable jungles (in both a literal and figurative sense). Strictly speaking, it quite soon developed that military power was the principal and later on virtually the only instrument of this struggle and this foreign policy. The results are common knowledge. We fortunately came to understand that this is a road that leads nowhere and that our country and our ideas deserve a better fate and better argumentation. This is also one more proof of the need for extensive military reform.

Thus, the question is: military power—how much, what kind, and why? Realizing that my answers will of course be incomplete and will by no means satisfy everyone, I nevertheless propose my own variant. How much—no more than the level required to protect the country's vital interests in accordance with the character of real threats and economic potential given the transition to the principles of defensive sufficiency and the lack of political, economic, and other potential and motivation on the part of both West and East to engage in a conflict that is both suicidal and senseless (even with the hypothetical possibility of survival). What kind—flexible, mobile, with clearly expressed priorities of development, capable of reacting promptly to changing situations. Why—to secure the comprehensive participation of the country in peaceful development processes and in the support of the principal directions of foreign political activity.

Military reform is unquestionably just as essential as reform of the political system and the economy. External conditions favorable to military reform are taking shape: in addition to the long-range obligations and factors that were already described above, we cannot fail to see other, entirely tangible manifestations of this fact. The USA has cut its military spending 5 years in a row and signs of favorable change in Europe and Asia are gradually multiplying. While nothing in this world is free of ambiguities, further steps of the USSR in the already chosen direction will dramatically accelerate positive changes today and secure positions worthy of us tomorrow.

The biggest risk today is to change nothing, to stop, deciding that a sufficient amount has already been done (there is such a point of view). A great politician in the last century said that the most unpleasant thing is to make a decision and that the most dangerous thing is not to make a decision. Our country today has with its own hands created a chance for cardinal change for the better everywhere, including the military sphere. We must use all 100 percent of this chance.

## Footnotes

1. See "The Military Balance. 1987-1988," London, 1987. I do not address this question in greater detail because it has been very competently dealt with in a number of publications, in particular in the journal MEZHDUNARODNAYA ZHIZN.

2. See "Soviet Military Power," Washington, 1988, pp 34, 38.

3. S. G. Gorshkov, "Morskaya moshch gosudarstva" [State Naval Might], Moscow, 1979, p 276.

4. Ibid., pp 411-412.

5. See MEZHDUNARODNAYA ZHIZN, No 1, 1984, p 66.

6. See KRASNAYA ZVEZDA, 13 April 1989.

7. See PRAVDA, 13 March 1989.

8. See MEZHDUNARODNAYA ZHIZN, No 3, 1989, p 41.

9. See C. Levin, "Beyond the Bean Count," Washington, 1988, pp 24, 25.

10. Calculated according to: "Budget of the United States Government" for the respective years.

11. See "American Defense Annual. 1987-1988." Ed. by J. Kruzal, Lexington, (Mass.), 1987, p. 65.

12. See, for example, KOMMUNIST, No 4, 1989, p 116.

13. For more detail, see "Voyenno-ekonomicheskiye svyazi stran NATO" [Military-Economic Relations of NATO Countries], Moscow 1988, pp 222-224.

14. H. Seki, "The Asia-Pacific in the Global Transformation," Tokyo, 1987, p 35.

15. See ME I MO, No 2, 1989, pp 106-107.

16. THE ECONOMIST, 24 December 1988, p 48.

17. See THE WASHINGTON POST, 16 May 1989.

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### Problems of Computer Control in SDI Discussed

18160018D Moscow MIROVAYA EKONOMIKA I MEZHDUNARODNYYE OTNOSHENIYA in Russian No 8, Aug 89 pp 91-96

[Article: "Artificial Intelligence for Nuclear Chess"; first paragraph is MIROVAYA EKONOMIKA I MEZHDUNARODNYYE OTNOSHENIYA introduction]

[Text] A. B. Kuvshinnikov, a reporter specializing in international affairs, and V. M. Sergeyev, an associate of the USA and Canada Institute of the USSR Academy of

Sciences and an expert on applied computerized information processing, discuss problems born of the space weapons control system concept.

[Kuvshinnikov] The problem of developing and exploiting a space weapons control system is a separate category among the multitude of problems posed by the "strategic defensive initiative" concept. They are of a moral-technological character that is strange to us because they reflect the astonishing intertwining of two worlds: the world of people and the world of machines.

A partially space-based, antimissile defense control system must be a vast computer complex capable of the collection, primary processing, and correction of data on the launching of enemy missiles, of using these data to compute the flight trajectory of missiles and warheads, to determine the time and sequence of destruction of targets, and to secure the guidance and direct application of the appropriate type of antimissile weapons. The task is incredibly complex. Many scientists even express doubt as to its theoretical feasibility.

[Sergeyev] It is indeed beyond the reach of the computers of today. The problem is one of conceptual difficulty.

The fact of the matter is that the control of any weapon is connected with the solution of real time problems. Unlike computational problems, they require the practically instantaneous recognition of an object or process and an optimal decision regarding the action that is to be taken in response. The appropriate electronic systems must have an appropriate reliability margin and significantly high operating speed. According to the estimates, the threshold here is at the level of approximately 150 billion operations a second. Crossing this threshold requires a new generation of computer technology.

Sequential data processing with a central control processor has been an immutable principle in computer design up until now. Every command must go through it and only one command can go through at any point in time. The dilemma of this concept is obvious: while the command transmission time, like the interval between commands, can be reduced to an incredible minimum, there is nevertheless a physical limit to the speed of these machines.

However in the next couple of years the situation changed radically. Rejection of the traditional sequential computer in the '40's by J. von Neumann in favor of a network of a certain number of less powerful processors became the conceptual breakthrough in computer technology. In the USA I saw a computer with 64,000 processors. Such parallel computers are controlled by a conventional sequential computer that in every specific instance configures the network of processors that corresponds most closely to the specific task that must be realized.

The novelty of the situation consists in the fact that the technology acquires the properties of software and becomes flexible. There is now feedback that did not

previously exist. Work on the idea of flexibility generated such breakthroughs in recent years that radically altered the situation and made possible that which had been considered total fantasy.

No conceptual limits to increasing operating speed are as yet visible in the area of parallel computers. The curve is rising sharply, surpassing all predictions. After all, the network of processors can be expanded practically infinitely. In a certain stage, to be sure, it will be necessary to enlist the aid of superconductivity. The maximum speed of semiconductor-based processors is roughly 100 billion operations. While it is theoretically possible to raise the bar even higher, the circuitry will become too dense because of the increasing proximity of the elements required to raise the speed. The denser the circuitry, the more heat is emitted and the greater the number of malfunctions. Hence the need either for additional cooling or for a heat-removing diamond substrate. Or else the circuits must be made into weak-current circuits, but then they will also begin to malfunction.

Nevertheless, the existing speed of adaptive systems makes it possible even now to develop computers capable of controlling SDI-type weapons systems. The only question is: how compact will these computers be and how convenient will the software be to use? But speed is practically no longer a limiting factor.

Such is one of the most important results of intensive research planned and carried out within the framework of the "strategic computer initiative" (SCI).

[Kusvshinnikov] Unfortunately, there has been practically no discussion of it in our press—either the popular scientific and or academic press. But the SCI, or as it is called in the official documents, the "strategic computer plan" (SCP), unquestionably merits greater attention.

Such a plan was developed in the mid-eighties by DARPA—the Pentagon agency for long-range defense research projects. The SCP was a kind of challenge to computer programmers and designers to develop several applied military computer programs. For example, DARPA experts ordered an electronic battle control system for the navy. The reference is to the development of a computer with artificial intelligence that could converse in ordinary language with fleet commanders about the tactics and strategy of combat operations. I quote the text of the SCP: "This type of system will generate scenarios of possible enemy intentions, array them according to their degree of probability, and explain on the basis of certain criteria specifically why the given system has been chosen. By comparing theoretical positions with the real potential of its combat forces and the potential enemy forces, the system is capable of proposing potential battle scenarios and of explaining the key facts of each of them. At the same time it explains the relative attractiveness of scenarios, taking into account such criteria as the preservation of own forces, inflicting damage on the enemy, and conditions for engaging in conflict."

DARPA specialists wanted to obtain another "talkative" computer—an electronic pilot-instructor—for the air force. Topics of conversation with a pilot could be: the state of the various aircraft control systems, navigational questions, the state of the enemy's anti-air defenses, the goal of the mission, the strategy and tactics of its safe execution taking the latest data of radioelectronic intelligence into account. Such an instructor would unquestionably have his own opinion of how the pilot should act to attain the optimal result.

The third direction of work within the framework of the SCP is the development of a self-propelled chassis on which various combinations of tactical weapons can be mounted: lasers, support fire, guided missiles, nuclear landmines, and visual and radioelectronic intelligence gear. The undercarriage must be a totally self-contained robot that can see, that has terrain orientation capability, that can select its route of movement independently, and that can evaluate the tactical situation. The following will be a typical control command: "In X hours, go to region Y, and destroy object Z." The specific way in which this is to be done is up to the robot.

Significant progress has been made in this direction. The self-contained, self-propelled robot laboratory at the Carnegie-Mellon University has already developed the first prototypes of the "terragator" six-wheeled undercarriage.

A great deal is also indicated by the Terrapin Company's "turtle"—a small self-propelled mechanism used as a visual aid to small schoolchildren learning their computer ABCs. The "turtle" is plugged into a computer and the robot rolls over a paper-covered floor drawing an intricate design with a built-in pen.

The creators of this harmless being received a letter from one of the Pentagon's largest contractors. The letter contained the request for documentation that could be used to evaluate the robot's potential combat applications. Wags at the Terrapin Company replied, using the tone and vocabulary of the military agency.

In the part entitled "Survivability," they noted: "The "Turtle"-system robot has a silhouette that is low to the ground which greatly reduces the possibility of its detection by the enemy. It evades radar fixes and leaves virtually no infrared trace. The slight clearance of its running gear increases its ability to camouflage itself in open terrain. Its silhouette also significantly reduces the probability that it will be locked on by the guidance systems of most of the existing "ground-to-ground" missiles. An especially important feature: the "turtle" can turn 180 degrees with a smaller radius than any other land, sea, or air weapons system or military transport vehicle in the U. S. military establishment."

The next section was entitled: "A Guide to Combat Application" and contained the following passages: "Using the sensors that encircle them, it is theoretically possible to program a large group of "turtles" to simulate Brownian motion. There is no way the enemy can

## SOVIET UNION

determine the trajectories of movement of 10,000 robots chaotically moving toward his positions. What is more, according to our estimates, this picture will have a demoralizing impact on the enemy's troops."

The section entitled "Weapons" states in particular: "The "turtle's" only real weapon is its ballpoint pen. But it is theoretically possible to program the robot to charge enemy positions while feverishly raising and lowering its pen and jabbing enemy soldiers with it. "Turtles" can also be programmed to push or move small objects in the required direction. Robots can be used in combat to roll grenades into the enemy's trenches and fortifications. Considering accelerated research on the development of small nuclear weapons, it is possible to use "turtle" as a carrier—or pusher—of tactical nuclear weapons."

The anecdotal reply was received in all seriousness. The Hughes Aircraft Co. bought several "turtles," plugged them into its mighty computer, and tested the robots' ability to move over conditionally mined terrain. The results of the experiment were classified.

All this has the most direct bearing on the work on the air-defense control system. While this task is not explicitly stated in the SCP for political reasons, it is nevertheless obvious that all three of the aforementioned directions of research are oriented toward the development of a new generation of computers capable of solving real time problems. But the distance from controlling the "terragator" to guiding orbiting laser platforms is not so very great. The only question is the relative difference in the sophistication of the software. Its reliability—or more precisely its lack of reliability—is the other side of the problem.

The Office of Technology Assessment, which operates under the auspices of the U. S. Congress, reached the conclusion: "There will always be unresolvable problems concerning the reliability of computer programs. This makes it highly probable that the (ABM defense control) system will fail due to software errors the very first time it is used in actual combat."

[Sergeyev] You know that programs of comparable complexity have already been created...But in principle you are right: the reliability of programs for military control systems is the problem of problems.

A fundamental point must be emphasized here. It is impossible to avoid programming errors entirely. There are no large error-free programs. The whole question is the nature of these errors and their possible consequences.

In principle there are two ways of increasing the reliability of programs. The first—very difficult and unpleasant—way consists in devising a logic test program. While the advent of adaptive computers simplifies matters to a certain degree, it must be remembered that the test program will be more complex than the program it tests and hence in turn will contain no fewer errors.

American specialists have taken another tack regarding the SDI control system. They are trying to develop an error-free program with the aid of a simulation complex. It plays the part of a proving ground for running-in the program, for cleansing it of errors, for learning how to correct errors. In practice, this appears as follows: an extraordinarily powerful computer continuously generates input data as if tossing tiny balls that are shot down by another computer running an ABM control system program.

But even if it is possible to conduct such a test under conditions that are very close to combat conditions, it nevertheless can only give an approximate understanding of the system's operation under real conditions.

At the present time, there is no way of developing an error-free program. But an ABM defense system that operates with errors is a potential source of war. You will agree that this is a serious argument against the SDI program.

[Kusvshinnikov] But there is also a third way of getting rid of errors: testing the functioning of air-defense components directly in orbit even on real, if training, targets. The USA has already conducted experiments on focusing a laser beam and on controlling an antisatellite interceptor.

[Sergeyev] It is specifically around this point that the haggling surrounding the interpretation of the ABM treaty revolves. It is extremely important for Americans to retain the possibility of testing in space the components that are developed. Otherwise they cannot be sufficiently certain that the system will operate the way it should. The mission of space air defense is so serious that the deployment of the system without total certainty of its ability will be a suicidal step. American specialists are fully aware of this.

[Kusvshinnikov] The reliability of the space ABM defense system depends not only on the reliability of the software but also on the survivability of orbiting command centers in the event of conflict.

The maximum centralization of the computer potential concentrated in a supercomputer assembled at a very great distance from earth is proposed as one of the architectural variants of the entire system. This ensures its sufficiently high invulnerability to the enemy but the reliability of two-way communication is at the same time dramatically reduced. Space is full of surprises.

Another variant, to the contrary, presupposes the maximum deconcentration of analytical potential, and the division of the ABM defense system into autonomous zones. In such a case, the disablement of a zonal *dispetcherskaya* computer will not result in the destruction of the entire system. It would seem to be not bad if we close our eyes to the obvious fact that the failure of the ABM defense system even in an individual sector will lead to inadmissible harm.

There are many variants of both passive and active protection of space-based ABM defense control centers. The first includes the deployment of backup and decoy *dispetcherskaya* computers, radar camouflage measures, etc. But all this only complicates an already complicated control system and consequently increases the probability of its failure.

Active protection is even more problematical. After all, no more and no less than about two tons of a working gas mixture are required for one shot by a chemical, hydrogen fluoride laser—the least fantastic type of radiation weapon capable of destroying an ablation-coated missile. Considering the special attractiveness that control system platforms hold for the enemy, their possessor must count on the necessity of destroying dozens of targets. As a result, the reservoir containing the “munitions” for the laser acquires such dimensions that it itself becomes an excellent target which if hit will also result in the destruction of the computer complex.

Because space platforms with control systems will for a long period of time be in orbits with known parameters, they will be an easy target for asymmetrical response systems. As noted in the Western press, small satellite “mines” or “shrapnel” clouds of gravel or ordinary nails are a very menacing weapon against them: after all, a particle weighing only 30 grams can pierce a protective shell 15 cm thick.

The infection of a program with destructive viruses can become a countermeasure within the framework of asymmetrical response against control systems. For average ground-based computers, this is not fantasy but a real problem.

[Sergeyev] Frankly I have never encountered an idea involving such an application of viruses. But in principle why not? A virus is usually introduced as a result of the incautious exchange of magnetic memories. In the case of SDI computers, this channel will obviously be reliably closed. But neither memories nor the program itself will be closed to those working directly to perfect it. And they are an excellent channel for implanting the virus. Here it is necessary to consider a human psychological factor: man's use of the machine to wreak vengeance on society has long ago grown from a fictional topic into an everyday reality in today's world.

[Kusvshinnikov] And what if the program contains a code that causes the computer to react to any unsanctioned attempt to modify it or to exert an external influence on it as a hostile act with the immediate combat deployment of ABM defense components? Knowledge of such consequences of any interference in the program will have a deterrent effect on attempts to use viruses.

[Sergeyev] At the present level of electronic reliability, a malfunction can also occur for purely natural reasons, for example, as a result of a flareup in solar activity or a magnetic storm. Thus to rigidly link the triggering of the ABM defense to the penetration of the program presents a danger to its owner.

[Kusvshinnikov] Let us sum up certain intermediate results. Controlling a space-based ABM system alone will require a new generation of computers with a thoroughly specific operating speed and the development of experimental prototypes of adaptive computers appropriate to these demands.

The solution of real time problems requires new software. Programs that are comparable in complexity, even if they are not sufficiently reliable, already exist. Thus a control system of this type already exists not at the conceptual level but in the form of experimental prototypes. But what kind of role is assigned to man in the system?

If a talking and thinking computer is capable of solving strategic problems for a limited contingent of combat forces—a ship, an aircraft, a fleet, etc., the sooner or later—probably quite soon—the question will arise as to the feasibility of transferring the entire military potential to the charge of an artificial commander-in-chief. Many of the weapons systems that are in existence even now are not used to the full extent of their combat potential because it is necessary to think about the human factor controlling them.

In the opinion of the military, the continued existence of the human factor in the decision-making process concerning the use of weapons in principle reduces their effectiveness. Man is a slow thinker, but in battle the one who fires first has a considerable advantage. All strategic computer plan programs are ultimately oriented specifically toward the exclusion of man from the “computer-weapons” chain.

But as regards a specifically space-based ABM defense system, its control must invariably be accompanied by an automatic decision-making process by virtue of the tasks that confront it. SDI advocates present the exclusion of the human factor from direct participation in combat as a major plus: if war does break out, it will become a battle waged by computers and lasers. But if the improvement of military equipment makes combat operations less dangerous from a human standpoint, it at the same time also makes them more probable.

The development of a self-contained electronic space-based ABM control system generates an entirely anomalous situation: thermonuclear war, the last crime against mankind, will have no concrete author. The decision to begin it will be made by a faceless microcircuit or a soul-less processor.

[Sergeyev] That is the whole point. The duration of the initial sector of flight of an IBM in which the space-based ABM defense system must be activated to intercept with maximum effectiveness is less than 5 minutes. Already existing plans to improve the design of delivery vehicles make it possible to reduce this time to 180 seconds. And according to certain assessments, the intercept stage [?] *etap razgona* can realistically be reduced to 50 seconds.

This means that a maximum of 20 seconds will be allotted for the activation of the ABM defense system.

The time remaining for human intervention is negligible. But what if the early-warning system malfunctions? Obviously the possibility of beginning a war must not be transferred to technical devices.

[Kusvshinnikov] While the present decision-making chain on the use of strategic missiles cannot be considered ideal, compared with such a prospect it seems entirely rational. American command norms allot no more than 2 minutes for processing data received from early-warning satellites and forward-based radars. Another minute is allotted to verifying the data by the central complex of the Joint North American Aerospace Defense Command (NORAD [North American Air Defense Command]). The next minute is used to check the system for malfunctions. Thirty seconds are allotted for the duty officer's report to the NORAD commander. One minute is allotted for communicating information to the national command center in Washington.

If the space-based ABM defense system is activated, the interception of the missiles is transferred to the *uchastok razgona* and hence the decision-making time is sharply reduced. And this inevitably has an extremely pernicious impact on the stability of strategic equilibrium.

Nevertheless, American specialists, and indeed some politicians as well, prefer—to put it mildly—not to focus attention on the fatal inevitability of the “dehumanization” of the decision-making process. What is more, they try to picture matters as if the SDI control system will ultimately be directed by humans.

[Sergeyev] At best, all that remains for humans to do is to view the computer-prepared variant. There will be no time to analyze variants proposed by computers—a fact that is fraught with unpredictable decisions.

The SDI control system will evidently be an artificial intelligence system with the ability to analyze a strategic situation. It is quite difficult to predict how it will react to various external circumstances. The computerization of military decision-making systems has confronted science with completely new tasks in the area of artificial intelligence. Chess-playing artificial intelligence is one thing. Here the only thing required is a knowledge of the game. Artificial intelligence that makes decisions upon which the fate of people and all mankind depends is something else altogether! In such a case, a system of human values and a moral code must be built into the weapons control system. Until a computer can evaluate the strategic situation from “human” positions, it is very dangerous to use it to make vitally important decisions.

Computer programs are now addressing the problem of simulating human values but as yet there is not even a visible hint that the problem is solvable. Thus, it is technically possible to develop an ABM defense system controlled by artificial intelligence long before a value “fuse” is installed in it.

[Kusvshinnikov] But even if it is possible to install a complex of human values in a weapons control system

(for any kind of weapons) over time, the question remains: who will determine its content and which specific values will be given priority?

Americans probably are more closely in touch than others with the world of electronic technology and from their own experience the potential danger presented by the lack of reliability and self-contained operation. It is probably this factor that is promoting the growth of political opposition in the United States to plans for developing any form of self-contained space-based ABM defense system requiring the exclusion of man from the decision-making process regarding its application in combat.

Even though they are not unanimous, scientists engaged in space-related research express a certain degree of dissatisfaction about the dominant role of SDI activity.

“I ask those who are interested to think together with us about ways of improving missile control systems”—stated the information bulletin of ARAPNET—a computer information system created by DARPA linking the major U. S. computer research centers. It brings to the computer screen information about a wide range of topics of interest to specialists: fiction, problems of space flight, amusement programs, electronic games, computer music. The computer makes it possible to exchange ideas, to seek the joint solution of a problem, i. e., essentially unites the intellectual potential scattered all over the country into one creative fist with incredible penetrating power.

But among the various hobby clubs, there is also a club for the “creation of new weapons systems.” It was through its channel that the message referred to above was distributed. From the multitude of responses, I selected three that most completely reflected the range of positions of ARAPNET users.

The first position: “I was insulted by the request for assistance in improving missile guidance systems. This is the same as saying: help me to destroy the world in a cleverer way. My tax money also goes to perfecting weapons and I am indignant over such waste of the Pentagon's colossal financial and human potential.”

The second position: “I think that all the Pentagon money that ARAPNET lives on should be used for something more beneficial, if only for the development of missile guidance systems.”

The third position: “All of us derive great benefit from Pentagon aid. Without it, there would be no DARPA, no ARPANET, nor would there be 80 percent of the research and design projects currently under way. It would be unjust if any of us criticized our colleagues requesting information about the possibility of speeding up work on the development of a new missile guidance system. Of course, such requests can cause alarm—they are a reminder of the ultimate direction of our work. There are people who find this reminder unpleasant, who do not want to think about it. I simply want to work.

I am not interested in the source of the money I am working for. Or: I use money that would go to defense anyway but for things that are totally bad, for the same missiles. This is to say: research has no relationship in reality to military questions, but is financed in this way exclusively because of the existing political situation, and ultimately I am not responsible for the end use of the results of my research. We will not criticize such people. But let them refrain from criticizing those to prefer not to avert their eyes from the truth."

[Sergeyev] Our talk is moving out of the area of expert evaluations of technical issues into subtle political and ethical spheres. I am an expert on applied computerized information processing and it seems to me that the solution of many of the questions you raise depends on one's personal political and ethical position. It seems to me that they must be resolved from the standpoint of general human values.

[Kusvshinnikov] The fateful cycle will continue without interruption as long as policy remains a hostage of technology and science that drives technology remains the hostage of the military. Such an interrelationship was inevitable in the early stage of the scientific-technological revolution. In the present stage, it becomes mortally dangerous.

If the arms race continues, the use of computer technology in military systems will inevitably expand. After

all, the rivalry is primarily in the area of qualitative improvements of arms, and computers are now the carriers of the desired new qualities.

Such development of events—and in the absence of a breakthrough in new measurements of agreement in the foreseeable future in Soviet-American negotiations on nuclear weapons, it is practically inevitable—is fraught with the most serious kinds of unpleasantness.

After all, extrapolation to the future of totally obvious trends toward the computerization of weapons logically leads to the gradual elimination of man from the decision-making process on putting these weapons into action. A very alarming dependence is clearly seen: the elimination of the human factor is accelerating in proportion to the increasing destructive power of the weapons system.

The SDI program is confirming this dependence at the level of an absolute: absolutely powerful weapons that threaten the destruction not of individual people but of all mankind are becoming absolutely independent of human will.

This is no longer a paradox. This is an absurdity.

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## EUROPEAN AFFAIRS

**NATO Ministers Discuss German Unity, Arms Talks***LD2911231589 Madrid Domestic Service in Spanish  
1900 GMT 28 Nov 89*

[Text] Today saw the opening of a meeting in Brussels of the NATO defense ministers, a meeting at which statements have been made on German reunification and at which there has been a wide-ranging exposition of the European military doctrine. The United States is prepared to reduce its manpower and arms on European soil in the future. A report on this from Nacho Hernandez in Brussels:

[Hernandez] This is a NATO Defense Planning Committee meeting marked by the explosion in the East and the upcoming summit in Malta between Bush and Gorbachev. The West German defense minister has been prominent. He said that the unification of the two Germanies could come about earlier than many people think. In the opinion of Stoltenberg, Europe should accept greater responsibility for the defense of the continent. In this respect we should also report the statements by U.S. Defense Secretary Cheney, who has outlined reductions which will be the subject of consultations with the allies and which will come about by virtue of an agreement on conventional arms in Vienna. We should also report the stand expressed by the Spanish Government on the situation of change in East Europe—there are three points: Economic aid for these countries via the EEC; speeding up the process of constructing the European Community; and the speediest conclusion of those agreements which are already at an advanced stage—that is conventional arms in Vienna, START talks, and the elimination of chemical weapons. Narcis Serra, minister of defense:

[Begin Serra recording] In this context, given that the three sets of talks are already very much oriented, and the positions very well known, the prospects for agreement are real. It seems much more sensible to conclude these agreements as quickly as possible rather than fall into the temptation—which may have existed—of introducing new elements into the mechanics of the negotiation of these three agreements deriving from the situation created in Europe. [end recording]

[Announcer] We continue in Brussels because Spanish Defense Minister Narcis Serra also spoke about the future of the Spanish Army in the framework of a reduction of conventional forces in Europe. Nacho Hernandez again reporting:

[Hernandez] Defense Minister Serra said that Spanish defense planning work is taking into account an eventual agreement in Vienna. It is too early to submit ideas on this question, he said, although he acknowledged that the new situation would demand new organization. However, the time to ponder this, he added, would be after the agreements on conventional arms in Vienna.

**Cheney Remarks Raise Questions on U.S. Troops***LD281121489 Hilversum International Service  
in English 1130 GMT 28 Nov 89*

[Text] NATO defense ministers are meeting in Brussels on Tuesday and Wednesday to discuss the progress in the current round of disarmament talks in Vienna. Figuring prominently on the agenda will be the recent announcement by U.S. Defense Secretary Dick Cheney that the developments in Eastern Europe make it possible for Washington to effect substantial cuts in defense spending. Mr Cheney's remarks have raised questions among the NATO partners about America's willingness to maintain its troop strength in Western Europe. During a working visit to The Hague on Monday Mr Cheney told his Dutch opposite number, Relus ter Beek, that Washington will consult its NATO allies before any decision on U.S. troop withdrawals is made.

Next week after his summit meeting with Soviet President Mikhail Gorbachev U.S. President George Bush will come to Brussels to speak with West European government leaders and brief them on the results of the summit.

**Woerner Says Alliance 'Indispensable'***LD2211120389 Hamburg DPA in German  
1040 GMT 22 Nov 89*

[Excerpt] Munich (DPA)—NATO Secretary-General Manfred Woerner thinks the Western alliance is indispensable for the foreseeable future, in spite of the changes in the East. The continued existence of the Atlantic Alliance was "urgently needed" in order to guide the change with a coordinated policy and to safeguard security policy, Woerner said in Munich on Tuesday at the end of the 3-day "Franz-Josef-Strauss Symposium" of the Hanns-Seidel Foundation, which has close links with the CSU [Christian Social Union]. Credible deterrence on the Western side will remain indispensable in the next decade as well.

Woerner spoke of a "minimum of weapons for preserving a maximum of deterrence." Confrontation between East and West has to be increasingly replaced by elements of cooperation. After 40 years, NATO is about to see "almost total success for its policy." The alliance had made a decisive contribution to the present situation by holding Soviet expansionism in check. "Without NATO there would be no perestroika and no glasnost," the former FRG defense minister said. [passage omitted]

## CANADA

**Arms Control Center Report Urges Arms-Free Zone in Arctic***52200006 Toronto THE TORONTO STAR in English  
25 Oct 89 p A3*

[Article by William Walker]

[Text] Ottawa—A sweeping report has mapped out an eight-point plan for Canadian and Soviet officials to create a central demilitarized zone in the Arctic.

A panel comprised of professors, international relations experts and representatives of native groups issued the report yesterday on behalf of the Arms Control Centre, a Canadian research body promoting disarmament.

The Arms Control Centre is hosting a conference here on Canadian-Soviet co-operation in the Arctic, along with the Union of Soviet Friendship Societies.

On Monday, Soviet Deputy Foreign Minister Vladimir Petrovsky urged Canada in a speech to the conference to work toward limiting arms in the north.

Yesterday's report urges the Canadian government to "break the logjam" on several fronts to bring peace and security to the Arctic—but it also demands Soviet action.

Panel members told reporters in a press conference that the Soviets' policy of glasnost, or openness, provides the ideal opportunity to pursue disarmament efforts.

"Governments should not be deaf mutes where Arctic co-operation is concerned," said Franklyn Griffiths of the University of Toronto, one of 13 panel members.

The group says its recommendations are in response to Soviet General Secretary Mikhail Gorbachev's invitation on Oct. 1, 1987, when speaking in Murmansk, for western powers to join in arms control initiatives.

Canadian external affairs officials have been wary of the Soviet overtures, since the U.S.S.R. maintains a massive concentration of military power in its own Arctic.

"There has been considerable resistance by governments to do this while they're trying to figure out whether the end to the Cold War is real," said John Lamb, director of the Arms Control Centre.

The report's recommendations include:

- Establishing a central Arctic demilitarized zone, to prohibit weapons but not military personnel, equipment or resources used to assist in research, humanitarian or search activities, or environmental cleanup.
- Two unilateral Soviet initiatives. One, to officially declare that U.S.S.R. submarines will not transit Canadian Arctic waters. Two, that Soviets halt nuclear weapons testing at their Novaya Zemlya site, an island near the Kara Sea.
- An "open skies" policy, as recommended by U.S. President George Bush to allow monitoring and surveillance of military aircraft, should be extended to include the Arctic.
- A ban on simulated bombing missions and on military aircraft carrying nuclear weapons in the open skies zone, while Arctic countries agree to a common space-based radar system.
- Limits on sea-launched cruise missiles and naval arms control by the superpowers, to be negotiated.
- The establishment of a regular conference on Arctic Security and Co-operation.
- Creation of an ambassador for Arctic issues, since Canadian decision-making is "widely dispersed and

lacking co-ordination." Finland is the only Arctic nation with such a position.

—Finding a way to overcome "technically complex and prohibitively expensive" verification of the ban on submarines in Arctic waters, potentially through civilian co-operation.

Lamb vowed that the centre will pursue the agenda actively with Canadian MPs and in Washington.

External affairs officials said last night they are studying the report.

#### Value of Shevardnadze Admission on Krasnoyarsk Assessed

52200007 Ottawa THE OTTAWA CITIZEN in English  
26 Oct 89 p A8

[Text] Eduard Shevardnadze's extraordinary admissions this week about lies, deceit and immorality in Soviet foreign policy are proof that a little calculated honesty can go a long way.

The foreign minister admitted that the Soviet Union's huge radar complex at Krasnoyarsk in Siberia violated the 1972 Soviet-American treaty limiting anti-ballistic missile defences. But he implied that the military misled the civilian leadership about the station's purpose—a handy explanation for recent Soviet insistence that the station was built to track space objects.

And he admitted that the Soviet invasion of Afghanistan in 1979 was illegal, albeit making a point of blaming former leader Leonid Brezhnev and company for the gross miscalculation.

Despite Shevardnadze's obvious efforts to deflect the blame, these diplomatic confessions from a superpower are unprecedented: the United States has never admitted error in any of its disastrous undertakings in southeast Asia or Latin America.

President Mikhail Gorbachev, however, had little to lose and much to gain. The Soviets agreed last month to dismantle the Krasnoyarsk station. And the Soviet troops retreated from Afghanistan in February, a public and humiliating admission of defeat.

Under Gorbachev's tutelage, these foreign policy retreats are being transformed into current political assets. Admitting to the purpose of the Krasnoyarsk station makes it possible for him to state with some credibility that U.S. radar sites in England and Greenland violate the anti-ballistic missile (ABM) treaty. (The Americans deny this, but admit the Soviets have a legitimate concern that must be addressed.) And he can point to Soviet adherence to the ABM and challenge the legality of American Star Wars research.

Gorbachev's admission that Afghanistan was an immoral mistake allows him to distance himself from his unsavory predecessors and reinforces his image as a new, more conciliatory Soviet leader.

And finally, his honesty will build up Western confidence in the Soviet commitment to arms control negotiations and to limiting its foreign adventures.

Viewed in these terms, all sides will benefit from this unusual burst of candor.

## FEDERAL REPUBLIC OF GERMANY

### Bundeswehr To Be Reduced to 380,000 Men

#### Cabinet Decision Reported

AU2711155289 Hamburg *DIE WELT* in German  
27 Nov 89 p 1

[Report by Ruediger Moniac: "Bundeswehr Strength To Be Reduced to 380,000 Men"]

[Text] Bonn—After 1995 the peacetime strength of the Bundeswehr will be reduced to below 400,000 men and will probably end up at around 380,000 soldiers permanently present in the barracks. According to information available to *DIE WELT*, this is the basic line of the Cabinet decision which is currently being prepared by the government for its 6 December session in Bonn's Defense Ministry. The important change in current defense planning, which has so far been geared to a peacetime strength of 420,000, has been caused by the coalition's realization that, in view of the profound political changes in the East, extending the basic military service from 15 to 18 months, which has long been legally set down for June 1992, will not be accepted by the population. Says Free Democratic Party Deputy Feldmann: The extension is "politically dead." Thus, 30,000 to 40,000 men are missing for the plans.

Coalition politicians want to have this drastic new reduction in troop strength seen as a possible consequence of results at the Vienna disarmament negotiations. However, defense planning experts admit that the reduction of the Bundeswehr "will be absolutely necessary, regardless of Vienna." The reason: There are not enough people and the financial means available to the Bundeswehr are very scarce. Therefore, the number of large units in the Army is reportedly to be reduced; Air Force squadrons will be disbanded. As *DIE WELT* already reported weeks ago, the Navy will also have to shrink by half its strength. Nevertheless, the "basic structures of the three Armed Forces are to be preserved," as has been said—this means, above all, 12 Army divisions. However, the 48 brigades of the Bundeswehr, which currently exist in various states of readiness, are to be gradually reduced to 42 after 1995, and later to 36; they are to be filled in a flexible way through mobilization; 15 to 20 brigades are to be present in their entirety.

### Reduction Planned If Talks Succeed

LD2711143789 Hamburg *DPA* in German 1316 GMT  
27 Nov 89

[Excerpt] Bonn (DPA)—If, as expected, there is success in the Vienna negotiations on conventional disarmament, the Federal Army will reduce its size to 400,000 men. This was confirmed by government sources to *DPA* on Monday. It was pointed out that this is a "lower limit," which the Army's numbers should not fall below. Speculation that the peacetime size of the forces could fall to 380,000 for example were described as "totally wrong."

At the same time it was stressed by the government side that if the disarmament efforts in Vienna lead to success, there will be no prolongation of the national service period to 18 months from 1992 onward, which is still envisaged. One can assume that "then the 15 months of national service will stay in any case." [passage omitted]

### Stoltenberg Rejects Criticism of Bundeswehr

AU2711160389 Frankfurt/Main *FRANKFURTER RUNDSCHAU* in German 27 Nov 89 p 4

[Report by Anne Riedel: "Stoltenberg Rejects Criticism"]

[Text] Kassel—Defense Minister Gerhard Stoltenberg has criticized those "who claim that the Bundeswehr is having a legitimacy crisis." It is a "serious mistake" to question the Bundeswehr and NATO because of reforms in Eastern Europe, Stoltenberg stated at the Hessen Christian Democratic Union congress on defense policy in Kassel on 25-26 November.

The changes in Eastern Europe, the minister continued, must not block out the view of the "still existing major risks and insecurities." There is the danger that the reformist forces will be thwarted by the critical economic situation and the "silent resistance by outdated central bureaucrats." Because setbacks and "hardened positions" cannot be completely ruled out, the Bundeswehr will continue to depend on "joint defense capacity and NATO's political creativity," Stoltenberg said.

Stoltenberg said that the demands of the Social Democratic Party of Germany [SPD] for a drastic reduction of the number of Bundeswehr soldiers are a "dangerous lotto." With its demands, the SPD is giving "wrong signals, not only in foreign policy, but also in domestic policy." The Bundeswehr's reaction to the changes must not be "to dismantle," but to make the "required corrections." "In the future we will have a Bundeswehr that is in line with the changes and that can flexibly react to further progress in arms control."

The criticism by the minister was not only directed against the SPD, but also against the trade unions. Both had "backed the initiatives of radical groups against our Bundeswehr" with their "exaggerated" criticism of low-altitude flights, maneuvers, and public vows.

### Defense Minister on Cooperation With GDR Army

AU2911120689 Hamburg DIE WELT in German  
25-26 Nov 89 p 4

[Text] Bonn—Defense Minister Stoltenberg (Christian Democratic Union) sees possibilities for establishing contacts and for conducting an exchange of experiences between the soldiers of the Bundeswehr and of the National People's Army (NVA) of the GDR. The minister stated in Bonn on 24 November that he considers it conceivable that "certain forms of cooperation" will develop between the Bundeswehr and NVA if "convincing steps toward reform" are carried out within the GDR Army. As a matter of fact, it is not unrealistic that NVA soldiers might come to the FRG to hold discussions with Bundeswehr members, he pointed out. However, the contacts should take place "on the basis of reciprocity."

Stoltenberg also spoke in favor of relaxing travel restrictions for Bundeswehr soldiers. So far, soldiers who have access to top secret papers have not been allowed to make trips to Eastern pact states.

Concerning the new proposals on the reduction of the strength of the Bundeswehr, "further limited corrections" might be carried out in case the Vienna talks on troop reductions in Europe are concluded successfully by 1990, Stoltenberg stated.

The Bundestag group of the Social Democratic Party of Germany has reiterated its call for a reduction of military expenditure by DM3.2 billion.

## TURKEY

### Giray Believes in 'Validity' of NATO Strategy

TA2611073189 Ankara Domestic Service in Turkish  
0530 GMT 26 Nov 89

[Text] National Defense Minister Safa Giray has pointed out that the recent atmosphere observed in East-West relations is unclear and that Turkey believes that NATO's existing strategy retains its validity.

The national defense minister left for Brussels to attend the fall meetings of the NATO European Group defense ministers and the Defense Planning Committee. In a statement at Esenboga Airport before his departure, he said that these meetings are being held at a time when the

future of East-West relations has become a most current and urgent issue. Even though the developments in the Soviet Union and certain Warsaw Pact countries are of a nature that can contribute to peace, Giray said, the atmosphere reigning in East-West relations is observed, at this stage, as being unclear. He added: Despite these developments, we believe that NATO's existing strategy retains its validity and consider it important not to reduce defense efforts.

Giray said that during the Defense Planning Committee meetings, a routine assessment of the Alliance's defense plans will be made. At the meetings of the European Group defense ministers, he said, the contributions of NATO's European members—excepting France and Iceland—to joint defense will be discussed.

In response to a question, Giray said that if a disarmament agreement is reached during the [word indistinct] meetings, the issue of arms (?harmonization) will be discussed, and that this issue also involves the destruction of old weapons and their replacement with new weapons.

Giray will return to Turkey on 30 November.

## UNITED KINGDOM

### Army General To Visit USSR

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[By Eben Black, PRESS ASSOCIATION lobby correspondent]

[Excerpts] A Top British Army officer will visit the Soviet Union next week in the first such exchange for more than 40 years. [passage omitted]

General Sir Richard Vincent, vice chief of the Defence Staff, who begins his 4-day trip on Sunday [26 November], will be the first member of Britain's Chief-of-Staffs Committee to set foot inside the Soviet Union since Field Marshall Montgomery in 1974.

The tour includes talks at the Soviet Defence Ministry and visits to military bases. During his talks, General Vincent is expected to hear of the problems the Red Army faces because of the unilateral force reductions initiated by President Gorbachev. [passage omitted]