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TRANSLATIONS ON EASTERN EUROPE Political, Sociological, and Military Affairs

No. 1481



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BULGARIA

ASPECTS OF CIVIL DEFENSE WORK DISCUSSED

Treatment of Injuries Caused by Nuclear Weapons

Sofia GRAZHDANSKA OTBRANA in Bulgarian No 9, 1977 pp 13-15

[Text] The tremendous amount of energy released in a nuclear explosion converts into a shock wave, light, and ionized radiation of various kinds, and causes serious damages. However, if we are well familiar with the characteristics of a nuclear weapon and take the proper measures to counter its impact, and replace panic and fear with thoughtfulness and resolve, the percentage of irreversible and health losses could be reduced considerably.

Damage to Humans Caused by a Nuclear Explosion

The shock wave is characterized by pressure changes. At the time of the explosion the pressure rises exceptionally rapidly after which it drastically drops to its initial level. These pressure changes--strong rise and drop--are the reasons for the traumas suffered by the people. At the beginning, when the pressure rises, a person could be crushed by the wave itself. In a rapid drop of pressure all organs which contain gases (lungs, stomach, intestines) become strongly inflated and tear up as a result of which death frequently occurs. Hemorrhages frequently occur in other organs due to the torn blood vessels as the pressure drops.

The effect of the heat is considerable as well. It is believed that fortyfifty percent of the Hiroshima casualties were caused by burns. The burns were caused by the heat wave and the fires. Such burns are of a somewhat different nature. They are relatively superficial, for the infrared rays which caused them do not penetrate deeply. The same type of damage is caused by ultraviolet rays as well which act at the time of the explosion whereas the maximal effect of the infrared rays comes after a three second delay. We could protect ourselves from the latter by covering ourselves with a white cloth or paper whereas we have no time to use other materials to protect ourselves from the ultraviolet rays. The burns occur on the parts of the body covered with a dark cloth. Should a person wear light color clothing because of the short action of the thermal wave the time prevents the absorption of a sufficient quantity of heat and the skin remains unharmed. Also important as a protective measure is the layer of air between the clothing and the body. The thicker it is the lesser is the damage.

The time during which the heat damages appear depends on the distance between the people and the center of the explosion. Those who are the closest develop an erythema of blisters five minutes after the explosion. Naturally, in addition to radiation damages they also suffer from damages caused by ionizing radiation. People located 1,500 meters from the epicenter develop an erythema two hours later and blisters four to six hours later. The so-called secondary burns are more dangerous to the life of the victims. They are the result of the burning wreckage caused by the high temperature of the atomic explosion. Such burns are accompanied by infections which worsen the prognosis of the process. Light radiation causes a skin erythema which could be very severe and severe conjunctivitis in the eyes, resulting in temporary blindness for two to three hours. That is why the light of the explosion should not be watched. Blinking and tears play a great role as they hinder the damage caused by the light.

The ionizing radiations released in a nuclear explosion may be different: alpha, beta, and gamma rays, and neutrons. The alpha rays are of no practical value. Their duration and the relatively high amount of energy are short and do not reach the earth. Beta radiation also plays no practical role, for the duration of the beta particles is also short. However, in residual radiation beta particles play a different role. In an uranium bomb not all radioactive materials break down. Some of them remain entire, for the entire chain reaction does not take place in the explosion. Settling on a person such radioactive particles trigger a beta radiation. The formation of new radioactive substances under the influence of the neutrons is of greater importance.

We are interested above all in gamma radiation and, secondly, in radioactive particles. They could penetrate into the body through the respiratory tracks, the food, the water, and the pollution of wounds with radioactive substances. In an explosion in the air neutron radiation is less significant than should the explosion occur on the surface of the soil or the water or in the water which results in considerable radioactivity. The end effect of the influence of the neutrons on the body is the same as that of the other ionizing radiations.

From the surgical viewpoint we must emphasize that the most severe damages to the human organism will be caused by the mechanical factor (the shock wave). This is followed by burns of up to 80 percent, of which 20 percent will be severe or medium severe. Third are the radioactive damages (pure radiation sickness)--some 20 percent. Of all these damages 80 percent will be mixed. In other words, there would be a severe trauma plus burns or combined with radiation disease.

As early as 150 years ago N. I. Pirogov had stated that "war is a traumatic epidemic." It is believed today that a future thermonuclear war, of the type the imperialists are trying to launch, would be justifiably described as an "epidemic of combined damages." These damages are among the most severe and their mortality rate is the highest. Following is the mortality rate in radiation disease: with an external, general, and relatively even

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radiation of the body with 200 roentgens the mortality is 5 percent; with 300 roentgens, 15 percent; with 400 roentgens, 50 percent; with 600 roentgens, 95 percent; over 600 roentgens, 100 percent. Opinions vary as to the correlation between mortality and the dose. Some authors believe that a lethal dose for man would be 500 roentgens while according to others it is 600 roentgens. However, the combinations of a severe trauma caused by the shock wave plus 300-400 roentgens would be incompatible with life, not to speak of 500-600 roentgens plus a severe trauma. The results become even worse in the triple combination of severe trauma, burns, and 200-300-400 roentgens. We should know that some side factors play an important role in the ability of the human body to withstand radiation. This includes, above all, the food used. The content of proteins, and the richness of vitamins in the food increase the resistance of the body.

It has been proved that in combined damages (mechanical or thermal) plus a radiation with 100 roentgens, even 50 to 75 roentgens would be sufficient to trigger an acute radiation sickness.

The combined damages trigger the syndrome of reciprocal severity. In other words, the trauma worsens the development of the radiation sickness and, conversely, the radiation sickness worsens the development of the trauma.

In the period of the development of the radiation sickness even the most ordinary trauma drastically worsens the condition of the body. This particularly applies to shock and hemorrhage. Hemorrhages are very frequently observed in combined damages during such a period. They are spontaneous and are due to the ionizing radiation and the trauma itself. The hemorrhages caused by the trauma exceptionally worsen the condition of the victim and contribute to the progressive development of the anemic syndrome of the radiation disease.

Experimental studies have indicated that whenever the blood circulation has been drastically disturbed by the effect of ionizing radiation even the smallest traumas could accelerate the development of the anemic syndrome and the shock. The tendancy toward hemorrhages, i.e., toward hemorrhagic diathesis, characteristic of the radiation sickness, creates the danger of severe secondary hemorrhages. At the peak of the radiation sickness hemorrhages may appear as a result of a great variety of insignificant traumas and, particularly, in the case of surgical interventions. That is why indications for surgery should be limited or else surgery should be undertaken only in vital cases. Basically, operations must be mandatorily undertaken during the latent (concealed) period of the radiation sickness or, if possible, during the recovery period.

A characteristic feature of combined radiation damages is the fact that the traumatic shock and the shock of the burning take place in a very severe fashion and that the mortality is high.

The course of wounds and fractures is difficult and the growth period becomes greatly extended. All wounds and open fractures tend to develop infections. Gas gangrene develops at a lightning speed. In a few hours the victim could die as a result of the lack of protective forces in the body and as a result of ionizing radiation.

Basic Principles in Providing First Medical Aid and Treating Combined Radiation Damages

The rendering of first aid in combined radiation damages is not substantially different from the aid required in the case of conventional damages caused by a fire arm. The first medical aid in a nuclear center consists of self aid and mutual aid. The members of the medical units will provide first aid only to victims in a severe or medium severe state. First medical aid will include the following measures: asceptic (sterile) bandage, simplest possible immobilization in the case of broken bones of the extremities, the pelvis, ribs, and vertebra, temporary stopping of hemorrhages, artificial respiration (mouth to mouth, mouth to nose), putting out the burning clothing, putting the gas masks or a cotton-gauze mask on the victims, if possible, and their fast evacuation from the sector contaminated with radioactive substances above the norm, to an area where they will be subjected to partial medical processing and deactivation, cleaning the mouth and nose from dust and foreign bodies, and others (washing with water the open parts of the body or wiping them with a moist kerchief and rinsing the mouth with boiled water). In such cases it would expedient to inject the pain killing substances rather than to administer them orally.

In combined radiation damages specialized medical aid consists of total sanitary processing--washing with soap and warm water and showering the entire body. The bandage on the wound is not changed but covered with nylon cloth. Following the sanitary processing the victims go to the triage section where the procedure of their operation is established. Heavy casualties in a state of shock or are unconscious and who must be urgently operated on are sent directly to the operation room where, along with the treatment of the shock or the loss of blood they are deactivated on the operation table by washing the entire body with warm water and soap, after which the surgery is undertaken. Victims with open wounds are administer antitetanus serum and nontoxic antibiotics as indicated.

It has been proved that primary surgical processing can not take place during the period of the primary reaction and at the peak of the radiation sickness, unless there are vital indications to the contrary, for this would worsen the condition of the patient. The most suitable period for surgical interventions is the latent period so that until the radiation sickness has peaked the wound could heal and thus the complications, particularly the reciprocal worsening syndrome, could be avoided.

Casualties in a state of shock or coma which do not need surgery are sent to the shock treatment ward where they are treated for the shock and coma. Once their condition has improved they are sent to the operation room for the primary surgical processing of the wound. The primary surgical processing in the case of combined damages caused by external radiation is not substantially different from the conventional primary surgical treatment of bullet wounds.

An experimental study has shown that the "syndrome of reciprocal worsening" is most clearly manifested in the period of the peak of the acute radiation sickness, when the protection adaptation mechanisms are most suppressed, whereas in the latent period substantial disturbances in the protective and adapting mechanism have not been detected.

All of these factors could be useful as a theoretical basis for the elaboration of an efficient system for the treatment of combined radiation damages.

The main general line of behavior to be followed in rendering first medical aid and in treating combined radiation (mechanical or thermal) damages is reduced to the maximal utilization of the time of the latent period in the development of the acute radiation sickness, i.e., undertaking active surgical treatment (surgical treatment of the wound, necrectomy, sewing up vessels, intestines, livers, and lungs, metallic, extrafocal, and compression osteosynthesis, and so on) wherever possible (in wounds affecting soft tissues, cavities, parenchymal organs, and others), so that the treatment of the wound may be completed before the acute radiation sickness has broken out.

The course and outcome of the combined radiation damage are determined, above all, by the radiation syndrome. That is why, along with the surgical treatment, in the very first days following the radiation influence antiradiation treatment must be undertaken. Today the radiation sickness therapy is not etiological but pathogenic in nature. That is why antiradiation therapy must be comprehensive and focused on the basic symptoms of the disease:

1. Restoration and replacement of the disturbed blood circulation function (blood and plasma transfusions, and others).

2. Reducing the possibility for the appearance of a hemorrhagic syndrome (transfusion of fresh, citrate blood or, which is best, direct transfusion). Such transfusion has the most beneficial impact since it introduces not only biologically rich forming blood elements, but vitamins, hormones, ferments, and others. Direct blood transfusion prevents the development of anemia and increases the amount of thrombocytes and thus contributes to reducing the possibility of the appearance of the hemorrhagic syndrome.

In sublethal doses of ionizing radiation bone marrow could be transplanted, whether allogenic or autogenic, taken from a shielded section of the hip.

Vitamins are also part of the treatment of combined radiation damages. They contribute to the rapid restoration of the functions of all organs and tissues. Vitamin C and the B group of vitamins (B_1, B_2, B_6, B_{12}) have a similating effect on hemopoiesis in radiation sickness. Vitamins C, P, and K reduce the appearance of the hemorrhagic syndrome.

Generally speaking, some unresolved problems remain in the treatment of combined radiation damages. We still lack sufficiently effect treatment systems which would enable us to avoid the fatal outcome in severe cases. However, in order to reduce them the organization and volume of surgical aid in the course of the medical evacuation in the case of a nuclear war we do not wish would be of decisive significance. By Maj Gen Ivan Kopchev, honored physician.

Editorial Praises Government Regulation on Civil Defense

Sofia GRAZHDANSKA OTBRANA in Bulgarian No 9, 1977 pp 18-19

[Text] The present issue carries the regulation on the organization and control of rescue and emergency breakdown-restoration operations in the case of natural calamities and major production accidents, adopted by council of ministers decree. Even though it was issued very shortly after the earthquake which took place in our country this year, this important governmental document should not be linked with an individual natural phenomenon. It is a vital need triggered by life itself and by the dynamics of the tempetuously developing economy of socialist Bulgaria.

From the onset the regulation defines the meanings of concepts such as "natural calamity" and "major production breakdowns." It then proceeds to describe the tasks of the organs at all levels in charge of SNAVR [Rescue and Emergency Breakdown-Restoration Operations], and the forces and facilities to be used. It interprets certain regulations related to obtaining free food by the formations, the wages paid the members of the SNAVR, and others. Reading this document one could see behind each of its lines the constant concern displayed by the party and the people's government for man and for the protection of his gains under socialist conditions.

In the course of the 33 years of people's regime a number of important documents were issued related to the protection of the population and the national economy, formulating the role, place, and tasks of the civil defense. However, are the interested officials properly familiar with these documents? Are the legal stipulations governing the training of the entire population in civil defense known? Is legal knowledge related to the obligation of every citizen to implement defensive measures properly propagandized?

A glance at the many letters and requests daily received by our editors and impressions on the work of the respective organs, organizations, and staffs, as well as talks with ordinary people and specialists confirm that the state stipulations on civil defense problems are insufficiently known. Yet, they are of important applied significance not only under exceptional circumstances but in days of peace, when tasks related to the protection of lives and the people's wealth and environmental protection are carried out. They apply to all citizens of our country and the dissemination of knowledge in this respect contributes to the direct and indirect observance of the legal stipulations and governmental decisions. What prevents us, for example, to write suitable reports and talks to be presented at meetings, to public organizations, to trainees attending civil defense courses, in schools, and on the radio? Steps are already being taken in this respect at the Sofia University and in some other places but this is insufficient. Yet, could we demand the implementation of orders and norms if they are not known?

Clearly, the need is ripe for the respective organs and organizations to ask themselves whether or not we are carrying out the proper social and mass-political activities related to the popularization of important governmental and other normative documents to the necessary extent? Would we be able in the new school year to develop this problem into a field of masspolitical and propaganda activities, a field of specific actions?

> Government Regulation on Rescue Operations During Major Disasters

Sofia GRAZHDANSKA OTBRANA in Bulgarian No 9, 1977 pp 18-19, 23-24

[Text] Council of Ministers Regulation on the Organization and Management of Rescue and Urgent Breakdown Restoration Operations in the Case of Natural Calamities and Major Production Breakdowns (passed with decree No 42 of the Council of Ministers, dated 20 June 1977).

Chapter 1

General Stipulations

Article 1. (1) The present regulation deals with the organization, functions, and tasks of the organs in charge of rescue and emergency breakdownrepair operations in the case of natural calamities and major production breakdowns.

(2) In the sense of the present regulation the calamities mentioned in the Law on Assistance in the Case of Public Calamities Stemming from Natural Phenomena, such as earthquakes, floods, displacement of earth strata, and others, shall be considered natural calamities; major production breakdowns shall include sudden damages to machinery, mechanisms, and machine units in the course of their operation, involving the stopping or serious disturbance of the production process, explosions, fires, contamination of the environment, destructions, casualties, or threats to people and property. Article 2. (1) Activities related to the creation of an organization and of bringing it to a state of readiness to engage in rescue and emergency breakdown-repair operations in the case of natural calamities and major production breakdowns shall be controlled by the respective departments and executive committees of people's councils.

(2) The overall management, coordination, and control of the activities of such organizations and management shall be provided by the Permanent Governmental Commission.

(3) The activities of departments and executive committees of okrug people's councils as per paragraph one shall be assisted by permanent commissions set up for this purpose.

Chapter 2

Organization and Tasks of the Organs in Charge of Preparing and Conducting Rescue and Emergency Breakdown-Repair Operations

Article 3. The heads of ministries, other departments, economic organizations, and executive committees of people's councils shall:

1. Study conditions and reasons which could trigger natural calamities and major production breakdowns in their respective territories, enterprises, and projects, predict the consequences, and clarify the means to struggle against them;

2. Take the necessary preventive measures for the prevention of major production breakdowns and for limiting the consequences as well as the consequences of natural calamities;

3. Establish the proper organization and readiness for immediate struggle against eventual natural calamities and major production breakdowns, formulating the tasks and duties of their subordinate organs, organizations, units, and officials in case of need;

4. Organize and manage the elimination of the consequences of natural calamities and major production breakdowns, activities for rescuing endangered people and property, and urgent breakdown repair operations.

5. The permanent governmental commission as per article 2, paragraph 2, shall be the organ of the council of ministers. Its membership shall be ordered by the chairman of the council of ministers. The commission shall be headed by the deputy chairman of the council of ministers who will appoint a staff to assist the commission.

(2) The staff of the permanent governmental commission shall include chairmen of civil defense organizations in the country and interested ministries and other departments. (3) The decisions of the permanent governmental commission, issued within the range of its competence shall be binding to the respective ministries, other departments, people's councils, and private citizens.

(4) The chairman of the permanent governmental commission shall head the overall activities of the commission, issue orders on the use of forces and facilities, and report to the chairman of the council of ministers and to the government on the conditions in the disaster areas and on the rescue and breakdown repair operations and request the adoption of additional measures for the elimination of consequences.

(5) The secretary of the permanent governmental commission shall also be the commission's chief of staff. He shall organize the work of the commission and its staff, issue orders on behalf of the chairman, and control the implementation of the tasks. He shall organize the gathering of information and shall process summed up information to be submitted to the commission's chairman and the government.

(6) The members of the permanent governmental commission shall insure the prompt dispatch to the disaster areas of the forces and facilities supplied by the departments they represent. They shall assist the commission's chairman in his overall activities for rescue and emergency breakdown repair operations and inform the heads of the respective departments on conditions in the disaster areas and enterprises.

Article 5. The permanent governmental commission shall have the following main tasks:

1. Discuss the general state of readiness of the country to react to eventual natural calamities;

2. Establish the ministries and other departments which must set up permanent commissions;

3. Control departments and people's councils regarding their readiness to act on specific territories and projects, particularly projects presenting greater danger of major production breakdowns;

4. Assign studies and hear reports and information submitted on the planning and implementation of preventive measures and preparations for rescue and emergency breakdown repair operations;

5. Organize, head, and coordinate rescue breakdown repair operations in the case of natural calamities and major production breakdowns and issue instructions to the respective organs on the use of the necessary forces and facilities for immediate struggle.

Article 6. (1) The okrugs shall establish permanent commissions chaired by the chairman of the executive committee of the okrug people's council to carry out the assignments stipulated in article three and coordinate the actions of organs and organizations in charge of readying forces and facilities for immediate struggle against eventual natural calamities and major production breakdowns.

(2) The structure of the commissions stipulated in the preceeding paragraph shall be determined by order of the chairman of the executive committee of the respective okrug people's council. They shall include the following: the civil defense chief of staff, the chiefs of the okrug administrations of the Ministry of Internal Affairs, the garrison, and the military district, and other managers and specialists.

(3) The operative work of the commissions of the okrug people's councils shall be assisted by a staff appointed by the chairman of the executive committee of the okrug people's council.

Article 7. (1) Permanent departmental commissions, headed by the respective minister or a manager, shall be set up within the ministries and other departments specified by the permanent governmental commission.

(2) The permanent departmental commissions shall assist the heads of the respective ministries and other departments in carrying out their assignments as per article 3. They shall organize and control preventive operations.

(3) The composition of the permanent departmental commissions shall be established by order of the respective minister or manager. They shall include officials from the central administration and subordinate economic organizations, and specialists from competent organs, institutes, and others, with the agreement of the respective managers.

(4) The operative work of the departmental permanent commissions shall be assisted by a staff or operative group appointed by order of the respective minister or department head.

Article 8. (1) If deemed necessary by the heads of ministries and other departments or, respectively, executive committess of okrug people's councils, permanent commissions may be set up at projects with increased danger of major production breakdowns. The project head shall be the commission's chairman and determine its membership.

(2) The project's commission shall refine the tasks with a view to the nature of the project, the specific conditions, and the circumstances with a view to the adoption of immediate necessary actions for the efficient struggle against eventual production breakdowns.

Article 9. The chairmen of permanent departmental commissions or commissions of okrug people's councils may set up temporary commissions in the case of disasters to meet the requirements of individual areas, people's councils, enterprises, or projects.

Chapter 3

Recruitment of Forces, Means, and Communications Facilities

Article 10. (1) Should a natural calamity or major production breakdown take place the heads of the economic organizations and projects, the local authorities, and the permanent commissions must immediately undertake the necessary actions, based on the circumstances, for rescuing people and material values and preventing severe consequences.

(2) The forces and means shall be recruited for action as follows:

1. Civil defense formations--immediately, by order of the respective civil defense chiefs;

2. Army units from the construction and transportation troops and units of the Ministry of Communications--immediately, by order of the respective commanders who shall inform the respective deputy minister-member of the permanent governmental commission;

3. Subunits of the Bulgarian people's army and the Ministry of Internal Affairs--by order of the commanders who shall report on the actions undertaken to the Ministry of National Defense and the Ministry of Internal Affairs through the chain of command;

4. Workers, employees, and others, as instructed by the chairman of the respective commissions;

5. Equipment used for mobilization purposes--by order of the respective deputy ministers, or members of the permanent governmental commission, by request of the chairman of the executive committee of the respective people's council.

(3) By decision of the chairman of the permanent government commission or the respective okrug commission the population of the area experiencing the disaster or of neighboring areas may be actively recruited for rescue work.

(4) The recruitment of forces and facilities by the Ministry of National Defense and Ministry of Internal Affairs from other areas shall be based on orders issued by the respective ministers. Such orders shall be reported to the chairman of the permanent governmental commission and of the council of ministers.

Article 11. (1) The organization of communications to meet the requirements of the permanent government commission and its staff shall be provided by the Ministry of Communications and the Ministry of Internal Affairs on the basis of the operative requirements of said commission. (2) The nationwide and departmental communication systems shall be used in providing such communications facilities.

(3) The necessary telephone and telegraph communications of the permanent governmental commission and its staff and of the okrug commissions shall be secured by granting absolute priority to talks using the communications channels of the Ministry of Communications and other departments and by granting communications channels and developing direct communications between the staff of the permanent governmental commission and the staffs of the okrug commissions or using the facilities of another institute, department, project, or center.

(4) The utilization of the communications systems of the Ministry of National Defense and Ministry of Internal Affairs, as per the preceding two paragraphs, shall take place in ways not hindering such ministries in the implementation of their main tasks.

(5) Exercises in switching communications channels granted at exchange of information between the permanent government commission, the departmental and okrug and other commissions, and their staffs, shall be held to maintain the communications facilities in a state of readiness in accordance with the annual work plan of the permanent governmental commission.

(6) Conversations and granted channel communications faciliites and cable pairs shall not be paid for in exercises or factual events.

Additional and Concluding Stipulations

1. During their participation in rescue and emergency breakdown repair operations the personnel of the civil defense formations shall receive free food in accordance with Order No 108 of the Council of Ministers of 1973.

2. Workers and employees recruited for participation and rescue in breakdown repair operations related to natural calamities or major production accidents shall be paid as per article 2 of the Regulation on Wages in the Case of Idling, Replacement, Combined Jobs, and Others (IZV., No 58, 1958; amended, No 11, 1962; DV, No 90, 1965).

3. Mass information media shall receive information on natural calamities or major production accidents and the struggle against them, as well as suggestions on rewards and punishments may be issued only by the permanent governmental commission and, on the okrug scale, the chairman of the permanent okrug commission.

4. The present regulation is based on article 2 of the Law on Assistance in Social Calamities.

5. The implementation of this regulation shall be assigned to the chairman of the permanent governmental commission who shall issue instructions on resolving problems related to its application.

Specialist Comments on Government Regulation

Sofia GRAZHDANSKA OTBRANA in Bulgarian No 9, 1977 pp 24-25

[Text] This periodical asked a specialist to comment on the governmental document on the struggle against natural calamities and major production accidents presented in this issue.

The approval of a regulation on the organization and management of rescue and emergency breakdown repair operations in the case of natural calamities and major production breakdowns by the council of ministers is a timely measure meeting a ripe need. Unquestionably, this will introduce greater clarity in the activities of administrative and economic managers at all levels in their struggle against natural calamities and major production breakdowns.

The regulation clearly stipulates that rescue and emergency breakdown repair operations in such cases shall be conducted by the respective departments and executive committees of people's councils. The duties of their managers have been stipulated as well: to study the conditions and reasons for such calamities and accidents, predict the consequences, whenever possible, do the necessary work, and immediately organize and manage the elimination of consequences. In the struggle against major production breakdowns the principle of administrative and department responsibility has been observed in full.

On the basis of the new governmental document permanent commissions will be set up under the executive committees of okrug people's councils and under some ministries, central departments, and national economic projects where the danger of potential breakdowns exists. The commissions will be headed by the chairman of the executive committees of okrug people's councils, the respective ministers, or enterprise directors. This reemphasizes the administrative and departmental responsibility in the struggle against disasters and breakdowns.

Temporary commissions shall be set up at the remaining ministries, central departments, people's councils, and national economic projects prior to or immediately after the appearance of a disaster or major production breakdown. The permanent governmental commission will be in charge of the overall management of all such activities in the country.

The projects at which permanent commissions shall be set up shall be determined by the chairmen of the okrug and respective departmental commissions. This shall apply mainly to enterprises working with industrial poisons and explosion and fire prone materials, as well as other sites where an accident would endanger not only the workers and employees but neighboring enterprises and the surrounding population. Staffs shall be set up to assist the permanent commissions. The natural question arises of the structure of the permanent commissions and their staffs. It would be expedient to appoint as deputy chairman of the departmental commission as specific deputy head of department who would also be a member of the permanent governmental commission; the secretary (and the chief of staff) should be a civil defense official or chief of the special organ of that department. It would be expedient to include in the permanent commission the heads of economic trusts and ministry subunits directly involved in preventive activities, as well as the managers of rescue and emergency breakdown repair operations of the respective sector or department project.

It would be expedient to name as deputy chairman of the okrug permanent commission the deputy chairman of the executive committee of the okru people's council in charge of civil defense problems; its secretary should be the chief of the okrug civil defense staff who would be the commission's chief of staff as well. In addition to the officials stipulated in paragraph two, article three or the regulation, the commission should include members of the okrug BCP committee, the head of okrug civil defense services, and representatives of other important organs and institutions located on the okrug's territory.

In projects of the national economy, the deputy head in charge of production problems, for example, would be a suitable deputy chairman of the commission while the chief of staff of the project's civil defense could be its secretary. Other members of the commission could be executives whose work deals with the prevention of major production breakdowns and the elimination of their consequences.

In addition to the main personnel of the respective civil defense staff it would be expedient to include in the staffs of the permanent commissions officials of organs represented in the respective permanent commissions. This creates the possibility for uninterrupted control of rescue and emergency breakdown repair operations on a shift 24 hour basis.

Who will be in charge of preventive work? Who will organize and head rescue and emergency breakdown repair organizations wherever no permanent commissions have been established? According to article two, paragraph one, and article three such activities shall be interested to the departments and executive committees of the people's councils. They must be actively assisted by the respective civil defense staffs.

What will be the tasks of the permanent commissions and their staffs? Their main obligation will be to assist the respective administrative and economic managers in carrying out their obligations as stipulated in article three of the regulation. Their basic tasks will be similar to those of the permanent governtmental commission, as stipulated in article five of the regulation. The commissions will organize their work on the basis of an annual work plan. It will stipulate measures for training work shifts and the population for action in the case of danger; study areas, conditions, and reasons for the outbreak of earthquakes, floods, fires, icings, and major production accidents; organize the forecasting of the conseuqences of possible natural calamities and major production breakdowns; supervise activities for the prevention of big production breakdowns and limit consequences of natural calamities; control the readiness of the people's councils (departments, national economic projects) for launching an immediate struggle against natural calamities and major production breakdowns; organize and head rescue and emergency breakdown repair operations; and supervised implementation of regulations and orders.

Many tasks must be implemented at the current stage: the proper establishment of the permanent commissions and their staffs, the elaboration of annual plans for their work and readiness, the allocation and equipment of work areas, the organization of communications, the organization of the commissions as control organs, the forecasting of possible natural calamities and major production breakdowns, and the elaboration of operative plans for the organization and management of rescue and emergency breakdown repair operations.

The organization of the communications needed by the permanent commissions is a very important and urgent activity without whose proper solution they would be unable to carry out their managerial activities if so required. That is why the regulation pays particular attention to this problem. A responsible attitude must be adopted in establishing the system of communications and determining the procedure for direct conversations and communications channels. All possible requirements must be foreseen. It is not less important, in accordance with paragraph five of article 11 to conduct practice exercises for the conversion of channels and exchange of information. This would considerably upgrade the general readiness to fight natural calamities and major production breakdowns.

The regulation also deals with the forces to be recruited in the case of natural calamities and major production breakdowns. This should not take place indiscriminantly but in accordance with real needs. To this purpose, on the basis of a prediction of the eventual consequences in a given area or project operative plans of action must be elaborated precisely stipulating the type of forces to be recruited, their tasks, and the type and amount of equipment to be used. Activities related to the implementation of the assignments formulated in the operative plans should be practiced and mastered impecably by the formations personnel. Only in such a case could we consider that the necessary preparedness is being maintained.

The study and prompt implementation of the stipulations of the new important governmental document is the urgent task facing administrative and economic managers, permanent commissions, and their staffs. Without this any successful activity aimed at the prevention of natural calamities and major production breakdowns and the faster elimination of their consequences would be inconceivable. By Col Ivan Sultov.

Scientific Conference Dwells on Civil Defense Matters

Sofia GRAZHDANSKA OTBRANA in Bulgarian No 9, 1977 pp 32-33

[Text] A scientific-theoretical conference on problems of the multiplication approach within the civil defense system was held in Sofia sponsored by the command and political apparatus of the Bulgarian civil defense. It was attended by scientific workers, teachers, civil defense system personnel, and specialists.

Opening the conference, Lt Gen Nikola Atanasov, deputy chief of the Bulgarian People's Republic civil defense, stressed that the slogan of high effectiveness and high quality is the supreme synthesis of the party's strategy at the present stage. The problem of upgrading effectiveness and quality is not only one of material output but of all social activities, including defense.

The main task stemming from the decisions of the llth Party Congress concerning the civil defense personnel, he noted, is raising to an even higher level the training of staffs, services, and formations.

In his report Maj Gen Nesho Neshev, candidate of military sciences, explained the nature and significance of the multiplication approach. He paid special attention to the various multipliers which contribute to achieving maximal effectiveness, progressively increasing time savings, and uniform resolution of structural, organizational, managerial, cadre, and ideological problems.

Discussing the various multiplication effects (diffusion (penetration), reflection, starting explosion, parallel results, and acceleration), Maj Gen Neshev stressed their significance in the various types of activities. He drew the conclusion that at the present stage the multiplication approach is a powerful means for achieving a maximally increasing effect in enhancing the combat readiness of the army and the civil defense forces.

Officers within the civil defense system, scientific workers, teachers, and specialists expressed their views on the problem.

In his co-report professor engineer Aleksandur Simeonov, doctor of technical sciences, stated that the use of intensive factors in the development of the operating system is of decisive significance to insuring a multiplication result and that this basic stipulation fully applies to the scientific research and training provided by departments on the organization of the protection of the population and the national economy (OZNNS) in the higher schools.

He then discussed the diffusion effect. This is achieved when the results of the applied measure are extended to other projects. In the OZNNS departments of higher educational institutions such results may be obtained through the adoption of decisive measures aimed at upgrading the scientific

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and methodical skills of the faculty. This upgrades the level of scientific research in the departments and the elaboration of problems related to upgrading the country's defense capability.

Basic as well as applied and development research could be the foundations for enhancing the level of training of teachers and students, creating new institutions for civil defense needs, unification and standardization of goods used, creating conditions for the management and organization of the overall civil defense system, the development of new protective means, and others.

Senior instructor Vladimir Asev spoke on the multiplication approach as a superior form of management and organization of material and technical support. He stressed that such results could be achieved by improving the planning and synchronizing of its organizational structure with the general plan for vertical and horizontal concentration.

A criterion in assessing the organization and management of material and technical support, in accordance with the requirements of the multiplication approach, should be sought both in self administration and organization as well as outside them, and the influence they have on the qualitative implementation of the tasks facing civil defense staffs, services, and formations at different levels of combat readiness and the conduct of rescue and emergency breakdown repair operations in disaster centers.

Officer Iliya Georgiev spoke of the various trends to be followed so that they may turn into major prerequisites for the achievement of the multiplication effect. The first direction, according to the speaker, is to determine accurately the decisive links within the single chain of measures within the system and focus on them the forces and means. The second direction is related to the gradual development of the structure and the technical staffing of the engineering formations. The third direction covers problems of defense construction, i.e., production-construction activities in which the multiplication effect is obtained in its purest aspect, while the organization of the production process in some construction be developed on a national scale.

The final speech at the conference was delivered by Admiral Branimir Ormanov, chief of the Bulgarian People's Republic Civil Defense. He gave a positive assessment to the work done. The conference, said he, proved the great role of the multiplication approach in resolving civil defense problems and introduced greater clarity in its application. He stressed that considerable results could be achieved if in peace time all stages in management activities apply the methods, rules, and means used for the organization and conduct of rescue and breakdown repair operations in hit areas in war time.

The main lesson from the conference, Admiral Ormanov emphasized, is that the multiplication approach requires to proceed in resolving any problem not only from the viewpoint of a given administration, department, service, or staff, but from the interests of the entire civil defense system and of its mobilization-combat readiness, and the viewpoint of upgrading the defense capability of the Bulgarian People's Republic. This means that in resolving such problems we must surmount parochial trends and strictly departmental interests and make the national interests the basis for the implementation of any task.

Admiral Ormanov then discussed some problems related to the application of the new approach to the civil defense system. They include the creation of subjective and objective conditions, i.e., a set of multiplication factors; the use of scientific achievements; the development of socialist competition; the surmounting of negative phenomena; and others. Finally, he also called for the study and rapid application of this new approach by civil defense cadres, cautioning them against primitivism and over simplification. The multiplication approach would not resolve by itself the problem of effectiveness. It must be applied in combination with the methods of work already tried and elaborated by Marxist-Leninist theory.

Soviet Experience in Preventing Radioactive Contamination

Sofia GRAZHDANSKA OTBRANA in Bulgarian No 9, 1977 pp 35-36.

[Text] The radioactive contamination of the area is a treacherous and dangerous striking factor. It is extended also to areas which are not exposed to direct enemy attack, for the cloud formed in the explosion could cover great distances. Radioactive substances do not always have visible characteristics, while at the moment of radiation the radioactive emination does not cause any kind of irritation or painful sensation. Such radiation could be discovered only with the help of dosimetric instruments (meters, x-ray meters, and others) with which military subunits and civil defense formations are equipped. The people may not even suspect that their homes are within the contamination zone.

The extent to which the area could be contaminated varies. It depends on the power and type of nuclear explosion, the distance to its epicenter, the topography, the weather, and the time passed since the explosion. For example, in the course of time the contamination of the area as a result of a radioactive breakdown decreases rapidly. The radiation level reached one hour after the explosion decreases by nearly one-half after two hours, by nearly four times after three hours, ten times after seven hours, and 100 times after 2 days.

Furthermore, the trace of the radioactive cloud does not represent an evenly contaminated zone. The radiation level rises from the end of the trace to its center, reaching its maximal value at the axis of the trace. The radiation level gradually declines with the distance from the place of the explosion. For this reason the area may be moderately, strongly, or dangerously contaminated. However, since the area in which the people and their houses may be is unknown, measures for the defense of humans, housing, industrial buildings, and various installations from radioactive contamination must be taken everywhere.

Radioactive contamination occurs at the time of the precipitation of the radioactive dust as well as when such a dust created by the wind, machines, and people, rises and penetrates buildings and installations. That is precisely why the population must adopt a number of measures.

In order to protect the home from the penetration of radioactive dust and aerosols, all cracks along windows and doors must be blocked. Vents and fireplaces must be closed, and doors must be sealed with rubber or porous rubber materials. In stone buildings cracks must be plastered while those in wooden houses must be tightly caulked. Wooden shutters must be covered with a double layer of paper. Windowsills must be repaired and, if necessary, well sealed. Broken glass must be replaced.

In addition to preventing the penetration of radioactive dust and aerosols we must intensify the protective characteristics of every home against radioactive radiation (penetrating radiation). Windows must be blocked (particularly in wooden buildings) with bricks, and sand or dirt bags. The walls in the lower floors of buildings must be covered with dirt to a height of 1.8 meters from the floor. Fencing, lumber, and others could be used to keep the dirt in place. An additional layer of dirt must be poured over the roof. The shelters built in the construction or repair of basements should be such that, if necessary, they could be covered by a layer of dirt 60 to 90 centimeters thick. These measures increase the protective characteristics of the buildings and lower probably human casualties.

The radioactive dust and toxic substances contaminate food and fodder. In order to protect them from contamination, above all, they must be maximally insulated from the external environment. At home the main means for the protection of food products from contamination of radioactive and toxic substances is the use of hermetically sealed containers or protective covering. Bread, crackers, and confectionery goods must be wrapped in several layers of paper and placed in pots or polyethylene bags. Crumbling products (flour, sugar, oatmeal, or spaghetti type goods) should be kept in packages made of strong paper or in polyethylene bags. For greater security such packages (bags) must be placed in boxes or cases lined with cardboard, oilcloth, or other thick lining.

Meat, butter, delicatesen, and fish could be protected from radioactive substances in household refrigerators. Furthermore, butter, margerine, and various fats should be kept in glass or metal jars, tightly sealed. Metal and glass hermetically sealing containers entirely protect meat, fish, vegetable, and dairy products from contamination with aerosols and toxic substances. If so required, such containers must be decontaminated rapidly and reliably. Vegetables must be stored in wooden or plywood cases lined with paper, cellophane, polyethylene, oil paper, or oil cloth and covered on the outside with tarpaulin or other heavy fabrics.

Products in metal or glass containers avoid contamination. Powdered milk and children's foods in cardboard containers are not entirely protected from toxic substances. It is not recommended to keep meat and fish in metal containers as this could result in food poisoning.

The protection of food products in rural areas is more complex. Here considerably greater stocks of food for private use are stored compared with the cities. Potatoes, cabbages, carrots, and other vegetables, and meat and dairy products must be stored in cellars, warehouses, and barns offering reliable protection. Grain, flour, and other crumbling products must be stored in wooden cases or thickly sealed boxes.

If the cooperative warehouse is sealed, it would be proper to block all openings in the foundations, floor, ceiling, walls, doors, partitions, and roofs, while damaged window glass be replaced. It would be even better to close the windows with thick wooden shutters or oil cloth while unnecessary openings be sealed with bricks. Doors must be lined with felt on the inside and oil cloth of the outside. A layer of rubber of ribbons of cloth, cotton, or felt, packed together, must be placed between the doors and the frames.

Products kept outside of premises must be treated more carefully. To this effect special areas are selected in dry places. They are cleaned, evened up, and covered with a wooden flooring made of lumber, dry twigs or other materials on which tarpaulin or polyethylene cloth is laid. The packaged products are placed in piles while the unpackaged products are laid in trenches and covered with tarpaulin (polyethylene) or handy materials such as, for example, a layer of straw (10 to 15 centimeters), or twigs (20-30 centimeters) which are covered with clay to reduce the possibility of a fire.

If the vegetables have not been collected from the fields, pits 0.5 meters deep and 1.5 meters wide are dug near their location. Potatoes or other root vegetables are poured in them and are covered with straw mats, staw, or a 20-30 centimeter thick straw layer, covered with a layer of dirt 20-30 centimeters thick.

In order to protect coarse fodder (straw and hay) sheds, barns, or tenthouses could be used. If the hay and straw are kept in stacks, they should be covered with a 15-20 centimeter thick layer of straw not to be used as food. They could be also covered with tarpaulin or polyethylene cloth. In order to prevent the cover from being blown away by the wind it must be covered by sticks tied at their upper end. Animal fodder stored in silage pits and other similar installations is well protected and requires no additional care.

Preventing the water from contamination is an important and complex activity. In cities and settlements with water supply systems drinking water is filtered and decontaminated in special treatment systems of water main stations. The water is supplied through a network of pipes insuring reliable sealing. The water could be contaminated only should the pipes or filtering systems be destroyed.

Wells are extensively used in rural settlements. Radioactive and toxic substances along with various types of bacteria could enter the water through the opening of the well from the top or the side. The penetration of surface waters is almost totally excluded in the case of wells lined with concrete or bricks around which concrete or clay draining facilities have been built. In order to protect wooden wells we must dig a 20 centimeter deep ditch at a distance of 1 to 1.5 meters around them and fill it with packed clay covered with sand. Such a ditch could be filled with concrete or asphalt. The projecting part of the structure should be lined with lumber. The opening of the well should be covered by two layers of lumber separated by cardboard, tarpaulin, corrugated steel, or other thick materials. The cover should be lined on the outside with corrugated steel. Should the well have a winch and an opening, a cover tightly sealing the upper part of the well and the opening should be made. A single bucket should be used.

Wells with manual pumps could be lined with lumber with an opening for the handle. To protect the opening the upper part of the pipe must be covered with a soft tarpaulin whose lower end is affixed to the pipe while the upper end is tied to the hinge connecting the pump lever to the handle.

A ditch must be dug to protect the spring. The sides and the bottom must be propped and the area where the water collects must be cleaned. A wooden or other superstructure covered with clay must be built over the spring. An opening is made on the superstructure sealed tightly and the entire installation must be covered with dirt. Draining and collecting pipes must be installed for the draining of the water.

The best water supply method under contamination conditions is the building of artisian wells. Water drawn from artisian wells is practically uncon-taminated.

In addition to wells and other water sources each household must keep a stock of drinking water. As must water must be collected in advance as it is used for helping casualties, processing contaminated products and vegetables, and so on. Such water must be stored in tanks, barrels, and other hermetically sealing metal or wooden containers placed in closed premises or sheds. The use of thermos bottles, jerry cans, bottles, and even bathtubs is recommended to store water at home. All containers must be tightly sealed while buckets and bathtubs must be covered with oil cloth or other suitable materials. Storing water, we must bear in mind that a person uses three to five liters of water per day. By Colonel Aleksey Zaytsev, Moscow.

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EAST GERMANY

SED COOPERATION WITH AFRICAN, ASIAN PARTIES ANALYZED

East Berlin DEUTSCHE AUSSENPOLITIK in German Vol 22 No 10, Oct 77 signed to press 30 Aug 77 pp 93-106

[Article by Juergen Zenker, GDR Ministry for Foreign Affairs, East Berlin: "SED Cooperation With Revolutionary-Democratic Parties in Africa and Asia"]

[Text] The communist world movement attributes great importance to cooperating with national democracy, a significant political trend and ideological current in Asia and Africa. In assuming such an attitude, it takes account of objective requirements of the revolutionary world process.

Not a few communist parties, the CPSU and the SED among them, have stressed their resolve recently to develop their ties with revolutionary-democratic parties and movements in the future as well. The new program adopted by the Ninth SED Congress confirmed this line of direct cooperation, on a party level, with national-democratic forces in Asia and Africa, a line pursued for more than 15 years now, and assigned the task of further developing these relations.¹ As Erich Honecker emphasized in his SED Central Committee report to the Ninth Party Congress, much support is being given the revolutionary-democratic parties and movements in their just struggle.²

Three main areas have evolved in the relations between the SED and the revolutionary-democratic parties and movements: foreign policy, domestic policy and ideology. Some aspects of foreign policy cooperation are to be discussed in the following.

Based on an objective identity of interests in safeguarding world peace, assuring security in certain geographic zones, enforcing peaceful coexistence among states with differing social orders, eliminating the residues of the colonial system and fighting against racism and apartheid, the SED and the revolutionary-democratic parties and movements regard foreign policy as an important area of cooperation. Existing relations are used for discussing topical issues in the international situation, basic foreign policy problems, matters of mutual support or of solidarity with other forces of the worldwide anti-imperialist front, and political-ideological aspects that might arise along with it. Shaping the substance of connections that way is wholly in line with Lenin's demand to conceive of the proletariat's foreign policy as "the alliance with the revolutionaries of the progressive countries and with all suppressed nations against all imperialists."³

It has been characteristic of recent exchange of views between the representatives of the SED and of the national-democratic forces on international issues that the explanations given of foreign policy program documents of the communist world movement, the CPSU and SED, were combined with analyses of the status of their concrete enforcement in any given situation. Whenever in collective consultations among the leaders of the communist and workers parties in the countries of the socialist community results were negotiated in implementation of their coordinated foreign policy line and new tasks had been set down, representatives of national-democratic parties and movements were also informed about them. For example, in a report about a talk held between Erich Honecker and Yasir Arafat, the point was made that the SED Central Committee General Secretary informed the chairman of the PLO executive committee "about the outcome of the Crimean meeting of the leaders of the communist and workers parties of socialist countries, 30 to 31 July 1973."⁴ A communique, dated 9 May 1974, on an MPLA delegation that had come to the GDR states that Hermann Axen, head of the SED negotiating delegation, had reported "on the outcome of the most recent conference of the Political Consultative Commission of the Warsaw Pact member states."

National-democratic parties, it goes without saying, may also raise foreign policy issues in these discussions. Not rarely documents are mentioned that were adopted within the framework of the nonalinement movement. While normally substantive matters brought up by the SED or the national-democratic parties and movements complement each other, it may happen that -- with all their identity of interests on objective grounds -- differences of understanding arise in one matter or another, which then get discussed in a comradely fashion.

What is the importance of the exchange of views between the SED and the national-democratic parties and movements on foreign policy matters?

For one thing it helps deepen their mutual understanding of foreign policy activities in any of those countries. For national-democratic parties and movements to discuss international problems and come to the result, for instance, or to the conclusion, that the success of CSCE has had "positive effects on detente, not only in Europe but in other parts of the world as well,"⁶ is an extremely important matter.

And then, exchange of views, providing greater clarity on topical international problems, promotes the foreing policy cooperation among the partners concerned. That also is of great importance in view of the greater role the developing countries play in international relations. Third, the discussion of the international situation establishes a basis for agreements on where joint action is required. This applies to support given each other in the anti-imperialist struggle as much as to joint solidarity with other forces fighting against imperialism. The interest shared by the SED and national-democratic parties and movements in coordinated approaches on certain matters has brought it about that through accords mutual consultations were arranged with that end in view.

These consultations take account of the objective interrelations between the struggle of the international workers class and that of the national liberation movement. The great political importance of these consultations results from the fact that the national-democratic parties and movements "exercise power in countries playing an important role in international relations."⁸ It must not be forgotten, however, that there are differences in the positions of the national-democratic parties and movements in the political system of the countries with a socialist orientation.

While explicit arrangements for consultations, and thus for joint approaches in certain matters, were in principle initiated only after the 1969 international conference of communist and workers parties, de facto this principle had already been observed for some time.

For example, the SED used ties with national democrats to have them play an active role in breaking the diplomatic blockade of the GDR that had been set up by the FRG and its NATO allies. In its activities concerning national democracy, the SED took into account that involving it in breaking the FRG's Hallstein Doctrine, this was not principally a matter of argumentation but rather a problem of the international balance of power and the ever closer union among the main currents of the revolutionary world process. To the extent that the power balance shifted in favor of peace, democracy and socialism, and national democrats became affected, on the various levels including party relations, so that they would turn toward supporting SED positions, supporting them then assumed more and more active forms. This tendency is clearly reflected in the documents on the relations between the SED and national-democratic parties and movements. Leading national democrats in the early '60's advocated GDR-FRG negotiations. Thereby they placed themselves in opposition to Bonn's sole representation presumption which, ultimately, amounted to the notion of having the GDR annexed militarily by FRG imperialism.

On that basis, and with the desire to develop the relations between their countries and the GDR, national democrats became willing when we entered the '60's to take further steps toward normalizing mutual relations on the state level. General consulates were agreed to be mutually established between Egypt and the GDR in 1959. This example was later followed by national-democratic forces in other countries.

Against the background of further changes in the international power balance and of the consolidation of the socialist community of states in general, and the GDR in particular, the national democrats also became more willing in the second half of the '60's to back the position of the SED. That is reflected in the position of the Arab Socialist Ba'th Party in Syria.

That party, in a joint communique between an SED Central Committee delegation and one of the Ba'th Party, of 29 February 1968, gave voice to its "support for SED and GDR policy in their struggle against the sole representation presumption of the West German government, which potentially amounts to a declaration of war against the GDR."⁹

In line with such a stand, the national-democratic governments more and more actively would advocate a position of equal terms for the GDR in international relations. The support the GDR request for admission to WHO on 2 April 1968 received from Algeria, Egypt, Burma, Iraq, Mali, Syria and the Peoples' Democratic Republic of Yemen demonstrates it.¹⁰

Countries under national-democratic administrations were the first ones, in 1969, among the nonsocialist states to normalize their relations with the GDR. The GDR and Iraq agreed on the exchange of ambassadors on 10 May 1969. Similar agreements followed with Sudan, Syria, Yemen, Egypt, Congo, Somalia, Algeria and Guinea.

Of great importance also was the support received from those countries, after having established diplomatic relations with the GDR, in the struggle against the diplomatic blockade. They let themselves be guided here by the realization that "establishing relations based on international law between all states and the GDR--without delays, conditions or other obstacles-would conform to the interests of international security and peace."¹¹ The Arab Socialist Ba'th Party gave the assurance it would "continue to advocate on any occasions and in all international organizations the GDR's full and equal participation in international affairs."¹² And that pledge was kept through practical steps, for example by supporting the demand for equal GDR participation in the UN environmental conference in Stockholm in 1972.

These facts demonstrate the progressive states, freed from the colonial yoke, played an important role in breaking through the FRG's sole representation claim. Their attitude helped in making ruling FRG circles assume a more realistic position in its relation with the GDR, which brought about the development that, on 21 December 1972, led to the signing of the GDR-FRG Basic Treaty.

While the states under national democratic administrations on the whole helped break the diplomatic blockade against the GDR, whereby an objective of great importance was reached in the anti-imperialist struggle, the SED helped in the realization, or at least in taking steps in the solution, of matters of importance to the national democratic parties. A great amount of practical evidence on the relations between the SED and the nationaldemocratic parties and movements shows this to be true. Carrying on the traditions of the German workers movement's anticolonialist struggle, the SED has always been exercising active solidarity with the national-democratic movements, bent on completely and definitely eradicating the colonial system. It has actively been supporting, for instance, PAIGC, FRELIMO and MPLA in their struggle for national liberation. The SED has repeatedly come out with declarations of solidarity with the struggle of the patiots in those former Portuguese colonies and has been assessing the successes they reached. A communique of April 1972, on the visit of a FRELIMO delegations to the GDR, states: "The SED delegation has appreciated the heroic struggle of the prople of Mozambique which, led by FRELIMO, is fighting for liberation from the brutal domination by Portuguese colonialism. It has learned with satisfaction that FRELIMO has already liberated large areas of the country and is inflicting ever stronger blows on the Portuguese colonial mercenaries and their henchmen."¹³

A similar statement is contained in the communique on the visit in the GDR of a PAIGC delegation, dated 31 October 1972: "In the course of the talks, the SED delegation underscored the importance of the fact that the people of Guinea-Bissau, led by PAIGC, had already liberated three-fourths of the country and was inflicting ever stronger blows upon the Portuguese colonialists. Having always regarded PAIGC as the true representative and the vanguard of the people of Guinea-Bissau and Cape Verde, the SED recognizes PAIGC as the sole and legitimate exponent of political power in Guinea-Bissau. The SED appreciates the elections recently held in Guinea-Bissau, on PAIGC initiative, for constituting a national people's assembly, presenting a new and higher developmental phase in the struggle of the people of Guinea-Bissau and Cape Verde moving toward independence."¹⁴

As to Angola, a communique on the visit by an MPLA delegation to the GDR of May 1974 emphasizes this: "The SED delegation appreciates the leading role of the MPLA in organizing the political and military struggle of the Angolan people against Portuguese colonial tyranny. It has a high regard for the MPLA struggle for the independence of Angola and for the consolidation and broadening of the unity of action among all patriotic, antiimperialist and anticolonial forces in Angola."¹⁵

The SED has not confined itself to political-moral support; it has also helped materially. That, far from last, is reflected in agreements the SED has concluded with PAIGC, FRELIMO and MPLA. The support for the MPLA still increased after the founding of the People's Republic of Angola. Tents, Hankets, medicines, bandages, foodstuffs and other urgently needed commodities, for example, were made available. Seriously wounded soldiers of the armed forces of the People's Republic of Angola were treated in the GDR.¹⁶ The GDR furthermore complied with a request from the Angolan leadership and will "increase its support for the just struggle of the Angolan people against foreign intervention and imperialist economic blockade."¹⁷ The support given to the anticolonial struggle by the SED has repeatedly been recognized by national democrats. For instance, the joint communique on the visit of a FRELIMO delegation to the GDR, on 10 December 1974, states: "The FRELIMO delegation thanked the GDR government and people for their political, moral and material support of FRELIMO during the years of the people's liberation struggle against Portuguese colonialism."¹⁸ Similar statements are contained in numerous other documents, such as the communique on the visit of an MPLA delegation in the GDR.¹⁹ Amilcar Cabral, General Secretary of PAIGC, used the rostrum of the Eighth SED Congress to give thanks for "a very important gift,"²⁰ a mathematics textbook in Portuguese, sent in several thousand copies, which he called one of the best weapons received by PAIGC.

The independence gained by Guinea-Bissau, Mozambique, Angola and other countries that were parts of the Portuguese colonial empire, once again proves--as was stated in the communique on the visit of a FRELIMO delegation in April 1972--"that unified approaches by all anti-imperialist forces, the mobilization of their potentials and possibilities in the struggle against the machinations of imperialism and reaction, and the consolidation of the cooperation between all anti-imperialist forces and the socialist community of states are the main conditions for the success of the joint struggle against imperialism, colonialism, neocolonialism and racism."²¹

Having taken this always into consideration, the SED continues as it always has the rigorous support of the still suppressed peoples at present. A recent example of it was the trip by a party and government delegation headed by Werner Lamberz to the Democratic People's Republic of Yemen and five African states.

As was announced when the delegation reached Luanda, the GDR is furnishing solidary support to the peoples of Namibia, Zimbabwe and South Africa in their struggle for freedom, independence and human dignity, and against racism and colonialism. The permanent violation of human rights by South Africa's apartheid regime was vehemently denounced; the governments of some NATO states are propping it up.²²

To reinforce this attitude of principle, Werner Lamberz met with Sam Nujoma, president of SWAPO. In the course of their discussion, they considered matters of continuity in the fraternal cooperation between the SED and SWAPO.²³

That continued the talks with leading representatives of the liberation movements in southern Africa. In March this year already, the General Secretary of the SED Central Committee and Chairman of the GDR State Council, Erich Honecker, had received Joshua Nkomo, President of ZAPU, and supported the demand for an immediate and unconditional transfer of power into the hands of the people of Zimbabwe.²⁴ On that occasion further steps were agreed upon that serve the common anti-imperialist struggle and continued solidary cooperation between the peoples of the GDR and Zimbabwe. Along with the help given to the peoples of Namibia, Zimbabwe and South Africa, the delegation headed by Werner Lamberz also explicated the GDR's support for the territorial integrity of Angola, Mozambique, Zambia and Botswana, against the open threats and acts of brutal aggression by the racist regime in Salisbury.²⁵

In the cooperation between the SED and the revolutionary-democratic parties and movements, the joint effort for eradicating the sources of crises plays and important part. As to the conflict in the Near East, the SED has always stood on the side of the Arab peoples who are striving for a settlement that would stop the aggressive policy of the ruling circles in Israel and would insure progressive social changes in a number of Arab states.

It is enough in this connection to recall a few facts: When in the spring of 1967 the danger of another Israeli aggression against Arab states appeared on the horizon, the SED took a demonstrative stand on the side of the Arab peoples. In SED Central Committee telegrams of 30 May 1967, to the national executive of the Arab Socialist Ba'th Party in Damascus²⁶ and to the high executive committee of the Arab Socialist Union of what was then the United Arab Republic,²⁷ the assurance was given that the SED was standing firmly, and in solidarity, on the side of the Arab states.

In view of the refusal of the ruling circles in Israel to bring about a political settlement of the Near Eastern conflict in the time before the October 1973 war, the SED endorsed the right of the Arab states "to use any legitimate forms of struggle for the liberation of their occupied territories"²⁸ or "to use any form of struggle for the liberation of their occupied territories that conformed to the provisions of the UN Charter."²⁹

No sooner had the military conflict started in October 1973 between the Arab states and the Israeli aggressor than the SED Central Committee Politburo, the State Council and the Council of Ministers of the GDR, in a declaration of 7 October 1973, condemned "Israel's policy of war and conquest"³⁰ and supported "the just demands of the Arab peoples and states for Israel's complete withdrawal from all Arab territories occupied in 1967, and for insuring the legitimate demands of the Arab people of Palestine."³¹ With reference to the process of detente the point was made that the elimination of the dangerous hotbeds of war in the Near East was an indispensable necessity for safeguarding world peace.

The SED supported the UN Security Council resolution 338, of 22 October 1973, on the cease-fire and the assumption of negotiations for establishing just and permanent peace in the Near East.³² It contended--as is stated in a communique on the visit of a PLO delegation in the GDR in August 1974--"that the continuation of the Geneva Near Eastern conference with the participation by all directly interested states and by the PLO as the legitimate representative of the Arab people of Palestine, with rights equal to those of other participants, could now amount to a crucial contribution to obtaining a total withdrawal of Israel from all areas occupied in 1967 and the realization of the legitimate national rights of the Arab people of Palestine."³³ During a visit by a GDR party and government delegation to the Democratic People's Republic of Yemen in June 1977, its head, Werner Lamberz, underscored the GDR position that the desire of the Arab peoples to be, without constraint, masters of their destiny and to live in independence, freedom and peace, was their sacred right, and that it supported that desire and, together with the USSR and the other socialist states, advocated the bringing about of a permanent and just order of peace in the Near East."³⁴

With the imperialist colonial system by and large having collapsed, problems in the struggle against neocolonialism are becoming ever more pronounced. And here again the SED, in solidarity, stands on the side of the nationaldemocratic forces. For example, an SED Central Committee delegation which was in Iraq right after the Iraqi government, on 1 June 1972, had nationalized the IPC (Iraq Petroleum Company), gave backing to that step. A joint communique between the SED and the Arab Socialist Ba'th Party, of 23 June 1972, says about it: "The SED delegation appreciates the resolution by the revolutionary command council on the nationalization of the monopolist IPC as the most important historic and revolutionary achievement for freeing the national wealth from the exploitation by monopoly corporations and for realizing the economic independence and the consolidation of the sovereignty of the Republic of Iraq. The nationalization of imperialist petroleum companies is a great contribution to the just struggle by the Arab people against imperialism, neocolonialism and zionism, and for the realization of social progress. At the same time, the SED delegation considers this resolution a positive contribution to the struggle by the suppressed peoples for their liberation and progress. It affirms SED and GDR solidarity with Iraq in its struggle against the machinations by the monopolist petroleum companies and for success in nationalization."³⁵ Not only in words did the SED take its stand on the side of the Arab Socialist Ba'th Party; it helped by deeds break the imperialist boycott against the sale of nationalized petroleum. On its suggestion the GDR government took a number of measures in support of Iraq. A GDR tanker was the first vessel to take nationalized oil on board 36 In November 1972, the governments of the GDR and of Iraq signed agreements in Bagdad on the further development of economic cooperation for the period up to 1975. They contained measures for supporting Iraq in its struggle against imperialist_petroleum monopolies, including increased GDR petroleum imports from Iraq.³⁷ The GDR dispatched its tanker "Buna" which, shuttling back and forth between Iraq's petroleum port of Fao and tankers at anchor with carrying capacities of over 30,000 deadweight tons, significantly helped in speeding up transshipments of the "black gold." In the course of scarcely one year, between July 1973 and June 1974, "Buna" transferred 500,000 tons of petroleum to other tankers.

These facts demonstrate that SED and GDR support was a factor that contributed to forcing the petroleum monopolies to stop their boycott and seal their defeat by signature on 1 March 1973.

In documents with other national-democratic parties also the SED supported the nationalization of IPC by Iraq. For instance, a joint communique on the visit in the GDR of a party and government delegation from the People's Democratic Republic of Yemen states: "Both sides welcome the nationalization of the imperialist petroleum company IPC in Iraq and in Syria and assure the Iraqi and the Syrien people of their full solidarity."³⁹

The consistent position of the SED in support of national democratic parties and movements in their struggle against neocolonialism also is reflected by its approval of the documents adopted in 1974 by the sixth special session of the UN General Assembly, aimed at the elimination of neocolonialist practices in economic relations, and by its advocating their implementation. A communique on the visit of an MPLA delegation in the GDR on 9 May 1974 emphasizes: "In consequence of the recently held sixth special session of the UN General Assembly on problems of raw materials and international economic relations, the SED and MPLA delegations affirm that every people has the right to the free choice of its own socioeconomic road of development, and every state has the sovereign right to dispose of its natural wealth and resources. Both sides in this context express their hope that the results of this UN special session will lead to the elimination of discrimination and to the establishing of economic relations on equal terms among all states."⁴⁰

Numerous examples have been given to show that communist and revolutionarydemocratic parties help each other in the struggle against imperialism. That is an important trend in their cooperation but not the only one. While their interests are in principle identical, differences in views do exist in certain matters. The important consideration here is the pressure exercised by the imperialist forces on the national democrats and the differences in position as between communists and national democratic forces regarding the various issues in international development and politics. There are times when a joint approach or the implementation of accords made are harmed by particular positions taken by certain forces in developing countries. That sometimes also has something to do with the idea that one will look for arrangements with imperialist forces, merely in order to make "headway" in the solution of certain questions. Some national democrats have the tendency to yield to the pressure from imperialist forces and to avoid ties that are "too close" with the states of the socialist community. It should also be noted that some national democrats show some hesitation in contributing to the solution of certain tasks for which the time has come, objectively, in foreign policy, such as supplementing the political detente by military detente.

The communist world movement, in trying to recruit all anti-imperialist forces into the implementation of the anti-imperialist action program of the 1969 international conference, the peace program of the 24th and 25th CPSU Congress and other program documents, takes into account that the national democratic leadership forces are gathering important experiences in the common anti-imperialist struggle and are further developing their concepts on the basic processes in international development. The communists are paying attention to the fact that the turn from the Cold War to detente, which was initiated in consequence of the struggle of the socialist community of states, the revolutionary workers movement of the capitalist countries and the national liberation movement, has raised questions among the national-democratic alliance partners which have to be clarified as they contribute to giving an outline to their political-ideological convictions.

Uncertainties about the nature of detente as it came into being also are reflected in the documents of the summit conferences of nonalined states at Algiers and Colombo (1973 and 1976), in the drawing up of which national-democratic forces had a great share, being all in favor of them. The Algiers "economic declaration" holds the position "that the development in the international situation toward the relaxation of tension . . . had no noticeable useful effect on the developing countries and on international cooperation."⁴¹ Without differentiating between the attitude of the countries of the socialist community and the position of the imperialist powers, the Algiers "political declaration" states: "In a world which is already divided between rich and poor countries it would be dangerous to aggravate such a division by confining peace to rich areas in the world while the rest of mankind remains condemned to insecurity and to merely accepting the supremacy of the most powerful."⁴²

During innumerable meetings with delegations from national-democratic parties and movements the SED representatives have been explaining the standpoint of the communists on such matters as they relate to the process of They have demonstrated that detente fully conforms to the interests detente. of the national liberation movement. The communist world movement seeks not only to banish world war from the life of human society but to force imperialism altogether to renounce its aggressions, including those that are aimed at the peoples of Asia, Africa and Latin America. If certain antidetente elements seek to kindle new conflicts, particularly yet not only in the zone of national liberation, it cannot be deduced from that that detente is of no use to the developing countries. Rather, the conclusion should be drawn that in those regions in the world the power ratio also ought to be altered to the detriment of imperialism and the alliance with world socialism be strengthened, so that detente--as the communists are demanding--be spread all over the world.

Detente makes progress in arms limitation and disarmament possible. That would also, increasingly, free the developing countries from the burdens of military expenditures. And then, more funds becoming available, due to those disarmament measures, could be used for their assistance. Finally, detente favors the expansion of economic relations on the basis of equality and mutual advantage. That creates preconditions for forcing imperialism to place its economic relations with the developing countries on new premises.

Exchanges of views between the SED and revolutionary-democratic parties and movements about developmental tendencies in the international situation and about foreign policy action programs, a procedure of coordination developing in the approach to various issues in international relations, and discussions of political-ideological problems that relate to foreign policy activity thus
help develop a closer action community between communists and revolutionary democrats in the international anti-imperialist struggle, whereby the unity of all those forces is fostered which are in confrontation with imperialism.

Along with the foreign policy field, cooperation has also developed between the SED and the revolutionary-democratic parties and movements in the fields of domestic policy and ideology.⁴³ As party level contacts were further developed, especially by giving them more substance, their weight has increased within the overall framework and their importance has increased with regard to other levels of cooperation, in state and social organizations. In looking at the interchange of the cooperation on the party level and other levels of contact (state relations, contacts among social organizations) from a historic vantage point, two basic tendencies emerge:

First: Historically, the relations normally have developed in such a way that first state level contacts were made and then party level connections were agreed upon. V. Zagladin correctly wrote in 1972 "that our relations with countries with a socialist orientation by now no longer develop only on state level but even on party level."⁴⁴

Second: In some cases the SED entertained relations with national-democratic parties and movements active in countries that had not yet gained their national independence.⁴⁵ In such cases the party-level contacts became the basis for rapidly developing state relations once the independence had been achieved.

Yet regardless of how, historically, the interrelation of party connections, state cooperation and contacts among social organizations began to develop, today the relations between the SED and revolutionary-democratic parties and movements not infrequently do have a considerable place value within the connections in the overall framework. Willi Stoph declared during a visit to the People's Democratic Republic of Yemen in September 1976 that the "relations between the SED and UNFPO play an outstanding role in the cooperation between the two countries."⁴⁶

The effect party relations have on state cooperation is, for example, seen in the fact that frequently after party-level consultations were arranged, analogous state-level consultations got started. Not that the relations between the SED and national democrats affect only the political state cooperation. Party contacts also have repercussions on economic and scientifictechnical relations. Along with the discussion of basic matters in bilateral economic relations by representatives of the SED and the national-democratic parties, the results of which are concretized on the state level and set down in relevant agreements, greater importance also attaches to a partylevel treatment of problems resulting from the complex program on socialist economic integration. Not only impulses for state cooperation but also for ties among the social organizations in any of those countries emerge out of the party relations. Great attention has been paid to this matter in not a few of the agreements between the SED and national-democratic parties. In conformity with the line developed by the communist world movement vis-a-vis revolutionary-democratic forces, the SED will continue its efforts on behalf of further shaping its ties with appropriate partners in Asia and Africa. It thereby contributes to meeting its internationalist obligations.

FOOTNOTES

- 1. Cf. "Programm der Sozialistischen Einheitspartei Deutschlands" (SED Program), Berlin, 1976, p 71.
- 2. Cf. "Bericht des ZK der SED an den IX. Parteitag der SED" (SED Central Committee Report to the Ninth SED Congress), Berlin, 1976, p 138.
- 3. V. I. Lenin, "Werke" (Works), Vol 25, Berlin, 1970, p 77.
- 4. NEUES DEUTSCHLAND, Berlin, 4 August 1973.
- 5. Ibid., 11 May 1974.
- 6. "Joint Communique on the Visit of a FRELIMO Delegation in the GDR," NEUES DEUTSCHLAND, 11 December 1974.
- 7. Cf. "25th CPSU Congress--CPSU Central Committee Status Report and the Next Party Tasks in Domestic and Foreign Policy," Berlin, 1976, pp 17-18.
- 8. W. Schuessler, "United in Struggle Against Imperialism. SED--Firmly on the Side of the Revolutionary Forces in Africa and Asia," HORIZONT, Berlin, 1971, No 22, p 4.
- 9. NEUES DEUTSCHLAND, 2 March 1968.
- 10. Cf. "Protocol on the 21st WHO Conference," A 21/VR/5, p 21.
- 11. "Communique on the Visit of an SED Delegation to the Republic of Iraq," NEUES DEUTSCHLAND, 25 June 1972.
- 12. Ibid.
- 13. Ibid., 22 April 1972.
- 14. Ibid., 1 November 1972.
- 15. Ibid., 11 May 1974.
- 16. Ibid., 20 January 1976.

- 17. Ibid., 12 February 1976.
- 18. Ibid., 11 December 1974.
- 19. Ibid., 11 May 1974.
- A. Cabral, "Eighth SED Congress Speech," "Protokoll der Verhandlungen des VIII. Parteitages der Sozialistischen Einheitspartei Deutschlands" (Eighth SED Congress Proceedings), Berlin, 1971, p 176.
- 21. NEUES DEUTSCHLAND, 22 April 1972.
- 22. Ibid., 18/19 June 1977.
- 23. Ibid., 20 June 1977.
- 24. Ibid., 8 March 1977.
- 25. Ibid., 18/19 June 1977.
- 26. Cf. "Dokumente der Sozialistischen Einheitspartei Deutschlands" (SED Documents), Vol IX, Berlin, 1969, p 279.
- 27. Ibid., p 280.
- 28. NEUES DEUTSCHLAND, 12 May 1973.
- 29. Ibid., 28 June 1973.
- 30. Ibid., 8 October 1973.
- 31. Ibid.
- 32. Ibid., 25 October 1973.
- 33. Ibid., 10 August 1974.
- 34. Ibid., 13 June 1977.
- 35. Ibid., 25 June 1972.
- 36. Cf. H. Dittmar, "North Rumaila: Synonym for USSR-Iraq Friendship," NEUES DEUTSCHLAND, 2 January 1975.
- 37. NEUES DEUTSCHLAND, 19 November 1972.
- 38. Ibid., 21 June 1974.

- 39. Ibid., 6 August 1972.
- 40. Ibid., 11 May 1974.
- 41. INTERNATIONALE POLITIK, Belgrade, 1973, No. 563, p 26
- 42. Ibid., p 21.
- 43. Cf. J. Zenker, "On the Importance of the Cooperation Between the SED and National-Democratic Parties and Organizations on Behalf of Their Political-Ideological Development," ASIEN, AFRIKA, LATEINAMERIKA, Berlin, 1975, No 5, pp 813-816.

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- 44. V. Zagladin, "The Revolutionary Process and CPSU International Politics," KOMMUNIST, Moscow, 1972, No 13, p 21.
- 45. Examples are SED contacts with the African Independence Party of Guinea and Cape Verde, with the Mozambique liberation front and with the people's liberation movement of Angola.
- 46. NEUES DEUTSCHLAND, 28 September 1976.

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EAST GERMANY

SOCIALIST-CAPITALIST SCIENTIFIC-TECHNICAL COOPERATION ANALYZED

East Berlin IPW-BERICHTE in German Vol 6 No 10, Oct 77 pp 39-47

[Article by Paul Freiberg and Juergen Nitz: "Growing Scientific-Technical Relations Between Socialist and Capitalist Countries: Leading Role of Soviet Science--Dialectic of Political Detente and Economic as well as Scientific-Technical Cooperation--Objectives and Interests of the Two Sides--Mutual Resolution of Global Problems--Significant Prospects"]

> [Text] Proceeding from the dialectical unity between detente and international economic and scientifictechnical cooperation, in its introduction the article deals with the impulses of the latter. It finds them in the tempestuous development of science and technology in the socialist states, especially in the USSR, and in the objective processes of the scientific-technical revolution and of the development of the productive forces, which lead to the internationalization of economic life. A detailed presentation is offered of motivations in the states of both social systems, the areas and forms of their cooperation, the methods, mechanisms and problems and prospects of these relations.

To an increasing measure, science and technology are being drawn into the economic cooperation between socialist and capitalist countries developing in recent years as the outcome of the process of detente and of the internationalization of economic life.¹ That comes not only from the objective processes of the scientific-technical revolution and of the development of the productive forces and the internationalization of economic life that goes with it. It is also happening because of the great successes shown by the development of science and technology in the socialist states, especially in the USSR.

The Great Socialist October Revolution, the world historic triumph of the Russian proletariat under the leadership by Lenin's party in 1917, also laid the foundations for the development of Soviet science. "Socialism," as is stated in the CPSU Central Committee resolution on behalf of the 60th anniversary of the Great Socialist October Revolution, "has created unlimited possibilities for the development of science, placing it in the service of the people."² These 60 years of Soviet science convincingly prove the significant contribution the USSR has made to the scientific-technical progress of mankind as well as the advantages offered by precisely this socialist social order for the development of science and technology.

"We communists," L. I. Brezhnev stated at the 25th CPSU Congress, "start from the proposition that the scientific-technical revolution proceeds properly, in the interest of man and society, under socialist conditions only. In turn, only on the basis of an accelerated development of science and technology can the ultimate task of the social revolution be solved and the communist society be established."³

Leading USSR Position in Science and Technology

Soviet science has had much success in a lot of basic research. It has advanced onto leading positions in some aspects of mathematics and mechanics, quantum electronics and solid state physics, nuclear energy, chemistry and biology, medicine, space research, geology and many other science fields. Important accomplishments were achieved, among other things, in the production and investigation of transuranium elements, in the use of nuclear and thermonuclear energy for peaceful purposes, in space exploration and so forth.

Broad scientific-technical cooperation has been developed within the CEMA framework. This cooperation virtually embraces all branches of science and technology. It includes joint planning and implementation of science developments, scientific and technological research cooperation, the exchange of the data of such projects and so forth, with the enormous potentials of the Soviet Union playing a vital role. As an example, up to 1975, within the CEMA framework, 43 coordination centers for scientific-technical cooperation were set up combining the capacities of more than 500 science institutions of the CEMA member countries. In terms of their proportions of national revenue allocated for scientific-technical projects, the USSR, the GDR and the CSSR are among the principal countries in the world, surpassing the European average.

In terms of important scientific-technical index figures (personnel, size of research investments for science and technology, number of science institutions), the socialist states have overtaken leading capitalist industrial countries. One-third of the world's science potential is theirs. This alone would refute the claims disseminated in the West that the socialist states presumably were trying to establish scientific-technical relations with the capitalist countries only to overcome a so-called technological gap separating them from the West and to gain unilateral advantages.

According to the UN Economic Commission for Europe (ECE), the socialist states are holding most advantageous positions in such production branches as metallurgical equipment, crude iron, steel, turbines and generators, nuclear reactors and power plants, many types of machine tools and metalworking tools, products of precision mechanics and optics, certain means of communication, polygraphic equipment, fertilizer and some other commodities. Soviet power plants and metallurgical installations, motor vehicles and aggregate products, Czech textile equipment and preset machine tools, products of precision mechanics, optics and polygraphic equipment from the GDR are meeting with more and more recognition and demand in capitalist countries.⁴

Objective Needs for Internationalization of Science

The rapid development of the socialist states does, however, not mean they have equally great successes to show for in all fields of scientific-technical progress. It is equally characteristic of socialist as well as developed capitalist states that science and technology cannot boast the same degree of development in all branches. And this precisely is the objective basis for mutual advantageous cooperation in science and technology.

Moreover, in the current phase of scientific-technical development, by the transformation of science into an immediate productive force, the process of the internationalization of science and technology intensifies. Their development and practical application call for such great expenditures today that no one state is in the position--whatever its scientific-technical potential may be--to exhaust and use the entire spectrum of the scientific-technical progress on its own. No country can at one and the same time, and with a high degree of efficiency, carry out research and development projects in all basic and applied research fields and perfect, out of its own resources, the technologies in all production areas in accordance with the most up-to-date state of knowledge.

Above and beyond that, many scientific-technical problems today are of a global nature and can be solved only through the collective efforts and the use of the scientific-technical potentials of several countries. Among such matters are the protection and better use of the environment, influence on weather and climate, the exploration and use of the riches of the oceans, space research and so forth. The advancing exhaustion of numerous raw material and energy sources calls for the tapping of new resources, which frequently is beyond the strength of single countries or even groups of countries. And furthermore, the internationalization of scientific activities makes it possible to avoid unnecessary duplication, often very expensive, in various countries.

All these factors objectively dictate the need for developing international relations in science and technology. While these relations in the past primarily developed within the two social systems, they now become, under the objective force exercised by the scientific-technical revolution and by the significantly larger dimensions of the tasks that have to be resolved, more and more also a field of cooperation between socialist and capitalist countries. Objectively, this requires a high degree of political stability in the relations between them. For that reason, the further deepening of the process of detente becomes an indispensable prerequisite for an allinclusive development of this most propitious field of cooperation. The dialectical unity between detente and comprehensive international economic and scientific-technical cooperation lies in this: the former creates the precondition for economic relations between the states of both systems that are copious, stable and of equal terms, so that the potential opportunities existing here can be used, and the latter reinforces the foundations for a constructive peace policy. That is why the socialist states find in equal and mutually advantageous cooperation not only an economic but also a first-rate political importance, considering them an important contribution to stable peace and international security.

Motivations for Scientific-Technical Cooperation

In view of the objective needs stemming from the scientific-technical revolution and benefiting from the international process of detente, the socialist as well as the capitalist countries are interested in extensive scientific-technical relations.

As such, the socialist states seek that kind of cooperation as an accelerated tempo in scientific-technical progress itself constitutes an important precondition for solving the tasks assigned in the socioeconomic field by the party congresses of the communist and workers parties. They aim at deriving advantages from the internationalization of science for their own scientifictechnical progress, saving research and development expenditures and time by making their own use of processes of the division of labor, using the experiences of Western countries, above all in applied research, more rapidly improving, by taking over scientific-technical performance parameters, their own labor productivity in the interest of a more rapid implementation of their economic and sociopolitical objectives, and making a contribution, at the same time, through developed scientific-technical relations, to the materialization of the detente process.

The capitalist countries likewise, for various reasons, favor an intensification of such cooperation. In their efforts at expanding economic relations with the socialist states in general--in view of worsening investment conditions for capital--, their interest in scientific and technical cooperation increases, as they frequently are a step leading to closer foreign trade relations, especially within the framework of economic and production cooperation (for example, in the joint exploration of raw material and fuel sources or in carrying out cooperative projects in the field of the processing industry). In this they are mainly interested in the results of basic research in the socialist countries, which are ahead of them in this in various fields.

The positive results of that kind of cooperation for capitalist industrial countries became apparent in the case of France, whose scientific possibilities have greatly been improved in such fields as space travel, nuclear physics, chemistry and petrochemistry, and television transmission, through close relations with Soviet research institutions.⁵ Similarly, the FRG also is interested in cooperation. Director Hans Werner Buescher of Siemens has announced, among other things, that approximately 100 FRG firms are at

present engaged in exchanging ideas about lines of technological development with the Soviet Union: "The transfer of know-how is not, as it were, regarded as a one-way street. More and more German firms are also buying Soviet licenses. For instance, in cooperation with the Leningrad Svetlana Works, Siemens was developing a transmission tube," as the Duesseldorf HANDELSBLATT reported.⁶ Of special interest to Western partners also are the Soviet experiences in reactor technology.⁷ A whole number of West European countries (Great Britain, France, the FRG, Belgium and Sweden) were working together with the USSR in uranium concentration for themselves.⁸

Comprehensive scientific-technical cooperation on a bilateral as well as an overall European basis could significantly strengthen the technological positions of Western Europe and its science and production potential as well. This would, for instance, have special importance in nuclear research, satellite research, and in the solution of energy problems, where the research done thus far in special EEC institutions had not led to the desired results. And this would also be significant with regard to the technological gap separating it from the United States, which is mentioned time and again in West European literature.⁹

What advantages the United States itself derives from such cooperation with the USSR was revealed in a report by the Subcommittee for National Security and Scientific Problems of the U.S. House Foreign Affairs Committee, published on 10 June 1973. It emphasizes that the modern technological processes developed in several branches of the Soviet economy are of significant interest to the United States and other industrially developed states. Since 1962 the USSR has sold to the United States twice as many licenses on technological processes as it has itself bought from the United States.¹⁰

The U.S. periodical FOREIGN POLICY points to the increasing role of the Soviet Union as a source of "technological innovations" and calls attention to the fact that there has been an eightfold increase in the number of Soviet inventions patented in the United States in the course of 8 years -from 1966 to 1974.¹¹ According to Western reports, up to 1976 there have been concluded 11 agreements on various special areas of cooperation and 53 accords between enterprises of both states in science and technology.¹² In hearings of the U.S. House of Representatives in November 1975, a general assessment was made of the results thus far of the scientific-technical cooperation with the USSR. It was found that "the progress achieved has considemably surpassed the original expectations. . . It became possible to carry out basic research, with results already published or about to be published. The work has been of outstanding quality."¹³

Finally there also are the advantages of the socialist planned economy, especially the five-year plans of the CEMA countries, from which more and more economic circles in the capitalist countries are promising themselves a stable cooperation, unaffected by market fluctuations.

Opposite and Common Interests

Nonetheless, it must not be ignored that influential circles in the imperialist countries consider scientific-technical relations a means for acquiring positions from which they could exercise an influence on the socialist states. They may have the hope that the deliveries of modern technologies could cause irresistible fascination for the capitalist West or that they could produce economic dependency. Certain circles also seek to undermine an expansion of economic and scientific-technical relations altogether by means of the already mentioned argument that such cooperation was not based on mutual advantage but would allegedly provide greater advantages for the socialist states. The experiences of recent years have taught, however, that any attempts have failed that would have wanted to exploit the economic and scientific-technical relations on behalf of aggressive imperialist policy.

Opposite as the interests of the two sides in this scientific-technical cooperation may be, there also are points of intersection in this interchange. Such amalgamation of interests mainly result from the realization that all benefit from using processes of a division of labor, that the universal problems in raw material, energy and fuel supplies and in environmental and communication matters can best be resolved only through joint efforts and that, furthermore, a resolution of the food supply problem and that of the peaceful use of the oceans, of space and so forth will in the future become inconceivable without global cooperation.¹⁴

The final act of Helsinki has given expression to these general findings. It states that the relations in the fields of science and technology, as much as those in commerce, industry or the environment must be organized on the basis of equality among the partners and for their mutual advantage. Reciprocity is what is wanted, facilitating a well-balanced distribution of advantages and obligations of comparable scope on the whole, in order to promote relations contributing to "the consolidation of peace and security in Europe and everywhere in the world," encouraging economic and social progress and facilitating the improvement of the conditions of human life.¹⁵

Tendencies and Areas of Cooperation in Science and Technology

The cooperation between the socialist and capitalist states in the fields of science and technology has significantly increased in scope in the '70's through international detente, the outcome of the peace policy of the socialist states, and in consequence of the progressive internationalization of economic life.

It is to be noted that scientific-technical cooperation entails a complicated web of the participating countries' economic, scientific, financial and legal relations, emerging in relation with the production and implementation of a commodity of a special kind, that is, the outcome of scientific research. Scientific-technical relations frequently form the basis for more extensive, industrial or commercial, cooperation. They are proceeding in various forms. They include joint research, on a bilateral as well as multilateral basis (the latter, up to now only within international scientific-technical organizations), the transmission of the necessary data comercially, for instance by the purchase and sale of scientific research results in the form of patents, licenses, through "know-how" or "engineering," and also non-commercial relations like science conferences and symposiums, the exchange of publications, scientists and engineers, international exhibitions and fairs.¹⁶

An analysis of the scientific-technical relations between the socialist and capitalist states indicates the emergence of two tendencies in recent years. On the one hand, the number of projects is growing, the exchange of scientists and specialists increases, and there is more of a mutual participation in international exhibitions, conferences and symposiums; exchange of information is growing. On the other hand, already a qualitative change in these relations makes itself felt. Initially being purely informative and above all, spontaneous, they now begin to assume a systematic and longrange character and to combine with the cooperation in the fields of the economy and industry.

That tendency and, with it, the transition toward new quality, expresses itself primarily in the long-term government accords on economic and scientific-technical cooperation as concluded between the socialist states and most capitalist industrial countries. Prerequisite to this qualitative further development has been the process of political detente, which produced the real possibility for establishing long-term relations based on long-term planning and cooperative programs in commerce, industry, science and technology, whereby the complexity of international economic relations was taken into account.

Within the framework of the scientific-technical relations between the socialist states and the capitalist industrial countries--according to analyses in Soviet literature--three large main areas of cooperation can, by and large, be differentiated:

The first area concerns those problems that are of a global character and that cannot be resolved by any one country, and sometimes not even by one group of countries. The first steps in this area were taken in Europe as well as within the U.S.-USSR relations. For instance, in the field of environmental protection cooperation is beginning to develop successfully between the USSR and Norway, or Sweden. A concomitant agreement was concluded between Great Britain and the USSR in May 1974. Since 1972 already such an agreement has been in effect with the United States; it was extended in July 1977.¹⁷ Joint space research was carried out between France and the USSR, and a French Sputnik was started in connection with "Molniya-1."¹⁸ Government cooperation agreements on public health exist between the USSR and the United States, Great Britain, France and Italy, and agreements with the United States, Sweden and Finland were concluded in the field of the peaceful use of nuclear energy. In space research one should above all

recall the joint space flight of Soyuz 19 and Apollo, a great contribution to USSR-U.S. scientific cooperation in the exploration of the universe. Eleven USSR-U.S. government agreements were concluded between 1972 and 1974 on scientific and technical cooperation, principally concerning global problems such as nuclear energy, space and oceanic research, environmental protection and medicine.

Other socialist states also have taken appropriate steps toward resolving global problems jointly with capitalist countries. The three socialist Baltic states, for example, took an active part in the international cooperation for setting up the convention for the protection of the maritime environment of the Baltic area, of 22 March 1974, and the convention on fishing and the protection of live resources in the Baltic and its belts, of 13 September 1973.¹⁹

In the field of public health, there are cooperative agreements, for example, between the GDR and the FRG and Austria, between Poland and Sweden and Finland, and between Hungary and the Netherlands.²⁰

The second area of cooperation embraces those areas of science and technology where the specialization of the participating countries plays a vital role. The strong positions the Soviet Union especially holds in basic research and, on the other hand, the experiences of the capitalist industrial countries in applied research are favorable conditions for advantageous relations. French firms, for instance, are interested in using Soviet research in power machinery construction, metallurgy and heavy machinery construction. There is, for instance, a French firm, Solmer, that is using the Soviet system for blast furnace vaporization cooling.²¹ FRG enterprises are interested in USSR research in welding techniques, casting, blast furnace construction and some areas of the chemical industry. Agreements between the GDR and Austria call for concentrating their scientific-technical cooperation above all in the fields of soft coal mining and refining, energy production and mining technology.²² The Hungarian electronics research institute (VKI) maintains scientific-technical relations with Siemens in the FRG and Brown, Boverie & Cie in Switzerland.23

The third area of cooperation includes two aspects: scientific-technical relations in the exploration and use of natural resources and in the construction, reconstruction and modernization of industrial enterprises. The latter is still under development; it will gain a more prominent place value in the future, especially in connection with the increasing cooperative relations. Often both areas are connected with each other, especially in the more complex forms of economic cooperation.

Thus within the framework of compensation projects scientific research is carried out, for instance in the exploration, mining and transportation of natural resources, on the basis of credits from capitalist countries, which are redeemed later by the delivery of products. As little as in commodity trade, production cooperation and so forth, so also the relations in the fields of science and technology are no one-way streets. More and more enterprises in the socialist states are participating in the building and reconstruction of capitalist enterprises, for instance the USSR, in the Fus-sur-mer steel plant in southern France, or in the development of the largest hydraulic press in the capitalist world (65,000 tons) in the French town of Issoire (for Creusot-Loire).²⁴ With scientific-technical assistance from the USSR, the Lovisa nuclear power plant in Finland was completed; another nuclear power plant is under construction right now.²⁵

Forms and Methods

Among the forms of scientific-technical cooperation one has to mention first and foremost the purchase and sale of licenses, patents, "know-how" and "engineering." The license and patent trade right now is the most dynamic sector in this domain of foreign trade relations.

One will always desire the import of foreign technologies by means of license agreements when it saves considerable funds and time for carrying out one's own research, experimentation and construction projects. Often purchasing licenses is more economical than commodity import since the fee amounts only to part of the value of the commodities produced. Transactions of this kind are often carried out in close conjunction with industrial cooperation, which then also foster commodity trade as license agreements normally lead to the shipment of material and equipment for getting the production started as well as of spare parts, aggregates and so forth.

License trade between socialist states and capitalist industrial countries has been developing mainly since the late '60's. For example, the USSR uses foreign licenses for manufacturing products in radio electronics, for computers and for electrical engineering. Hungary bought a license for producing railroad brakes from the Knorr corporation in the FRG and extensive autoelectrics licenses from the Bosch corporation in the FRG. Modern automatic washing machines are produced by use of a Belgian license.²⁶ Similar examples could be given for the other socialist countries too and for other fields.

Events in recent years have shown the socialist states in turn have great possibilities for exporting licenses of their own. In France, for instance, Soviet techniques for steel making are used (by Schneider-Creusot, for example), the Hoesch corporation in the FRG produces filter presses on a Soviet license, and the Gutehoffnung metallurgical plant in Oberhausen, FRG, uses the Soviet blast furnice vaporization cooling system. Poland provided the French Creusot-Loire Enterprises with a license for the construction of a rotary furnace.

The GDR is one of the biggest license exporters among the socialist states.²⁷ Licenses for the Malimo and Voltex technologies were, among others, sold to the FRG, Great Britain, France, Italy and Sweden. For the principle of conveyer belt reinforcement that had been developed in the GDR, licenses were given to four leading conveyer belt manufacturers in Western Europe. The Austrian VOEST-Alpine-Montan AG, Linz, took a license for the drying procedure for concrete clinker. Licenses for the procedure with urea formaldehyde foam were acquired, among others, by the Netherlands, for the steel concrete skeleton construction, by Great Britain and Switzerland, and licenses for agricultural breeding operations went to the Netherlands and Great Britain -- to mention only a few examples.

Contracts combining licenses with know-how, which are becoming more and more common in the economic relations between socialist and capitalist countries, were concluded between the GDR and firms in France, Great Britain, the FRG and other countries (for instance in the chemical and construction industries). In many West European countries (the Netherlands and Great Britain among them) the GDR held license symposia and fairs.²⁸

As the scientific-technical revolution advances, the trade of commodities is more and more being replaced by that of technical data. Even so, the socialist states' participation in the international license trade still lies far below the limit of their opportunities for selling their own licenses and below the needs of their national economies for acquiring foreign ones. The reasons for the minus balance the socialist states still maintain in the license trade with a number of capitalist countries can be found, among other things, in the fact that the scope of foreign patents, first of all, is inadequate because, for one thing, the capitalist countries still maintain political and ideological reservations and also, the promotion abroad of inventions made in socialist countries is insufficient and, as a matter of fact, many capitalist countries are starting only now in familiarizing themselves with the scientific-technical accomplishments of the socialist states.

Another important form of scientific-technical relations is cooperation in research, experimentation and construction projects. That includes the exchange of scientific-technical documentation, science information, specialists and, frequently, novel and science-intensive technologies. The advantage for both sides lies in that the production capacities and the staffs of skilled specialists of the partner can be used without incurring foreign exchange expenditures. This kind of cooperation often is taken care of by selling the products manufactured jointly on the world market and dividing the profits.

This cooperation at present is also gaining in importance in the development of economic and industrial (enterprise) cooperation among the states of both social systems. Currently, approximately 30 percent of all agreements pertain to specialization and coproduction and approximately 10 percent, to research and development.²⁹

A typical example is the accord concluded in 1971 between the Italian largescale corporation Montedison and the state committee for science and technology under the USSR Council of Ministers. It includes the exchange of information on the outcome of research, testing and design projects and their practical use. In particular, documentation is exchanged on the basic materials and technologies in petrolchemistry, chemical products, dyes, paints, varnishes and pharmaceutical products. Another example is the cooperation of a group of USSR and FRG designers developing a new type of lathe for the machine tool generation of 1980.

Scientific-technical cooperation in research, testing and design projects may also aim at specialization, that is to say, in certain areas specialization often becomes necessary in consequence of such production cooperation.

And then there are specializations for certain phases of the research, testing and design projects. Then one partner may carry out the research, while the production capacities of the other partner take care of its application. This form of cooperation is of advantage for the socialist states whenever they do not have the industrial base requisite for application but are ahead in the basic research. In such a case the Western partner normally also takes over marketing.

In conjunction with the development of scientific-technical cooperation, consignment production also plays a role. In recent years, for instance, GDR enterprises have started manufacturing through consignment production well-known market products of capitalist firms, a customary international form of economic relations. They exist in socialist countries as much as in the economic cooperation among firms of various capitalist countries.

As compared with licensed production, for which fees have to be paid, consignment production has the advantage that the production equipment delivered, the know-how and the raw materials supplied are paid for by the partial export of the products contractually agreed upon. An advantage of this kind of production also is that by means of a relatively small expenditure an expansion of the assortments for domestic trade, especially in new consumer commodities, is made possible and imports from capitalist countries are held back.³¹

Finally, an important field of cooperation are the non-commercial relations in science and technology, such as the exchange of scientists and information and the sponsoring of symposia and so forth. French engineers and scientists, for instance, are working on an efficient proton accelerator in Serpukhov, USSR, where the French bubble chamber "Mirabelle" was installed. Soviet scientists in nuclear energy, biology and agricultural science are doing their practical year at French research institutions. In 1976 alone, in accordance with the Soviet-French scientific-technical exchange programs, there were 1,700 Soviet experts in France.³²

Trilateral cooperation (in third states) is going to be an entirely new field of scientific-technical relations. At the Fourth UNCTAD Conference in Namibia in 1976, the socialist states stressed their willingness to support the development of the countries that have freed themselves from colonial dependency also in the science and technology field, and to check "the feasibility and practicability of organizing multilateral industrial cooperation in which the socialist countries, the developing countries and capitalist industrial countries would take part."³³ Such trilateral science and technology cooperation provides another possibility for the developing countries to remove themselves in this field more than they have done before from their subservience to the division of labor with the capitalist industrial countries, whereby their positions in world politics and world economics will be improved. Once again, this form of cooperation can also not be separated from the political aspects of cooperation and is therefore not conceivable without the continuation of the detente process.

The Mechanism

In organizational respects the scientific-technical cooperation between the socialist and capitalist states mainly proceeds in two forms at present: on the government level and in the form of direct contacts between the interested organs and enterprises of the countries concerned. The basis for the organizational mechanism is formed by the activities of the mixed government commissions. At their annual meetings they deal with the main issues and sign off on the plans for cooperation. They thereby define the main trends and forms of the relations. Some of these commissions have mixed working groups for various economic branches or for specific fields of the scientific-technical cooperation. And there also are groups of experts.

Of outstanding importance furthermore is the participation in the activities of international organizations. Through international congresses, symposia and research programs, the participating countries get the opportunity to engage in complex research and global investigations and to maintain permanent contacts among the scientists and specialists so as to insure mutual information exchange and the sharing of experience.

For European cooperation, ECE plays the most important role. In its framework, many economic and scientific-technical matters as well as problems of the environment, transportation, construction and others are discussed and ruled on. The 32nd ECE session in May 1977, for example, charged the ECE executive secretary with initiating, through consultations with the governments of the member states, the preparation of an all-European congress on the problems of environmental protection, as it had been proposed by the Soviet Union. At the same time it was decided to support the preparation of a UN science and technology conference in 1979 and to elaborate in this connection appropriate documents at a regional meeting in the summer of 1978 in Bucharest.³⁴

The scope and effectiveness of ECE activities toward expanding international scientific-technical cooperation do not, however, as yet satisfy the scope of possibilities this organization has. CSCE therefore devoted much attention to the further work of ECE, which also was reflected in the concluding document. The question also was raised how the work of the other organizations could be improved which are working in science and technology on an interstate or non-state level. Thus in recent years extensive cooperation

has been initiated among academies, research centers and research institutions in socialist and capitalist countries. The final act of the conference notes that it is necessary to make more effectively useful "the possibilities and potential of existing international interstate and non-state organizations dealing with science and technology for improving the exchange of information and experience and for developing other forms of cooperation . . . in ECE . . . UNESCO and other international organizations."³⁵

Problems in Further Cooperation

No doubt, science and technology cooperation among the countries of both social systems still calls for the resolution of many problems. These relations, after all, are still in their initial stage.

Experiences thus far have shown scientific-technical relations often to be the most effective where they go hand in hand with economic cooperation and foreign trade. Especially when they are supposed to become long-term in character, such interlinking often is imperative. Scientific-technical cooperation more and more frequently leads to cooperation relations. That requires the elimination of the obstacles still existing in the field of economic cooperation, the vestiges of embargo provisions, customs discrimination and so forth, so that the results of this cooperation can be brought to realization on the import-export markets in the best possible way.

Scientific-technical relations also are still being blocked by many provisions made by capitalist countries in the time of the cold war, like export restrictions for certain products (for instance, electronics). This also includes the U.S. trade legislation of late 1974, which discriminates against the socialist states. Holding on to such regulations is not compatible with the intent announced in the final act of CSCE "to eliminate obstacles obstructing such cooperation."³⁶

Scientific-technical cooperation requires, in an especially high degree, that the partners know each other well, jointly assess scientific-technical feasibilities and find ways for overcoming obstacles. That includes the resolving of financial problems, the matters of assuming or sharing risks, the handling of patent and license exchange and so forth. It includes the clarification of legal questions, such as the rules on patent and license relations, of authors' rights and so forth, which in part go beyond the bilateral relations and must be defined by requisite conventions, as this has already been done in various fields among the socialist states within the CEMA framework. Without settling such matters it is not possible to make scientific-technical cooperation truly comprehensive in character.

Finally it must not be overlooked that certain limits are set for scientifictechnical cooperation by the fact that all this involves relations between countries with differing social systems. For the socialist states, cooperation within CEMA will always come first. That fact must not be confused with certain Western arguments which, for that reason, attribute no, or poor, prospects to scientific-technical relations between socialist and capitalist countries. The differing social systems in east and west must always be kept in mind, to be sure, yet practical events have shown them to be no argument against the development of fruitful scientific-technical relations.

It has to be taken into account here that not all socialist states have the same possibilities and meet the same preconditions for expanding this cooperation because of differences in their scientific-technical status, their technological levels and the complexities in their national economies. Our socialist economic integration, however, makes it possible, not only to employ the total scientific-technical potential of the CEMA countries with the highest use value, but also to create ever better preconditions in each country for participating in the international division of labor. There are the best possibilities within the CEMA framework for using, through coordination, the international license trade, for the sale of licenses of socialist countries, including the results of their joint efforts, as well as for buying foreign licenses.

Socialist economic integration offers its member countries all opportunities for jointly elaborating and implementing their scientific-technical policy. This is the most important factor for accelerating the speed of progress in science and technology.

The Prospects of Scientific-Technical Relations

With all the advances made in recent years in scientific-technical cooperation, the possibilities for improving this cooperation are by no means as yet used adequately. The CSCE final act recommendations for elaborating and developing projects and agreements for mutual interest and benefit may cover the following fields: Agriculture; energy; new technical procedures, rational use of resources (especially the saving of energy); technology and transportation; physics (investigation of problems in high energy and plasma physics, research in theoretical and experimental nuclear physics); chemistry (the practical application of the latest chemical achievements in the branches of the economy); meteorology and hydrology; oceanography; seismological research; research in glaciology, permanently frozen soils and life in cold climate; electronic data processing, communications and information systems; space research; medicine and public health; and environmental research.

In these fields, all the forms and methods of cooperation, that have already been practiced and proven, can be applied. And then also, new fields may emerge in the course of the practical work.

The current status of the cooperation between the socialist and capitalist countries in science and technology may actually be called the first step or the beginning. The states in both social systems are interested in expanding these relations. Also the all-European congresses and conferences on the government level for cooperation in the fields of the environment, transportation and energy, as proposed by the Soviet Union, will lend further impulses to such scientific-technical cooperation. As the problems referred to here will, with development going on, become more complex and complicated, the methods used hitherto, for instance the discussion of separate questions on a technical basis, prove no longer adequate.³⁷ It may therefore be accepted as reassuring that the 31st ECE session in April 1976 in Geneva dealt with the initiative for holding all-European congresses and conferences on the government level, which would facilitate a new and comprehensive approach at a corresponding political level. The 32nd ECE session in May 1977 decided on preparations for an all-European congress on problems of environmental protection.

The UN science and technology conference scheduled for 1979 will also lend further impulses to this cooperation. All experiences have confirmed that the expansion and deepening of economic and scientific-technical cooperation have in turn positive repercussions for the political relations. For that reason the implementation of the exceptionally auspicious possibilities in the cooperation among the countries of both social systems in science and technology will help enforce the principles of peaceful coexistence, safeguard peace and strengthen security.

FOOTNOTES

- For greater detail on this see M. Schmidt, "Economic Relations Between Socialist and Capitalist Countries in the Light of New World Political and Economic Processes," IPW-BERICHTE, Berlin, No 9, 1976; J. Nitz, "Problems in the Economic Relations Between Socialism and Capitalism," IPW-FORSCHUNGSHEFTE, Berlin, No 2, 1977; P. Freiberg and J. Nitz, "Forms and Prospects of Economic Relations Between Socialist and Capitalist States," IPW-BERICHTE, No 11, 1975, p 16.
- 2. NEUES DEUTSCHLAND, Berlin, 4 February 1977.
- 3. L. I. Brezhnev, "25th CPSU Congress--CPSU Central Committee Status Report and the Next Party Tasks in Domestic and Foreign Policy," Berlin, 1976, pp 58-59.
- 4. N. Shmelev, "Peaceful Coexistence and Economic Cooperation," SOTSIOLOGICHESKIYE ISSLEDOVANIYE, Moscow, No 2, 1977, pp 57-58.
- 5. Cf. P. Freiberg and J. Nitz, op. cit., p 19.
- 6. HANDELSBLATT, Duesseldorf, 13 June 1977.
- 7. FRANKFURTER ALLGEMEINE, Frankfurt/Main, 8 July 1977.
- 8. HANDELSBLATT, 24 May 1977.
- 9. Cf. "East-West Economic Relations--Problems and Possibilities" (in Russian), Moscow, 1976, p 112.
- 10. Cf. N. Shmelev, op. cit., p 58.

- 11. FOREIGN POLICY, Washington, No 23, 1976, p 136.
- 12. HANDELSBLATT, 16 September 1976.
- "U.S.-USSR Cooperative Agreements in Science and Technology--Hearings before the Subcommittee on Domestic and International Scientific Planning and Analysis of the Committee on Science and Technology, U.S. House of Representatives, 94th Congress, November 1975," Washington, 1976, p 216.
- 14. Cf. J. Nitz, "Probleme der Wirtschaftsbeziehungen . . ." (cited in footnote 1), p 36.
- Cf. "Fuer Entspannung und dauerhaften Frieden in Europa, Dokumente" (For Detente and Lasting Peace in Europe--Documents), Berlin, 1976, pp 143 f.
- 16. For greater detail see P. Freiberg and J. Nitz, op. cit.
- "European Security and Cooperation: Premises, Problems, Prospects" (in Russian), Moscow, 1976, p 191.
- 18. "Problems in the Development of Economic Relations between Socialist and Capitalist Countries" (in Russian), Moscow, 1974, p 80.
- 19. Concerning the activities of the socialist Baltic states, see further, "Bulletin: Economic Cooperation of the CEMA Member Countries," Moscow, March 1976 (in Russian); "Bulletin: Socialist Economic Integration," Moscow, October 1976 (in Russian).
- 20. AUSSENPOLITISCHE KORRESPONDENZ, Berlin, No 51, 18 December 1975; NEUES DEUTSCHLAND, 25/26 January 1975 and 17/18 January 1976.
- 21. VNESHNYAYA TORGOVLYA USSR, Moscow, No 7, 1975, p 9.
- 22. NEUES DEUTSCHLAND, 6/7 November 1976.
- 23. BUDAPESTER RUNDSCHAU, Budapest, 28 Jun 76.
- 24. NOVY MIR, No 12, 1977, p 4.
- 26. BUDAPESTER RUNDSCHAU, 1 Mar 76, 31 May 76, and 23 Aug 76.
- 27. Cf. P. Freiberg and J. Nitz, op. cit., p 20.
- 28. For examples, see VNESHNYAYA TORGOVLYA USSR, No 6, 1975, pp 36-37; DDR-AUSSENWIRTSCHAFT, Berlin, No 51, 18 December 1974, No 19, 7 May 1975, No 25, 18 June 1975; DIE WIRTSCHAFT, Berlin, No 15, 11 April 1973; NEUES DEUTSCHLAND, 5 June 1975.
- 29. WEST-OST-JOURNAL, Vienna, No 1, 1977, p 29.

- 30. K. Chernenko, "One Year After Helsinki" (in Russian), Moscow, 1976, p 18.
- 31. "Was und Wie" (What and How), Berlin, No 4, 1977, pp 9-10.
- 32. I. Kharlanov, "USSR-France--Steps in Cooperation," PRAVDA, Moscow, 2 March 1977.
- 33. Fourth UNCTAD Conference, Nairobi, 1976, "Conference Material."
- 34. NEUES DEUTSCHLAND, 2 May 1977.
- 35. "Fuer Entspannung . . .," loc. cit., pp 157 f.
- 36. Ibid., p 154.
- 37. Cf. "Speech by the Head of the GDR Delegation, Ewald Moldt, GDR Deputy Minister for Foreign Affairs, at the 32nd Plenary Session of ECE," AUSSENPOLITISCHE KORRESPONDENZ, No 17, 28 April 1977, p 129.

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EAST GERMANY

DOCTORAL CANDIDACIES AT ACADEMY OF SCIENCES ASSESSED

East Berlin SPEKTRUM in German Vol 8 No 10, Oct 77 pp 13-16

/Article by Sinaida Rosenthal, member, Scientific Council for Basic and Advanced Education, under the president of the GDR Academy of Sciences: "Doctoral Candidacies at the Academy of Sciences: Summary of a Discussion Series"/

/Text/ The thought-provoking question of whether obtaining a doctor's degree can be an occupational goal, as posed last November right here in SPEKTRUM, brought to our desk a sizable number of opinions and proposals on a central point of our article: the education of trainees in science. The Ninth Party Congress specifically commissioned us, the professors, science lecturers and other leading personnel at the Academy of Sciences to train qualified and politically strong young scientists who are distinguished by their motivation and love of learning. This commission assumes that a higher level of performance in research is tied to the develop ment of future generations of scientists who will be capable of finding solutions to fundamental scientific problems and important economic tasks. Since 1972-73, there has been a greater influx of graduates into our academy, predominantly from the natural science departments of universities and advanced schools. At present the proportion of young scientists under the age of 30 amounts to 25-30 percent of the total number of scientists. This marked influx of young people, at first a quantitative expansion of the research potential, made it possible to undertake new research projects and go into others more deeply. The Academy was thus confronted with a very momentous task, which had in the past been the responsibility of the universities and advanced schools -- namely, that of educating young trainees for specific basic and applied research in medicine, agriculture and the most varied branches of our industry.

It was therefore beneficial in this context to bring up for discussion once again the content and objectives of the doctoral program. The doctoral program is an appropriate method of purposefully developing successors of our scientists for the following reasons: The doctor's degree is dependent upon a result that is subjected to public assessment;

The doctoral program demands specific identification with the research project, which provides the incentive for independent work and permits recognition and evaluation of the doctoral candidates' capacities and qualifications;

The doctoral program can contribute to greater development of a sense of social responsibility.

Thus far, 16 readers have spoken out on this issue in SPEKTRUM. Unfortunately, the majority of them have been teachers rather than the doctoral candidates themselves.

The discussion series carried in this space used comparative gradations such as "skilled workman's certificate" in order to suggest that doctor's degrees are to a certain extent certificates attesting to the profession of the scientist. That would be saying that the advanced school diploma is the scientist's "skilled workman's certificate." Derived from this is his professional designation -- even if a professor, academy member or institute director. The doctor's degree -- just for the record -- has since earlier times been comparable to a "master workman's certificate," but all these comparisons do not get to the heart of the matter. For those who have wanted to practice the sciences, their development has always been tied to proof of the ability to do independent scientific work and to observance of the ethical standards of science. These considerations alone were supposed to be the guarantee that unauthorized persons, charlatans, quacks and the like would not be able to bring discredit upon science. At the same time, substantial advances were being achieved in science by way of the doctoral thesis. In sum, it is inherent in the international character of the sciences that their findings, norms and degrees must be comparable.

It becomes clear from all of this that as regards the task of increasingly using the doctoral program at the Academy of Sciences to develop scientific potential, it is in no way a matter of "the same old thing," of conservatism and the like. It is rather a question of scientific activity that is always new, exciting and demanding the utmost. In my remarks that follow concerning several problems, I should like to resume the discussion that also has been going on within the Academy of Science's Council for Basic and Ad-Vanced Education.

Although there is no requirement for a doctor's degree at the Academy, we are of the opinion that the class A doctor's degree should as a matter of course be a part of the professional profile of members of the Academy's scientific staff. Efforts should be made to see to it that the directors of research collectives at the level of work groups are qualified as lecturers.

It is our unanimous opinion that the subjects of doctoral study should be taken from the intermediate-range plan objectives of the institutions. As a rule the scientific tasks that are assigned to the young graduate students are to be formulated in such a way that doctoral theses can be developed from them. Here it should be pointed out that according to the academic ritual of the university, a doctoral topic can be assigned only by a teacher at an advanced Similarly, the professors and work group leaders qualified school. as lecturers are responsible for this at the Academy of Sciences. To this select group goes the responsibility of formulating or confirming interesting and original dissertation topics taken from the master plan of the plan objectives, of supervising the doctoral candidates in their work and of fulfilling in every way the function of the doctoral adviser. Professor Schwabe described this very clearly in his article. Without reservation, we approve of all proposals which call for more attention to the selection of topics and conceptual preparation of the doctoral thesis.

We are also aware that in many instances the plan objectives of the institutions are inconsistent with the required and necessary originality and creative value of a doctoral thesis, especially if young graduate students are helping with research projects that are primarily concerned with closing gaps in terms of methods, for example, or that are in the nature of performing services.

Some parties to the discussion also see problems occurring if tasks involving transference /to production/ should be made the subject of a doctoral candidacy. In order to arrive at an objective judgment, we should analyze these questions thoroughly.

There continues to be agreement that advanced school graduates who come to us should as a rule complete 1 year of familiarization training. This year can be waived if -- as is customary at advanced schools -- the students have prepared their pre-graduation theses at their future place of assignment. Because of the schematic nature of graduate student placement in many cases, we are losing an opportunity for selection that is important from the standpoint of our scientific capability and effectiveness. It has been my experience that some of the graduate students have chosen a particular institute of the Academy not because of interest in the field or the attractiveness of the research project; they had simply been "assigned."

Medicine represents another extreme. In this field the interest of graduate students in experimental and theoretical research has

evidently declined to such a degree that -- although the Academy of Sciences has placed want ads -- there have been no applicants for fields of research dealing with biochemistry and molecular biology.

The Academy should further investigate the experiences of universities and advanced schools with combining teaching, research and the training of future scientists. Appropriate agreements between Academy institutions and advanced schools must help assure that the Academy is included early on in the fruitful interplay and vital process of discovering, recruiting and training gifted young people. We should learn more in this area from the USSR. The article by V. Ginzburg, for example, suggests the development of new ways of selecting candidates for the Academy in order to find the very best.

During the familiarization phase the research group leaders can and must assess the capabilities and the interests of the graduate students. In this regard I cannot agree with Professor Haenel. It is important both to the development of the young graduate student and to the utility of the scientific work (result, outlay and supervision) that a certain harmony -- a "fittingness" -- be achieved between the demands of the long-range objectives (subject of doctoral research) and the capabilities of the young scientist, a harmony that allows sufficient room for challenge.

Since in many cases the educational profile of the graduate student has not fit in with the tasks being performed by the institutions of the Academy, new, specific requirements have been developed in the institutes for an intensive supervision of the graduate students during the familiarization phase and for a more problemoriented program for their advanced education.

We must give thought to how we are tying this in with the broadening of knowledge oriented toward specific disciplines as well as showing adequate interest in applied research in industry, agriculture and public health.

An analysis by the Council for Basic and Advanced Education reveals that the number of class A doctoral candidacies at the Academy of Sciences remained almost constant between 1972 and 1977 at about 90 per year. This is surprising at first -- considering the large number of graduate students. It must be kept in mind, however, that under the most favorable conditions one must plan on a minimum of 3 years, but an average of 4 years, for a doctoral program, so that there should be an annual increase in doctor's degrees conferred between 1977 and 1979.

The analysis admits of certain statements on previously "valid norms" at the Academy of Sciences which need to be changed. The average age of the doctoral candidates is still relatively high; two-thirds are over 30. Since by their nature the institutes of the Academy correspond to neither an industrial enterprise nor a university -- research work in both of the latter can frequently take up only a part of the "normal" work time -- so late a date for the awarding of the majority of doctor's degrees is not easy to understand. In my opinion this reflects a low level of personal incentive, characteristics of indolence and passivity and perhaps also a lack of motivation. I agree with Professor Muentze, who said in a statement on the materials used by the Council for Basic and Advanced Education: "Observance of prescribed deadlines makes a statement about the productivity of the candidate, a very important measure of his social effectiveness." I should like to add the following: It also makes a statement about the productivity of the collective, the quality of instruction!

Occasionally, one still hears the view that no deadlines should be set for completing doctoral programs because this would inhibit independent work and self-discipline. In a capitalist society, various kinds of economic whip-cracking affect the working speed of scientists as well, so that a deadline set by a manager perhaps carries less weight; this principle is unacceptable for a socialist society. To educate a young scientist to the point of independence is to guide him in such a way that he resolutely accomplishes within a reasonable time a major scientific task in terms of method and content -- a doctoral thesis certainly fits this category -and can put the results on paper in a form suitable for publication. Only a few accomplish this with no guidance at all. It is also true that one does not need to pursue every wrong direction in scientific work, even though it is certainly correct that we learn the most from our errors and mistakes. Moreover, every experienced scientist learns very quickly just how far he can go in loosening the guiding rein and will couple this action with increasing demands.

We have at hand a first survey of the overall grades on doctoral efforts. This overall criterion shows that while the majority of all doctor's degrees were awarded with grades of "very good" and "good," only three or four degrees per year were awarded the mark of "excellent." As chairman of the test board in about six doctoral examinations, I found that the oral defenses frequently received poorer scores than the written theses. It is my view that these overall scores are a realistic reflection of the level of achievement. They show a good average standard, but there is not yet a frequency of high-level performances.

The proper mark of quality in every doctoral thesis -- its degree of creativity, the originality of the result -- has not yet been analyzed thoroughly. Several articles in the discussion series point out that the average level of the dissertations in terms of their originality has not risen to the extent that was to be expected under existing conditions (Pfeifer), and they confirm the trend that doctoral theses have been given better scores than they deserved (Heydenreich). Several factors have been mentioned which could have a positive influence on the level of quality: better selection of topics; increased emphasis on the principle of selection by the doctoral candidate (Schwabe, Ginzburg); longer periods of scientific preparation (Pfeifer) and more intensive use of this time; binding, objective evaluation standards and opinions by leading experts in the field and, in exceptional cases, bringing in foreign experts (Schwabe). The doctoral degree committees should be more diligent in finding out whether and how the experts have answered the question of originality and creativity in the theses.

There was lively discussion on whether it is possible to make the doctoral candidates more knowledgeable, with broader knowledge in areas related to their fields. Also discussed was the value or worthlessness of the oral examination. In general it was thought that the oral defense of the thesis frequently reveals a serious technical lack. Experienced university teachers pointed out that it is not the reintroduction of a kind of test before or at the time of taking the degree that leads to a necessary deepening and broadening of knowledge. Rather, this is actually a question of the quality of the scientific life, the scientific atmosphere and the scientific comparison of standards in the research collectives and institutes. Teaching experience by the scientific trainees is of positive and lasting value. Academy personnel are at a disadvantage in this regard.

It is the opinion of the Council for Basic and Advanced Education that the period of discussion on taking a doctor's degree at the Academy should be concluded for the time being with the presentation of practicable recommendations. The doctoral program should be carefully analyzed and continuously followed within the areas of research, and the results should be evaluated by all members of the doctoral committees at least once a year. It is important that great attention now be paid to doctoral candidacies at the institutes in accordance with the council's recommendations. To be included in the contracts between university and Academy institutions is insistence upon the principle of early selection of students for later positions at the Academy of Sciences through the appropriate assignment of graduation theses and inclusion of Academy personnel in the education and training of the students.

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POLAND

PZPR JOURNAL COMMENTS ON CARRILLO, INTERPARTY UNITY

Warsaw NOWE DROGI in Polish No 8, Aug 77 pp 52-57

[Article by Bogumil Sujka, Deputy Director of Foreign Affairs Department, PZPR Central Committee: "On the Question of International Solidarity"]

[Text] In the last few years we have been observing an intensified publicity campaign throughout the world on the problems of the communist and the workers' movement. There are many reasons for this. Among the most important are the consolidation of the world political, economic, social and moral position of the socialist countries, and the growth in the activity, role and importance of the communist workers' parties and of the progressive and democratic movements in the world.

The interests of the masses in the profound changes in the politico-economic structure of capitalist countries has increased. These tendencies are growing stronger and stronger in view of the fact that the realization of previous liberal, Christian democratic and social democratic concepts have not protected society from the negative consequences of the capitalist economy, which engender an increase in the tide of dissatisfaction among the masses. The range of social levels and classes subject to monopolistic exploitation is increasing, and their very existence is more and more threatened by the increasing domination of monopolistic capitalism. The processes of concentrating and centralizing capital and its internationalization in the form of great supranational economic organisms have added considerably to the further enrichment of the upper bourgeoisie and to the deterioration or outright elimination of small and middle capitalists, and at the same time have brought questions of national sovereignty to the current foreground.

All of these events inevitably engender a need to seek social, political and economic solutions which would correspond to the interests of the masses and give them support. For this reason the popularity of programs of change announced for decades by the communists and workers' parties has been increasing. There is no room here to discuss them in more detail. However,

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it should be asserted that communists, guided by their extremely progressive ideology and relying on experience gained, have been elaborating programs of change corresponding to the current balance of political power within a country and on an international scale, programs of activity appropriate to the state of political awareness and political organization of the masses, and primarily of the working class.

It is against this background that various concepts of cooperation between communists and other social forces aretaking shape and that the strategy and tactics of alliances in the battle against the common enemy and to solve common problems are developing. Modifications in programs of struggling for social progress, characteristic of different stages in the development of reality, have shown how attractive the mottoes are which the communists have used in addressing the masses, as well as their real and potential allies.

Sixty years of victories for the Marxist-Leninist social theory and political thought, begun by the October Revolution, have brought about a fundamental change in the world balance of class forces. No longer is the bourgeoisie able to determine the fate of the world independently. In many countries it has vanished as a class, while in others it is still capable of independent control. The working class, the masses of the people and the laborers have become a factor of increasing and more and more decisive importance.

This historical process has not advanced easily but, on the contrary, has been progressing in a battle with opponents, in mutual wear and tear between progressive, conservative and clearly reactionary elements of social development. Naturally these processes proceed in a complex manner, reciprocally conditioned and affected by various factors.

Putting this thesis into practical political language, we can state that the historical properties of every country, specific economic and social conditions, among other things, cause the political aspect of the bourgeoisie to be different in many cases, although in all countries it has the same general class characteristic: the pursuit of profits by means of exploitation. While in some countries it is decked out in the garments of liberals and makes various "democratic" gestures, in other countries it exerts class rule by authoritarian methods, even resorting to terror.

A similar situation also obtains with political parties. For example, Italian and Spanish Christian democracy cannot be compared to West German democracy from the point of view of its social base, its political program or its relationship to other political systems. These differences are determined by a complete set of factors which we cannot analyze here in detail because of lack of room.

The regularity, which appears in dissimilarities of this kind, also affects parties of the workers' movement, including parties belonging to the revolutionary stream of this movement. The differences in their program are primarily the result of the varied achievements in their struggle so far and in the differentiation of conditions in which they act. This is a natural and unavoidable feature characterizing the current stage of development of the communist and workers' movement.

Class opponents, anticommunists, would like to see a difference in the strategic goals of individual parties in this variety of slogans. After decades of vain attempts, it would give them hope of defeating the movement and of dismembering it, making it possible to struggle against individual parties more effectively. Communists are aware of this. They have opposed and are opposing the phenomenon of the internationalization of capital and exploitation by internationalizing their own struggle against capital, oppression and exploitation on every side. This is because a key condition for success in this struggle is international solidarity, reciprocal support for activity performed under varied conditions.

An essential factor in this solidarity is mutual recognition of the effectiveness of programs elaborated by parties. This conviction strengthens the mutual trust of communists who, in elaborating their programs, have available the best and most pertinent knowledge of chances and conditions for action, of needs and of the hopes of the working class in their countries. Communists not only have a right to independently elaborate such programs, but at the same time they have an obligation toward the working class and the workers, and toward the nation, to whom they must demonstrate the soundness of their election and the fruitfulness of their activity.

Such an attitude in our party depends upon the base of recognition and respect with which we refer to the activity of communist and workers' parties in the capitalist world, to parties attempting to strengthen their effect in society, to increase their role in solving critical economic, political and social problems weighing down the masses of the people and to exert a greater and greater influence on the fate of their countries. We have steadfastly given proof of this approach in the cases of successive successes of Italian, Portuguese, Greek, Spanish, French and Finnish communists. This is because we recognize that the communists of a given country best know how and best manage to define the political program of the struggle of the working masses. Our party has contributed and is contributing consistent support to this struggle. We consider this support to be a cornerstone of international solidarity, and we base our contacts with communist parties upon these very principles. These permanent widespread and fraternal relations favor the exchange of information and better mutual recognition of policies executed in important matters essential for party position and influence.

However, international solidarity cannot be unilateral. Recognition and trust must be accompanied by reciprocity. Unfortunately such reciprocitv cannot be found in the book "Eurocomunismo y Estado [Eurocommunism and the State]," the author of which is the secretary general of the Spanish Communist Party, Santiago Carrillo, nor in the many press interviews which he has recently given to representatives of the press, radio and television.

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Aiming at presenting the nature of the state as anticipated by him, the state for which Spanish communists must struggle, S. Carrillo defines it in many cases by criticizing structural solutions introduced in socialist countries. The author of the book and of the interviews, claiming to be more familiar than we with our realities and conditions, under which we have struggled for socialist changes, expresses the conviction that some structural solutions or others, for example those contained in the programs of socialist country parties, are not suitable. He also criticizes the nature of relationships among socialist countries.

There is no place here for polemics with the above-mentioned theses of the author of the book "Eurocommunism and the State." Anyway, this is not the place for polemics, but for principles. No one in our party, scholars, reporters and certainly not leading workers, could take it upon himself to publicly express doubt about the strategy and tactics used by Spanish communists in their struggle for structural changes in Spain, through the prism of our experience and our victory in the struggle for revolutionary changes in Poland. On the other hand, Santiago Carrillo not only considers that he has this right, but an obligation of publicly expressing doubt about our strategy and tactics in building socialism through the prism of his own ideas and hypotheses about the form of the future socialist system in Spain. Ignoring the methodological value of such criticism, the question comes up as to whether it is at all fitting for communists, particularly publicly and authoritatively, to express themselves in generalities on subjects which they have not exhaustively investigated or about which they know "by hearsay." How else is it possible to react, for example, to the following statement of S. Carrillo: "This system has not changed, has not become democratic, and has even maintained many of its features of coercion in relationships with socialist states."1

In essence this is a total negation of the development of the system brought about by the victorious revolution. This is because the author does not perceive the complexity of constant improvement in the democratization of the socialist state as the authority of the working class becomes stronger and as its economic bases take shape. To the author everything which has been done up to now is revealed in categories "of socialist totalitarianism."²

The author wishes to announce to the world: "Genuine socialism has not yet appeared." No communist would prevent nor interfere with anyone in developing forms of social life better than that which has already appeared in history, but still the author of the book does not seem to realize that attacks on what has been done up to now,³ are also personal "sallies" against himself and especially against the party which he represents.

As communists guarded by the theory of Marxism-Leninism, we realize that these achievements can be, must be, and are constantly improved as conditions, both internal and external, both objective and subjective, permit. The first secretary of the PZPR Central Committee, Comrade Edward Gierek, said this unambiguously at the Berlin Conference. "Real socialism has existed for not quite 60 years. Therefore it is a young formation which has not yet had its last word in any field, which is in a state of constant development and of constant seeking for better and better solutions to the problems which exist and which life will bring."⁴

The author devotes a great deal of attention in his book to the matter of a model of the future socialist state in Spain, assuming in addition that it does not apply to this country alone. The point of departure of these reflections is the thesis that this will be a state not formed according to any models known up to now. Among other things, the hypothesis on the subject of the future system is based on a criticism of really existing socialism. In this connection two observations must be made. First, in the Marxist theory of the state, no formulations can be found favoring any kind of universal model of a socialist state, either in classical works or in the political documents of the communist movement. Political structures in practice and historical experience up to now show that every nation entering the path of building socialism contributes something special to the treasury of common possessions.

Secondly, as a result of the victory of the October Revolution of which we are celebrating the 60th anniversary this year, as a consequence of the appearance of the first socialist state, it has been and will be considerably easier for all societies which have entered or which will in the future enter the road of building socialism. This is because everyone of them can profit from the experience of predecessors, developing some points and discarding others. Greater and greater support and aid will be found, and isolation will be felt less and less. This is exactly what the case was in Poland and other countries which have entered the path of building socialism since the establishment of the new system in the Soviet Union and its historical victory over Hitlerism.

This is a new situation. It must always be borne in mind that the existence of a system of socialist countries, their developing potential and their peaceful foreign policy are a major circumstance facilitating continuation of the struggle for social progress for the international working class and the forces allied with it. How this struggle is conducted in each of the countries still remains a matter of its own leftist forces, especially the communists.

The demonstrated interdependence constitutes a main cause for the intensification of the anticommunist campaign in recent times. Anticommunist circles are aware of the fact that a real chance for complicating, impeding and interfering with the struggle for social progress is losing its effectiveness and depends today on smashing the unity of the communist movement, and in particular on the opposition of parties in power to parties struggling for power. Therefore this is primarily a matter of not making things easy for the common class enemy. Therefore there is no way to agree with the practice of fighting anticommunists about the "dependence" or "lack of independence" of individual parties, a practice based on distinctions in really existing socialism and on criticism of it, not a subject of argument anyway. Independence is not obtained by rejecting what has already been established, but by independent application of existing experience or, to the extent possible, by the independent creation of improved solutions. The frequency of stating these virtues is no measure of independence, which is formed by real accomplishments.

Gathered last year at the Berlin Conference, the communist and workers' parties of Europe stated in their final document that in the name of the struggle for peace, cooperation and social progress in Europe: "They will develop international and fraternal cooperation and solidarity based on a principle of good will...," and that: "The struggle for socialism in their own country and the responsibility of each party to the working class itself and to the nation are connected with the joint solidarity of the workers of all countries...."⁵

The PZPR applies these principles precisely in the practice of its relations with other parties. The extremely disputable nature of S. Carrillo's book does not interfere with our relations with Spanish communists fighting for the genuine democratization of their country and for changes worthy of the glorious traditions of the Spanish left.

More than once the PZPR has expressed its satisfaction with the successes of Spanish communists in their struggle to democratize post-Franco Spain. Spanish communists have special reasons to do this, just like all other communists who once defended the Spanish Republic and after its tragic defeat gave refuge to many of their class brothers. The PZPR has always expressed its indignation at the bloody persecution of the Spanish leftists, and has protested against the imprisonment and torture of leftist leaders, joining other communist parties and worldwide progressive public opinion in this matter.

At present the Polish communists wish the Spanish communists complete success in their struggle for real democracy, real socialism.

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