USSR

COMMUNIST PARTY PROGRAM

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Front Cover: Anatoli Subbotin, steelman at the Moscow Hammer and Sickle Plant. *See story page 25.*

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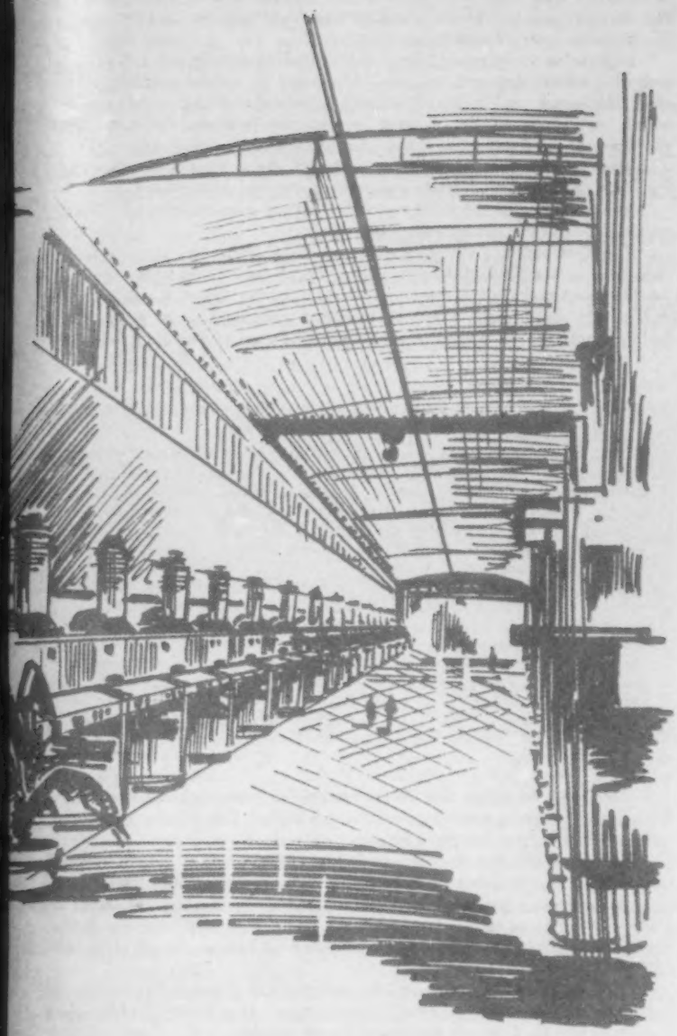


PROGRAM OF THE COMMUNIST PARTY OF THE SOVIET UNION

(A Summary of the Draft)

The draft of the new Party Program was approved unanimously at the Plenary Meeting of the Central Committee of the Communist Party in June. Then, in accordance with the decision of the Plenary Meeting, it was published for discussion by Communists and by all the working people of the Soviet Union. The judgments made in this wide public discussion will be carefully considered before the draft Program is submitted for final consideration and approval by the 22nd Congress of the Communist Party of the Soviet Union.

The draft, summarized below, is composed of an introduction and two parts.

THE Great October Socialist Revolution ushered in a new era in human history, an era of the collapse of capitalism and the establishment of communism. Socialism has triumphed in the Soviet Union, has won decisive victories in the People's Democracies, has become a cause of practical significance for hundreds of millions of people and the banner of the revolutionary movement of the working class throughout the world.

More than a hundred years ago the great teachers of the proletariat Karl Marx and Frederick Engles wrote in the *Manifesto of the Communist Party:* "A specter is haunting Europe—the specter of communism." The draft points out that an enormously long road, a road drenched with the blood of those who fought for the happiness of the people, a road of glorious victories and temporary setbacks, had to be traversed before communism, which had once seemed a mere specter, became the greatest force of our time, a society that is being built up over vast stretches of the globe.

In adopting its first Program at its Second Congress in 1903, the Bolshevik Party called on the working class and all the working people of Russia to struggle for the overthrow of the czarist autocracy and then of the bourgeois system, and for the establishment of the dictatorship of the proletariat. That was done. The second Program of the Party, adopted at the Eighth Congress in 1919, set the task of building a socialist society. That too was done, and socialism triumphed in the Soviet Union completely and decisively.

Now the Communist Party of the Soviet Union is adopting its third Program, the program for the building of a communist society in the USSR. The highest goal of the Party is to build a communist society, which will have inscribed on its banner "From each according to his ability, to each according to his needs," and realize the Party's motto: "Everything in the name of man, for the good of man."

Communism accomplishes the historic mission of freeing all people from social inequality, from every form of oppression and exploitation, from the horrors of war, and proclaims Peace, Labor, Freedom, Equality and Happiness for all peoples on earth.

"Under the tried and tested leadership of the Communist Party, under the banner of Marxism-Leninism, the Soviet people have built socialism.

"Under the leadership of the Party, under the banner of Marxism-Leninism, the Soviet people will build communist society.

"The Party solemnly proclaims: The present generation of Soviet people shall live under communism!"

From the draft of the Program of the Communist Party of the Soviet Union

PART ONE

Transition from Capitalism to Communism Is the Road of Human Progress

The epoch-making turn of mankind from capitalism to socialism initiated by the October Revolution is a natural result of the development of society. Marxism-Leninism discovered the objective laws of social development and revealed the contradictions inherent in capitalism, the inevitability of revolutionary upheaval and the transition of society to communism.

The development of world capitalism and of the revolutionary struggle of the working class has fully confirmed the correctness of the Marxist-Leninist analysis of capitalism and its highest stage, imperialism, given in the first and second Programs of the Party.

The draft traces the epochal significance of the October Revolution and the path traversed by the Soviet people that led to the victory of socialism in the USSR and draws the main conclusions from the lessons of this path. It lays stress on the fact that the Soviet Union is solving the tasks of communist construction not alone but in the fraternal camp of socialism.

A world system of socialism has been established—a social, economic and political community of free, sovereign peoples following the path of socialism and communism, united by common interests and goals and the close bonds of international socialist solidarity.

The world socialist system is confidently advancing toward decisive victory in its economic competition with capitalism. In the near future it will surpass the world capitalist system in volume of industrial and agricultural production. Its influence on the course of social development in the interests of peace, democracy and socialism keeps growing.

The draft devotes considerable space to an analysis of the crisis of world capitalism.

The First World War and the October Revolution ushered in the general crisis of capitalism. In the course of the Second World War and the socialist revolutions in a number of European and Asian countries, the second stage of the general crisis of capitalism developed. Now world capitalism has entered a new, third stage of this crisis. The most important distinguishing feature of this new stage is that it was not the result of war.

The section following deals with the international revolutionary movement of the working class. The world socialist system is the chief result of this movement. The example of victorious socialism has a revolutionizing effect on the minds of the working people of the capitalist world, inspiring them to fight against imperialism and greatly facilitating their struggle.

The social forces that are to ensure the victory of socialism are taking shape, multiplying and growing stronger within the womb of capitalist society. A new contingent of the world proletariat—the young working-class movement of the newly free, the dependent and the colonial countries of Asia, Africa and Latin America—has entered the world arena.

The capitalist countries are shaken continuously by class battles. The militant acts of the working class in defense of its economic and political interests are growing in number. The working class and all working people have frequently endangered the class rule of the bourgeoisie.

A section of the draft on the national liberation movement takes note of the fact that a powerful wave of national liberation revolutions is sweeping away the colonial system and undermining the foundations of imperialism. Young sovereign states have arisen and are arising, replacing former colonies and semicolonies.

But the struggle is not yet over. The peoples who are casting off the chains of colonialism have won different degrees of freedom.

Having established national states, many of them are striving for economic independence and the consolidation of their political independence. The peoples of countries that are formally independent, but actually politically and economically dependent on foreign monopolies, are rising in struggle against imperialism and reactionary pro-imperialist regimes. The peoples who have not yet thrown off the chains of colonial slavery are waging a heroic fight against their foreign enslavers.

Wide prospects open up for the peoples of underdeveloped countries when they set up and develop national democratic states. The political basis for a national democracy is a bloc of all progressive and patriotic forces fighting for complete independence, for full democracy, fighting to consummate an anti-imperialist, anti-feudal, democratic revolution.

The Communist Party of the Soviet Union considers fraternal alliance with nations that have cast off the colonial and semicolonial yoke as a cornerstone of its international policy.

In the next section the draft notes that a grim struggle is going on in the world today between two ideologies—communist and bourgeois—and that this struggle mirrors, in mankind's spiritual life, the historic process of transition from capitalism to socialism.

Imperialist reaction mobilizes every possible ideological influence to discredit communism and its great ideas and to defend capitalism. Its chief ideological and political weapon is anticommunism, which consists mainly in slandering the socialist system and falsifyng the policy and objectives of the Communist Parties and of Marxist-Leninist theory.

The Program goes on to well-formed criticism of the various "theories" that capitalism uses to disguise and prettify its exploitive nature.

The first part of the draft concludes with a consideration of peaceful coexistence and the struggle for world peace.

The Communist Party of the Soviet Union considers that its major objectives in the field of foreign policy are to secure peaceful conditions for the construction of a communist society in the Soviet Union and the development of a world system of socialism, and, together with all peace-loving peoples, to rid humanity of the threat of a world war of annihilation.

"What is communism?

"Communism is a classless social system with one form of public ownership of the means of production and full social equality of all members of society; under it the all-round development of people will be accompanied by the growth of the productive forces through continuous progress in science and technology; all sources of public wealth will flow in abundance, and the great principle 'From each according to his ability, to each according to his needs' will be carried out. Communism is a highly organized society of free, socially conscious working people in which public self-government will be established, a society in which labor for the good of society will become the prime vital requirement of everyone, a necessity recognized by one and all, and the ability of each person will be employed for the greatest benefit of the people."

From the draft of the Program of the Communist Party of the Soviet Union

The Party maintains that forces capable of preserving universal peace have taken shape and are growing in the world. Possibilities are arising for essentially new relations between states.

The most effective way of securing a lasting peace is through general and complete disarmament under strict international control.

Socialism has proposed to mankind the only rational principle for relations between states at a time when the world is divided into two systems —the principle, advanced by Lenin, of peaceful coexistence of states with different social systems.

Peaceful coexistence of socialist and capitalist states is an objective necessity for the development of human society. War cannot and must not serve as a means of settling international disputes.

The Soviet Union has consistently pursued and will continue to pursue the policy of peaceful coexistence of states with different social systems.

PART TWO

The Tasks of the Party in Building a Communist Society

The building of a communist society has become an immediate practical task for the Soviet people. The gradual development of socialism into communism is an objective law; it has been prepared by the development of Soviet socialist society throughout the preceding period.

Communism is a classless social system with one form of public ownership of the means of production and full social equality of all members of society; under it the all-round development of people will be accompanied by the growth of the productive forces through continuous progress in science and technology; all sources of public wealth will flow in abundance, and the great principle "From each according to his ability, to each according to his needs" will be carried out.

Communism is a highly organized society of free, socially conscious working people in which public self-government will be established, a society in which labor for the good of society will become the prime vital requirement of everyone, a necessity recognized by one and all, and the ability of each person will be employed for the greatest benefit of the people. A high level of communist consciousness, industry, discipline and devotion to the public interest—these are the qualities of the man of a communist society.

Under communism, classes and the socio-economic and cultural distinctions and differences in living conditions between town and countryside disappear completely; the countryside rises to the level of the town in development of productive forces and nature of work, forms of production relations, living conditions and well-being of the population. With the victory of communism mental and physical labor will merge organically in the production activity of people. The intelligentsia will no longer be a distinct social stratum, since manual workers will have risen in cultural and technological standards to the level of intellectuals.

Communist society, based on highly organized production and advanced

technology, alters the character of work, but it does not release the members of society from work. It will not be a society of anarchy, idleness and inactivity. Everyone will participate in social labor and thereby ensure the steady growth of the material and spiritual wealth of society.

Labor and discipline will not be a burden to people; labor will no longer be a mere source of livelihood—it will be a genuinely creative process and a source of joy.

Communism represents the highest form of organization of social life. All production units and self-governing associations will be harmoniously interlinked by a common planned economy and a uniform rhythm of social labor.

Under communism the nations will draw closer and closer together in all spheres on the basis of a complete identity of economic, political and spiritual interests, of fraternal friendship and cooperation.

Communism is the system under which the abilities and talents of free man, his best moral qualities, blossom forth and reveal themselves in full. Family relations will be freed from material considerations and will be built solely on mutual love and friendship.

The Communist Party of the Soviet Union, as the Party of scientific communism, projects and completes the tasks of communist construction step by step as the material and spiritual prerequisites are prepared and mature. The Party considers that it would be wrong to skip necessary stages of development and that it would be equally wrong to halt at an achieved level and thus check progress. The building of communism must be carried out in successive stages.

In the current decade (1961-70) the Soviet Union, by creating the material and technical basis of communism, will surpass the strongest and richest capitalist country, the USA, in production per head of population; the people's standard of living and their cultural and technical standards will rise substantially; everyone will live in easy circumstances; all collective and state farms will be highly productive and profitable enterprises; the demand of Soviet people for well-appointed housing will, for the most part, be satisfied; hard physical work will disappear; the USSR will have the shortest working day.

In the next decade (1971-80) the material and technical basis of communism will be created and there will be an abundance of material and cultural benefits for the whole population; Soviet society will come close to the stage where it can introduce the principle of distribution according to need, and there will be a gradual transition to one form of ownership—public ownership. Thus, a communist society will, in the main, have been built in the USSR. The construction of a communist society will be completed in the subsequent period.

The draft Program notes that the main economic task of the Party and the Soviet people is to create the material and technical basis of communism within two decades. As a result, the USSR will possess productive forces of unparalleled capacity; it will surpass the technical level of the most developed countries and be first in the world in per capita production. This will serve as the basis for the gradual transformation of socialist social relations into communist social relations and for a development of industry and agriculture that will make it possible to supply in abundance the requirements of society and all its members.

The Community Party plans the following increases in total industrial output:

within the current 10 years, by approximately 2.5 times, exceeding the present level of U. S. industrial output;

within 20 years, by not less than 500 per cent, leaving the present over-all volume of U. S. industrial output far behind.

To achieve this, it will be necessary to raise the productivity of labor in industry by more than 100 per cent within 10 years, and by 300-350 per cent within 20 years. In 20 years' time labor productivity in Soviet industry will exceed the present level of labor productivity in the USA by roughly 100 per cent, and considerably more in terms of per-hour output, considering the reduction of the working day in the USSR.

The electrification of the country will for the most part be completed in the second decade.

The annual output of electricity will be brought up to 900 billion-1 trillion kilowatt-hours by the end of the first decade, and to 2.7-3 trillion kilowatt-hours by the end of the second decade.

The further rapid expansion of the output of metals and fuels, the foundation of modern industry, remains one of the major economic tasks. Within 20 years metallurgy will reach a level high enough to produce about 250 million tons of steel a year. A consistent effort will be made to ensure priority output of oil and gas, which will be used increasingly as raw materials for the chemical industry. Oil output must meet the requirements of the national economy completely. One of the most important tasks is the all-round development of the chemical industry and the full use in all economic areas of the achievements of modern chemistry.

The development of mechanical engineering is of primary importance for comprehensive mechanization in industry, agriculture, building, transport, loading and unloading operations, and in the municipal economy. Within the 20-year period the comprehensive automation of production will be carried out on a large scale, with more and more shops and plants being fully automated.

The Communist Party will concentrate its efforts on securing a rapid increase in the output of consumer goods. The growing resources of industry must be used more and more to fully meet all the requirements of the Soviet people and to build and equip facilities for the household and cultural needs of the population.

Full-scale communist construction calls for a more rational geographic distribution of industry in order to save social labor and ensure the comprehensive development of areas and the specialization of their industries, do away with overpopulation in large cities, help to eliminate the essential distinctions between town and countryside, and further even out the economic levels of different parts of the country.

To gain time, priority will be given to the development of easily exploited natural resources that produce the most effective economic results.

The Party will do everything to enhance the role of science in the building of communist society; it will encourage research and the rapid and extensive application of the latest scientific and technical achievements.

The Party will work toward a highly accelerated development of the productive forces in agriculture in order to accomplish two fundamental and closely related tasks: 1) to build up an abundance of high quality food for the consumer and raw material for industry; and 2) to effect the gradual change-over of social relations in the Soviet countryside to communist relations and eliminate, in the main, the distinction between town and country.

The further advance of the countryside to communism will proceed through the development and improvement of the two forms of socialist farming—the collective and state farms.

The economic progress of the collective farm system creates the conditions for the gradual rapprochement and, in the long run, for the merging of collective farm property and the property of the whole people into one communist property.

In order to fully satisfy the requirements of the entire population and of the national economy the task being set is to increase the aggregate volume of agricultural production in 10 years by about 150 per cent, and in 20 years by 250 per cent. Agricultural output must stay ahead of growing demand. In the first decade the Soviet Union will outstrip the United States in per capita output of key agricultural products.

The draft Program devotes considerable attention to improvements in economic management and planning.

Communist construction presupposes the maximum development of democratic principles of management coupled with a strengthening and improvement of centralized economic management by the state. The economic independence and the rights of local organs and enterprises will continue to expand within the framework of the single national economic plan. Plans and recommendations coming from below, beginning with local enterprises, must play an increasing role in planning.

The Communist Party has set the historic task of achieving in the Soviet Union a living standard higher than that of any of the capitalist countries. The Party acts upon Lenin's thesis that communist construction must be based upon the principle of material incentive. In the coming 20 years payment according to one's work will remain the principal source for satisfying the material and cultural needs of the working people.

At the same time, as the country advances toward communism, personal needs will be met increasingly out of public consumption funds, whose rate of growth will exceed the rate of growth of payment for labor. The transition to communist distribution will be completed after the principle of distribution according to one's work will have outlived itself, that is, when there will be an abundance of material and cultural wealth and labor will have become a prime necessity for all members of society.

The national income of the USSR in the next 10 years will increase nearly 150 per cent, and about 400 per cent in 20 years. The real income per head of population will increase by more than 250 per cent in 20 years.

In the next 10 years the real incomes of factory and office workers (public funds taken into account) per employed person will increase by almost 150 per cent, and in 20 years will increase by approximately 200-250 per cent. The rise in the real incomes of factory, office and professional workers paid relatively lower wages will be brought to a level at which low-paid

"The main economic task of the Party and the Soviet people is to create *the material and technical basis of communism* within two decades. This means complete electrification of the country and perfection on this basis of the techniques, technologies and organization of social production in industry and agriculture; comprehensive mechanization of production operations and a growing degree of their automation; widespread use of chemistry in the national economy; vigorous development of new, economically effective branches of production, new types of power and new materials; all-round and rational utilization of natural resources; organic fusion of science and production and rapid scientific and technical progress; a high cultural and technical level for the working people; and substantial superiority over the more developed capitalist countries in productivity of labor, which constitutes a most important prerequisite for the victory of the communist system."

From the draft of the Program of the Communist Party of the Soviet Union

brackets throughout the country will be eliminated altogether within 10 years.

By virtue of the higher rates of growth of the collective farmers' labor productivity, their real income will grow more rapidly than that of factory workers, and will, on an average per employed person, more than double in the next 10 years and increase more than fourfold in 20 years.

As incomes grow, the general level of popular consumption will rise rapidly. The entire population will be able to satisfy all its requirements for varied and high-quality foodstuffs and manufactured goods.

The second decade will see an abundance of material and cultural benefits for the whole population, and the material prerequisites will be created to complete the transition to the communist principle of distribution according to need in the period to follow.

The Communist Party sets the task of solving the most vital problem relating to the well-being of the Soviet people—the housing problem. By the end of the second decade, every family, including newlyweds, will have been provided with a comfortable apartment that conforms to the best standards of hygienic and cultural living. Rural dwellings of the old type will, for the most part, be replaced by new housing or, wherever possible, will be rebuilt with modern improvements. During the second decade, rents will gradually be abolished.

Streetcar, bus, trolley-bus and subway fares will also be abolished during the period, and at the end of the decade public utilities—water, gas, heating—will also be free.

In the coming 10 years the country will go over to a six-hour workday with one day off a week, or a 34-36 hour workweek with two days off; and in underground and hazardous jobs, to a five-hour workday or a 30-hour, five-day workweek.

With a corresponding rise in labor productivity, the transition to a still shorter workweek will be begun in the second decade. The Soviet Union will thus have the world's shortest and, at the same time, most productive and highest-paid workday. The length of the annual paid holidays of working people will be increased along with the reduction of the workday.

By fulfilling the tasks set by the Party for the improvement of the well-being of the people, the Soviet Union will considerably advance toward the practical realization of the communist principle of distribution according to need.

At the end of the 20 years public consumption funds will total about half of the aggregate real income of the population. This will make it possible to provide, at public expense, for:

Free maintenance of children at children's institutions and boarding schools, should parents so desire; maintenance of disabled people; free tuition at all educational establishments; free medical services for all citizens, including supply of medicines and treatment at sanatoriums; rent-free housing and, later, free public utilities; free public transport facilities; free use of some types of communal services; steady reduction of charges for, and, partially, free use of vacation resorts, boarding houses, and tourist camps; more benefits, privileges and scholarships (grants to unmarried mothers, scholarships for students); gradual introduction of free public catering (midday meals) at enterprises and institutions, and for collective farmers at work.

The Program set can be carried through with success under conditions of peace. Complications in the international situation and the consequent need to increase defense expenditures may delay the fulfillment of plans for raising the living standards of the people. A lasting normalization of international relations, reduction of military expenditures and, in particular, general and complete disarmament under an appropriate agreement between countries would make it possible to go far beyond those plans for raising living standards.

The section of the draft defining the further development of socialist democracy says that the dictatorship of the proletariat, born of the Socialist Revolution, has played a historic role in ensuring the victory of socialism in the USSR. In the course of socialist construction, however, it has undergone changes itself. After the exploiting classes had been abolished, the state function of suppressing their resistance ended and the other chief functions of the socialist state—organization of the economy, culture and education—were developed. The socialist state has entered a new phase. It has begun to transform itself into a nationwide organization of the working people. Proletarian democracy is becoming more and more a socialist democracy of the people as a whole.

The working class is the only class in history that does not aim to perpetuate its power. Having brought about the complete and final victory of socialism—the first phase of communism—and the transition of society to the comprehensive construction of communism, the dictatorship of the proletariat has fulfilled its historic mission and has ceased to be indispensable in the USSR from the point of view of internal development. The state, which arose as a dictatorship of the proletariat, has developed into a state of the entire people, an organ for expressing the interests and will of the people as a whole.

"Socialism has offered mankind the only reasonable principle of maintaining relations between states at a time when the world is divided into two systems—the principle of peaceful coexistence of states with different social systems, put forward by Lenin.

"Peaceful coexistence* of the socialist and capitalist countries is an *objective necessity* for the development of human society. *War cannot and must not serve as a means of settling international disputes."

From the draft of the Program of the Communist Party of the Soviet Union

The Party holds that the dictatorship of the working class will cease to be necessary before the state withers away. The state as an organization embracing the entire people will survive until the complete victory of communism.

The extension and perfection of socialist democracy, the active participation of all citizens in the administration of the state, in the management of economic and cultural life, improvement in the work of the government apparatus and increased control by the people over its activity —these are the main directions in which socialist statehood develops in the period of the building of communism. As socialist democracy develops, the organs of state power are gradually transformed into organs of public self-government.

The role of the Soviets, which have become an all-inclusive organization of the people, an embodiment of their unity, will grow as communist construction progresses. The Soviets, which combine the features of a government body and a public organization, operate more and more like public organizations, with the masses participating in their work more extensively and directly.

To improve the work of the Soviets and bring fresh forces into them, it is desirable that at least one-third of the total number of deputies to a Soviet be elected anew each time so that more hundreds of thousands and millions of working people may learn to govern the state.

The Party considers systematic renewal of the leading bodies necessary to bring in a wider range of able persons and to exclude the possibility of abuses of authority by individual government officials. It is advisable to introduce the principle that the leading officials of Union, republican and local bodies be elected to office, as a rule, for no more than three consecutive terms.

Discussion by the people of draft laws and other decisions of both national and local significance must become the rule. The most important draft laws should be put to a nationwide referendum.

The role of the public organizations grows in the period of the full-scale construction of communism. The trade unions acquire particular importance as schools of administration and economic management, as schools of communism.

The Young Communist League, a voluntary public organization of the youth which helps the Party to educate young people in the spirit of communism, will play a greater role. So will the cooperatives—collective farms and consumers', housing and other cooperative organizations—as a means of drawing the masses into communist construction, as communist educators and schools of public self-government. Other public associations of the working people will likewise be developed.

To extend the independent activities of members of public organizations, the Party considers it necessary to reduce their salaried staffs from top to bottom, to renew each public body by approximately half of its members at the regular election and to establish the rule that leading functionaries of public organizations not be elected, as a general rule, for more than two consecutive terms.

As socialist statehood develops, it will gradually become public communist self-government which will embrace the Soviets, trade unions, cooperatives and other mass organizations of the people. This process will represent a still greater development of democracy, ensuring the active participation of all members of society in the management of public affairs.

Historical development inevitably leads to the withering away of the state. To guarantee that the state withers away completely, it is necessary to create the proper internal conditions—the building of a developed communist society—and the proper external conditions—the final settlement of the contradictions between capitalism and communism in the world arena in favor of communism.

The Party maintains that as long as imperialism exists, the threat of aggressive wars will remain. The Party regards the defense of the socialist motherland and the strengthening of the defense potential of the USSR, of the might of the Soviet Armed Forces, as a sacred duty of the Party and the Soviet people as a whole, as a most important function of the socialist state. The Soviet Union considers that its internationalist duty is to guarantee, together with the other socialist countries, the reliable defense and security of the entire socialist camp.

As far as internal conditions are concerned the Soviet Union needs no army. But since the danger of war coming from the imperialist camp persists, and since complete and general disarmament has not been achieved, the Communist Party feels it necessary to maintain the defensive power of the Soviet state and the combat preparedness of its Armed Forces at a level ensuring the decisive and complete defeat of any enemy who dares to encroach upon the Soviet Union.

On the question of national relations in the USSR the draft states that with the victory of communism, the nations that live united in the USSR will draw still closer together, their economic and ideological unity will grow and the communist characteristics they have in common will develop.

However, the obliteration of national distinctions, and especially of language distinctions, is a much longer process than the obliteration of class distinctions.

The draft further defines the tasks of the Party in the fields of ideology, upbringing, education, science and culture.

The Party considers that the paramount educational task in the present period is to give all working people a sense of ideological integrity and devotion to communism, and a communist attitude toward labor and the social economy; to eliminate completely the survivals of bourgeois attitudes and morals; to ensure the all-round, harmonious development of the individual; to create a truly rich spiritual culture. Special importance is attached by the Party to the education of the younger generation.

The Party calls for the education of the population as a whole in the spirit of scientific communism and strives to ensure that all working people master the ideas of Marxism-Leninism, that they fully understand the course and perspectives of world development, take a correct view of international and domestic events and consciously build their lives on communist principles. Communist ideas and communist deeds should blend organically in the conduct of every person and in the activities of all collectives and organizations.

The system of public education must make certain that the training of the younger generation is closely linked with life and productive labor, and that adults are able to combine work with further training and education in keeping with their vocations and the requirements of society. Public education on these principles will help to mold harmoniously developed members of communist society and solve a cardinal social problem, namely, the elimination of substantial distinctions between mental and physical labor.

In the next decade compulsory general secondary and polytechnical eleven-year education is to be introduced for all children of school age, and an eight-year education for young people employed in the national economy who have had insufficient schooling. In the subsequent decade everyone is to have a complete secondary education.

In step with scientific and technical progress specialized secondary and higher education, which must train highly-skilled specialists with a broad theoretical and political background, will be expanded.

Shorter working hours and a considerable rise in the standard of living of the entire population will provide everyone with an opportunity to receive a specialized secondary or higher education if he so desires.

Application of science to production is a decisive factor for the rapid growth of the productive forces of society. Scientific progress and its application will continue to be matters of special concern to the Party.

In the period of transition to communism, creative activity in all fields of culture becomes particularly fruitful and accessible to all members of society. Soviet literature, music, painting, cinema and theater, and all the other arts will reach new heights of ideological content and artistry.

The draft Program emphasizes that the Party regards communist construction in the Soviet Union as a component part of the construction of a communist society by the peoples of the entire world socialist system.

Due to the fact that socialist revolutions take place at different times and to the uneven levels of economic and cultural development of individual countries, the completion of socialist construction and the beginning of full-scale communist construction will occur at different times in different countries. Nevertheless, the fact that the socialist countries are developing as members of a single world socialist system and utilizing the objective laws and advantages of this system enables them to reduce the time necessary for the construction of socialism and offers them the prospect of effecting the transition to communism more or less simultaneously, within one and the same historical epoch.

The first country to advance to communism facilitates and accelerates the advance of the entire world socialist system to communism. In building communism, the peoples of the Soviet Union are blazing new trails for mankind, testing by their own experience, revealing difficulties, finding ways and means of overcoming them, and selecting the best forms and methods of communist construction.

The Communist Party maintains that the existing forms of economic relations between the socialist countries—foreign trade, coordination of economic plans, and specialization and combination of production—will be developed and perfected more and more as time goes on. All-round fraternal cooperation benefits every socialist country and the world socialist system as a whole.

It is in the best interest of socialist and communist construction that each socialist country combines the effort to strengthen and develop its own national economy with the effort to expand economic cooperation of the socialist camp as a whole.

The objective laws of the world socialist system, the growth of the productive forces of socialist society, and the vital interests of the peoples of the socialist countries lead toward an increasing affinity of the various national economies. As Lenin foresaw, the tendency is toward the future creation of a world communist economy regulated by the victorious working people according to one single plan.

The Party and the Soviet people are doing everything in their power to help all the peoples of the socialist community to build socialism and communism.

The period of full-scale communist construction is characterized by a further enhancement of the role and importance of the Communist Party as the leading and guiding force of Soviet society.

Strictest adherence to the Leninist standards of Party life and the principle of collective leadership, increasing the responsibility of Party bodies and their personnel to the rank and file, fostering the initiative of all Communists and their participation in making and carrying out Party policy, and the widest practice of criticism and self-criticsm is a law of Party life.

This is an imperative condition for the ideological and organizational strength of the Party itself, for the greater unity and solidarity of the Party ranks, for the all-round development of inner-Party democracy, for activizing all Party forces and for strengthening the Party's ties with the masses.

The cult of the individual and the violations of collective leadership, of inner-Party democracy and socialist legality, are incompatible with the Leninist principles of Party life. The cult of the individual belittles the role of the Party and the masses and hampers the development of the ideological life of the Party and the creative activity of the working people.

In order to apply the Leninist principle of collective leadership consistently, to ensure a greater influx of fresh Party forces into the leading Party organs, to get the proper combination of old and young leading personnel, and to rule out the possibility of excessive concentration of power in the hands of individual officials and prevent their getting out of the control of the collective, the Party considers it necessary to carry out a number of measures.

These include the introduction in practice of a regular renewal, in certain proportions, of members of all elected Party bodies—from primary organizations to the Central Committee, at the same time preserving continuity of leadership.

At all regular elections at least one-fourth of the membership in the Central Committee of the Communist Party and its Presidium shall be renewed. Presidium members shall, as a rule, be elected for no more than three successive terms. Particular Party workers may, by virtue of their generally recognized authority and great political, organizational and other abilities, be successively elected to leading bodies for a longer period. In that case, the respective candidate is considered elected only in the event that three-quarters of the votes are cast for him by secret ballot.

The membership of the Central Committees of the Communist Parties of Union Republics, of territorial and regional committees shall be renewed by not less than one-third at each regular election, and those of area, city and district committees, and the committees and bureaus of primary Party organizations shall be renewed by one-half. Furthermore, members of these leading Party bodies may be elected consecutively for not more than three terms, and secretaries of the primary Party organizations for not more than two consecutive terms.

A Party organization may, in consideration of the political and professional qualities of a person, elect him to its leading body for a longer period. In that case a candidate is considered elected if no less than three-quarters of the Communists attending vote for him.

The people are the decisive force in the building of communism. The Party exists for the people, and it is in serving the people that it sees the purpose of its activity. A further extension and strengthening of the ties between the Party and the people is an imperative condition for success in the struggle for communism.

The Communist Party of the Soviet Union is an integral part of the international communist and working-class movement. The tried and tested Marxist-Leninist principles of proletarian internationalism will continue to be inviolable principles which the Party will follow undeviatingly.

The Communist Party of the Soviet Union will continue to strengthen the unity of the international communist movement, to develop fraternal ties with all the Communist and Workers' Parties and to coordinate its actions with the efforts of all the contingents of the world communist movement in the joint struggle against the danger of a new world war, for the interests of the working people, for peace, democracy and socialism.

The building of communism in the Soviet Union, it is pointed out in the conclusion of the draft Program, will be the greatest victory mankind has ever won in its entire history.

Under the tried and tested leadership of the Communist Party, under the banner of Marxism-Leninism, the Soviet people have built socialism.

Under the leadership of the Party, under the banner of Marxism-Leninism, the Soviet people will build communist society.

The Party solemnly proclaims: The present generation of Soviet people shall live under communism!

THE PRESENT GENERATION OF SOVIET PEOPLE SHALL LIVE UNDER COMMUNISM!

"In adopting its first Program at its Second Congress in 1903, the Bolshevik Party called on the working class and all the working people of Russia to struggle for the overthrow of the czarist autocracy and then of the bourgeois system, and for the establishment of the dictatorship of the proletariat. In February 1917 the czarist regime was swept away. In October 1917 the proletarian revolution abolished the capitalist system so hated by the people. A socialist country came into being for the first time in history. The creation of a new world began.

"The first Program of the Party had been carried out."

From the draft of the Program of the Communist Party of the Soviet Union

THE 1919 COMMUNIST PARTY PROGRAM HAS BECOME A REALITY

THE WHOLE COUNTRY is now preparing for the 22nd Congress of the Communist Party. These congresses at which Communists discuss the major problems that face the nation are always events of historic significance. The resolutions adopted at Party congresses chart the country's course of development for years to come.

The 22nd Congress will adopt a new Party Program outlining the tasks in building a communist society. The draft of this Program was published in the Soviet press for nationwide discussion.

The former Program, the Party's second, was adopted in 1919 at the Eighth Congress. The first Program, which goes back to the early years of the century, set down the steps by which the proletariat would achieve power under the Party's leadership. The second Program, a guide to action for more than forty years, mapped the road to socialism in the Soviet Union.

Four decades is only a short period in mankind's long history, but these were four of history's most memorable decades, for in these 40 years the Soviet people carried through the social transformation envisioned by the 1919 Program and built a socialist society.

Consider the state of the country when the Party formulated its 1919 Program. A civil war was raging and foreign interventionist armies overran the land. Most of the factories had been reduced to heaps of rubble; in those that were not production was a standstill. Vast stretches of farmland lay waste, and hunger was the daily condition. Everything was short—bread, machines, skilled specialists and just literate people.

It was then that the Eighth Congress of the Communist Party met. When Lenin, the founder of the Soviet state, addressed the congress, he spoke of socialism, of fully developing the country's productive forces, of the new type of man, born of the Socialist Revolution, to whom the future belonged.

The Party adopted a program for the building of socialism, and impoverished, hungry, illiterate Russia began to build a new social order. And so great was the Party's influence, so strong its belief in the future that the Soviet people never for a moment doubted that the great goals set forth in the program were achievable. With the Party leading them, the people set out to overcome all hardships.

The dream of millions of people of a new life based on socialist principles, the dream Lenin had given scientific validity, became the reality. The tasks set forth by the 1919 Party Program were carried out with honor, socialism has triumphed completely and decisively.

The Soviet Union has gone through monumental changes. They are evidenced in every phase of life and activity—in the flowering of the people's socialist democracy, in the development of science, in the growth of the nation's productive forces. They are mirrored in a single state plan, in the radical reorganization of farming based on progressive principles, in the release of the people's creative energy. This is a movement of grand and unprecedented scope that grows out of the people's complete responsibility for the country's well-being and prosperity.

All this derives from the enormous power of the Party and the people merged, power generated by ideas which have become a vital matter for all the people.

The Soviet Union is now entering a new stage—the construction of a communist society, expounded in the new Party Program. This is not a theoretical thesis alone. The program outlines concrete tasks to be completed within definite time limits. Though of astonishing magnitude, the prospects will be realized, for the Soviet people are fortified with the experience of carrying out the tasks which were advanced by the 1919 Party Program. Simple facts tell of this experience, as we shall see in the following pages.

In the Program adopted in 1919, the Communist Party defined the concrete ways of democratizing state power:

"Instead of formally proclaiming rights and liberties, proletarian democracy actually guarantees them . . . to the workers and the peasants."

Political equality of people, irrespective of sex, race, nationality, religion, property status and education, has not only been proclaimed in the USSR but is being carried out in practice. The Constitution of the USSR grants citizens freedom of speech, press, assembly; freedom to form street processions and demonstrations and to unite in public organizations; freedom of conscience. These rights are guaranteed by making printing presses, stocks of paper, public buildings, the streets and means of communication available to the working people and their organizations.

Every Soviet citizen is guaranteed the right to a job, to rest and leisure, to education, to maintenance in old age and in case of sickness or disability. Upon reaching the age of 18 every citizen has the right to vote. The age requirements for election to public office are: 23 for the USSR Supreme Soviet, 21 for the Supreme Soviets of the republics, and 18 for the local Soviets. All organs of state power—from the village and city Soviets of Working People's Deputies to the USSR Supreme Soviet—are elected on the basis of direct suffrage by secret ballot cast by *all* men and women.

Of the 1,378 deputies in the USSR Supreme Soviet more than a thousand are industrial workers, collective farmers, engineers and agronomists. The remainder are statesmen and public figures, teachers, doctors, scientists and people in literature and the arts.

Each of the 15 sovereign Union Republics that make up the USSR has its own higher organ of power—the Supreme Soviet. The entire power in the localities is exercised by the territorial, regional, city, district, village and rural Soviets of Working People's Deputies. A total of 1,822,000 deputies have been elected to them, including 741,000 women. There are 433,000 workers and 691,000 collective farmers in the local Soviets. The rest of the deputies are in the professions and the Soviet Army.

As a rule, deputies continue to work at their regular trades or professions. They are required to report back to their constituents at regular periods. Electors may at any time recall a deputy who has lost their confidence.

". . . The gradual involvement of the entire working population in the activities of administering the state."

The participation of the citizens of the USSR in administering the state is not confined to the election of deputies to the Soviets. Tens of millions of men and women participate actively and directly in the activities of all organs of state power in their spare time. More than three million industrial workers, collective farmers and professional people are members of the various permanent and temporary committees of the Soviets and public organizations.

The Soviets carry on their manifold activities in conjunction with such public organizations uniting the overwhelming majority of citizens as the trade unions, the Young Communist League, collective farms, the rural consumer cooperatives and scientific societies, and benefit from their direct assistance and support in solving all state matters. Not a single important law, not a single major political or economic measure is carried out by the Soviet Government without nation-wide discussion. Such people's referendums took place—to cite only a few instances—in 1957, when the Party and the Government proposed a draft law for reorganizing industrial management and construction; in 1958, when the law on school reorganization to strengthen ties between school and production was proposed; and again in 1958, in connection with legislation to reorganize the machine and tractor stations and sell their equipment to the collective farms.

Tens of millions of working people discussed these draft laws. This type of general participation in law making is an important element in socialist democracy, one of the steps leading to the universal participation of the citizenry in the management of their state.

"For the full equality of nations, it is necessary to wipe out any and every special privilege of any national group whatsoever."

National strife and inequality have been ended permanently. The peoples of Russia, freed of social and national oppression by the October Revolution, formed 15 sovereign socialist republics. Each has its own constitution and can enter into direct diplomatic relations with foreign countries. These sovereign national republics are voluntarily united in the Union of Soviet Socialist Republics and have the right to secede from the Union.

The USSR Supreme Soviet consists of two chambers—the Soviet of the Union and the Soviet of Nationalities. Both chambers have equal rights. Election to the Soviet of the Union is on the basis of proportional representation—one deputy for every 300,000 of the population. Election to the Soviet of Nationalities is based on equal representation from each republic. Every Union Republic, regardless of size or population, sends 25 deputies to the Soviet of Nationalities; every autonomous republic, 10; every autonomous region, 5; and every national area, one.

Alongside the 15 national sovereign republics, diverse forms of state autonomy exist for smaller nationalities and national groups, such as autonomous republics, autonomous regions and national areas. As has already been mentioned, they all have their representation in the Soviet of Nationalities of the USSR Supreme Soviet.

During the Soviet period the Union and autonomous republics have developed their own economy with large industrial centers. Many entirely new industries have been developed. The Union Republics have made remarkable progress in other spheres as well—in science, education and the development of their national culture.

Each of the 15 republics has its own Academy of Sciences. Teaching in the schools of each Union and autonomous republic, autonomous region and national area is in the native language.

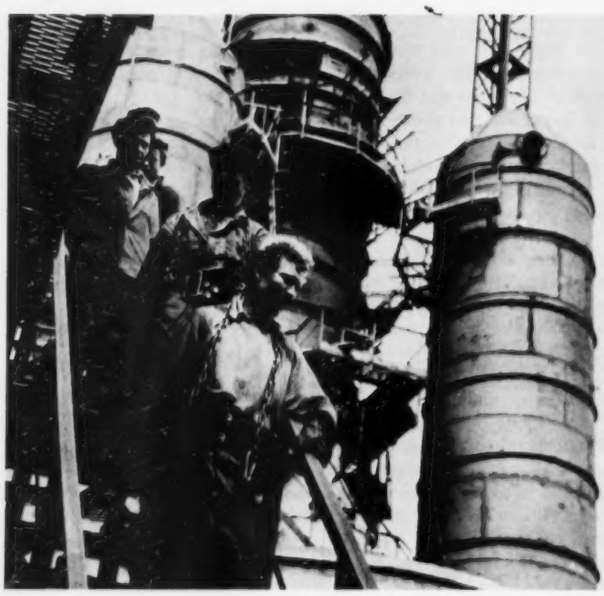
The 1919 Party Program formulated a number of demands which determined the entire economic policy of the Soviet state.

". . . All-round rise in the country's productive forces."

In the very first months of Soviet power all plants and factories, railroads and power stations, banks and trade establishments were nationalized by the workers' and farmers' state and became the property of the people. Private ownership of the means of production was abolished. This put an end, once and for all, to the opportunity for the exploitation of man by man. The foundation was built for the planned development of the national economy in accordance with a single state plan, making possible rates of growth never before reached.

The Soviet Union, despite the colossal damage of two wars which were thrust upon it, has become a mighty industrial power. In volume of industrial production it has surpassed all the European countries. Its industrial output has multiplied 45 times since 1913, and its share of world output has grown from 1.7 per cent in 1913 to 22 in 1960.

Like the means of production, the profits of socialist enterprises remain the property of the people and are distributed in their behalf by planning bodies. A quarter of the national income is used for the further development of the economy; the other three-quarters, for education, public health, housing construction and the wages of the country's factory and office workers.



"It is necessary to show concern for expanding economic cooperation and political ties with other countries . . ."

This point in the program was an expression of the principle of peaceful coexistence which has been the country's policy from the first day of the October Revolution.

The Soviet Union is constantly strengthening economic trade and cultural ties with all countries that wish to cooperate. Especially close economic relations have been established with the socialist countries of Europe and Asia. Scientific-technical cooperation projects and concentration areas of production have been worked out, with each country devoting special attention to its specific and traditional areas of production. This division of labor is mutually profitable and helps to build up the economy of the whole socialist part of the world.

Trade ties with the non-socialist countries of the West also keep growing. The Soviet Union presently trades with 80 countries.

With its great industrial potential the Soviet Union is able to assist the economically underdeveloped countries of Asia, Africa and Latin America. The economic and technical aid rendered to 20 of these underdeveloped countries—without strings attached—involves credits totaling more than two billion rubles. The USSR, with its economic resources and technical personnel, is promoting the strengthening of the national economies of underdeveloped countries.

"The maximum utilization of all the country's manpower . . . should be the immediate task of the Soviet Government's economic policy."

Prerevolutionary Russia could not use the labor of all its able-bodied workers. Joblessness, a permanent and immutable condition of the country's economy, became more acute in the frequent periods of economic crisis.

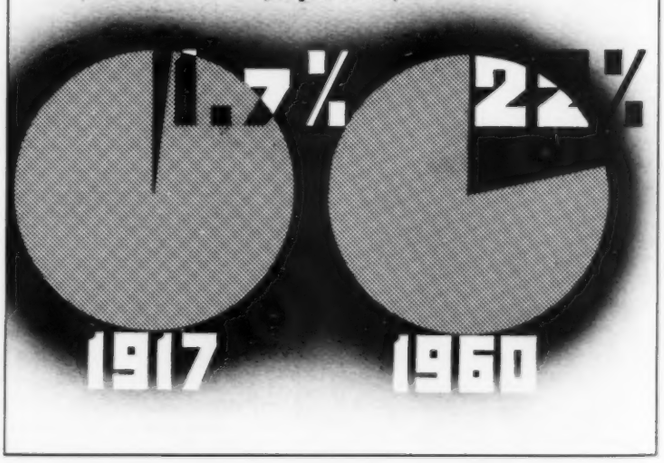
Unemployment has been done away with forever in the Soviet Union. The last employment agency was closed down in 1930; it was no longer needed.

Joblessness was ended as a result of the rapid and steady growth of the socialist economy, which is developing according to plan, thereby eliminating overproduction crises. Every Soviet person, regardless of sex, nationality or color, is guaranteed the right to a job, as well as the right to equal pay for equal work.

The number of employed persons, exclusive of collective farmers, increased almost fivefold from 1913 to 1960. The present total is 62 million.

In the Soviet Union a worker does not have to look for a job, the job looks for him. That is one of the greatest achievements of Soviet power.

THE SOVIET UNION'S SHARE IN WORLD OUTPUT
(in per cent)



DEVELOPMENT OF PRODUCTIVE FORCES

"Soviet power, having completely abolished private ownership of the land, has begun to carry out a number of measures aimed at organizing large-scale socialist farming."

These words written into the Party Program more than 40 years ago expressed a desire to extricate the Russian countryside from economic and cultural backwardness and advance it along the wide road of progress. Instead of 20 million small peasant holdings, the majority of them barely scraping a living out of the soil, large and mechanized collective and state farms now use the most modern techniques to grow bumper crops.

During the Soviet period agriculture's power capacity has been multiplied by six. In 1960 it exceeded 141 million horsepower. The farm worker today uses an average of almost five horsepower as compared with 0.5 horsepower before the Revolution.

Mass production of farm machinery made it possible to add some 210 million acres to the country's sown area by comparison with prerevolutionary times, bringing the present sown acreage to 500 million. In the past six years more than 100 million acres of virgin and long-fallow lands were turned to the plow and the number of productive head of cattle increased by almost 80 million.

With more than 530,000 specialists equipped with a secondary and higher education working in agriculture, and a network of farm research institutions spread across the country, efficiency is high. Although only half as many people are engaged in agriculture as before the Revolution, production has more than doubled.

In its 1919 Program the Party declared that *one of the basic reasons for the economic and cultural backwardness of rural life* is the opposing interests between town and country. The Party therefore *"considers the elimination of this opposition one of the basic tasks of communist construction."*

During these 40-odd years the socialist town has helped the village overcome its economic and cultural backwardness. The poor peasant has completely disappeared in the countryside. The bankruptcy of the marginal peasant household ended with the organization of collective farms. The real income of the country's collective farmer is almost seven times that of the prerevolutionary peasant.

Economic achievements were the basis for the unprecedented flourishing of education and culture in the country's rural areas. Before the Revolution there were only 104 secondary schools in rural districts; today there are more than 16,000.

The colleges and universities in the cities are open to young men and women from the villages. Agricultural institutes have been set up in rural districts, as well as branches of leading colleges and universities.

The number of books in village libraries during the Soviet period has multiplied 90 times, with 400 million volumes on the shelves today.

The very appearance of the village is being gradually altered. There are schools, libraries, stadiums and other public buildings in today's collective farm village. Village construction follows a unified architectural plan incorporating all city facilities.

The growing efficiency and productivity of collective farm labor has eliminated the opposition between town and country.

"In adopting its second Program at its Eighth Congress in 1919, the Party promulgated the task of building a socialist society. Treading on unexplored ground and overcoming difficulties and hardships, the Soviet people, under the leadership of the Communist Party, put into practice the plan for socialist construction drawn up by Lenin. Socialism triumphed in the Soviet Union completely and decisively.

"The second Program of the Party had likewise been carried out."

From the draft of the Program of the Communist Party of the Soviet Union

THE CULTURAL REVOLUTION

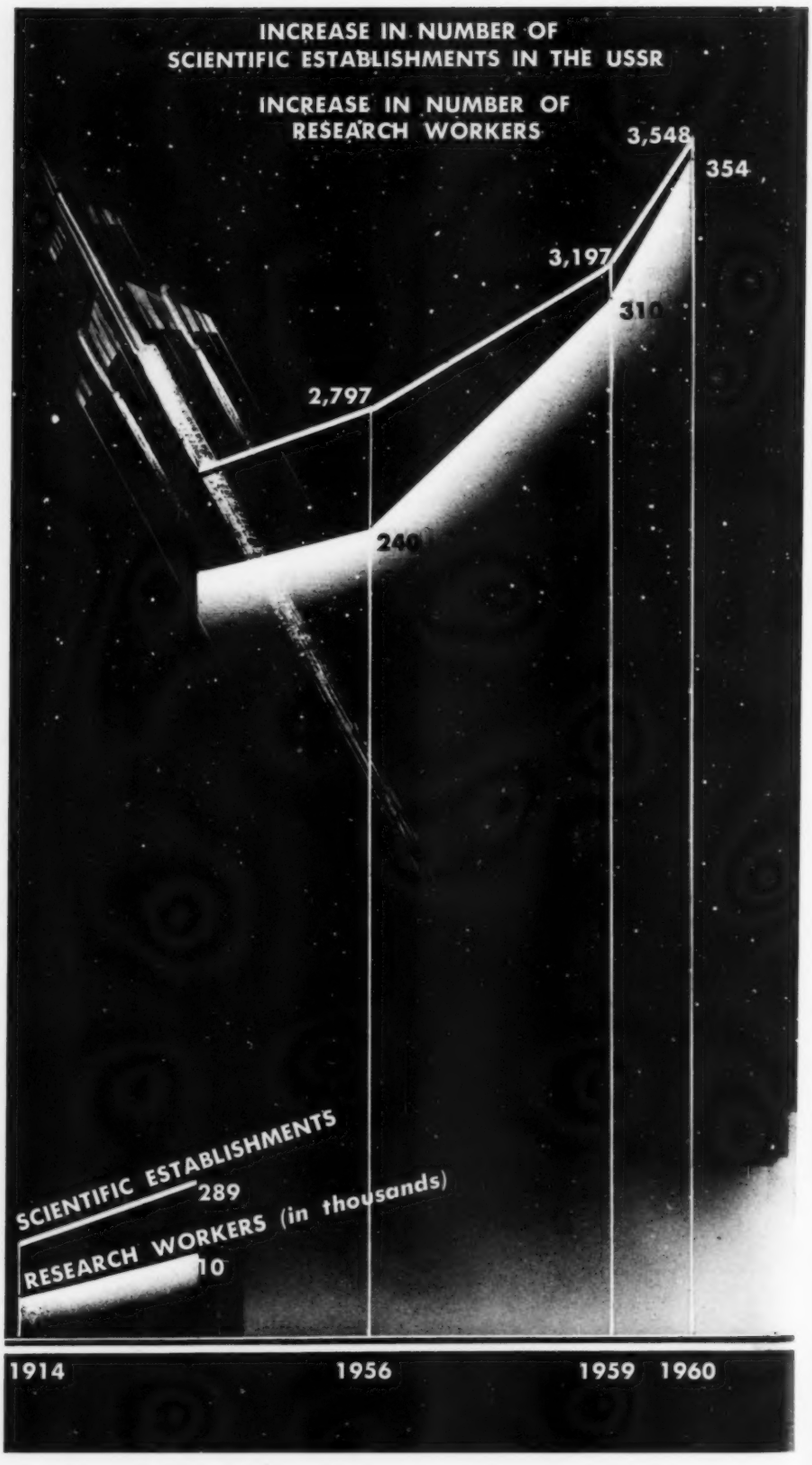
The Communist Party in its 1919 Program advanced concrete measures for developing culture and bringing it within the reach of the masses.

"Soviet power has already adopted a number of measures to develop science and link it more closely with production. By supporting these measures the Communist Party is striving for their further development and for creating the most favorable conditions for scientific activities."

In these four decades the Soviet Union has won a leading position among nations for its scientific and technological achievements. The world's first sputniks and space rockets were launched from Soviet soil. The first man to penetrate outer space, Major Yuri Gagarin, was a Soviet citizen in a Soviet-built ship.

A large atomic industry has been organized in the USSR. Soviet scientists have made many outstanding discoveries in solid-state physics, in the creation of synthetic and polymer materials, in the utilization of the atom for peaceful purposes, in designing new machines and instruments. Soviet geologists have opened up and continue to discover for the country's use great stores of coal, iron, gas, oil and other minerals.

Research in the country is purposeful and is organized under the aegis of the USSR Academy of Sciences and its many associated bodies. The Academy determines the major trends of research and directs long-range research projects in the natural sciences and the humanities. In addition to the USSR Academy of Sciences, the branch academies specializing in various spheres of agriculture, medical science, architecture and the arts are conducting large-scale research. All the Union Republics have their own academies with associated experimental stations, observatories and branch institutes. The state is generous with research funds. In the past ten years expenditures on science have tripled, from 900 million to 2.8 billion rubles.



"Today the Communist Party of the Soviet Union (CPSU) is adopting its third Program, a program for the building of communist society. The new Program is a constructive generalization of the experience of socialist development; it takes account of the experience of the revolutionary movement throughout the world and, giving expression to the collective opinion of the Party, defines the main tasks and principal stages of communist construction.

"The highest goal of the Party is to build a communist society which will have inscribed on its banner: 'From each according to his ability, to each according to his needs.' The Party's motto, 'Everything in the name of man, for the good of man,' will be put into effect in full."

From the draft of the Program of the Communist Party of the Soviet Union

"The introduction of free and compulsory general and polytechnical education for all children."

In this country where, on the eve of the 1917 Revolution, three out of every four people between the ages of 9 and 49 could neither read nor write, this point in the Party Program was, to put it mildly, a piece of historical impudence.

Today eight years of schooling is universal and compulsory. The child begins his formal schooling at the age of seven. From there on free education is open to him all the way through college and professional school.

In 1960 the Soviet Union had more than 224,000 schools, with 4,000 to 5,000 being added annually. The student body has been growing by approximately 3 million a year. The present total is better than 36 million. The budget for education keeps rising. For 1950 it was 6.5 billion rubles; for 1960, it was more than 11.5 billion.

A recent law reorganizing the school system, adopted by the USSR Supreme Soviet on the recommendation of the Central Committee of the Communist Party, brings the classroom in closer touch with life. Together with their academic studies—literature, native and foreign languages, natural science, mathematics, etc.—children get manual training in shops and factories. As a result, school graduates have a good background in science fundamentals and are better prepared for socially useful work.

"To give all those who wish to study, and especially workers, free access to higher education; . . . to give material assistance to students so that proletarians and peasants can actully make use of the opportunity to get a higher education."

Once within the reach of only the well-to-do sections of the Russian nobility and bourgeoisie, higher education became accessible to the people from the very first days of Soviet power. Any citizen between the ages of 18 and 35 with a secondary education who passes the entrance examinations in his specialty may pursue a course of higher education. The Soviet Union today has more college students than all the West European countries combined.

The number of people receiving a higher education while working is on the increase. Fifteen years ago there were only 254,000; now there are 1,240,000, better than half of the country's total college student body.

Higher education is free of charge, with some 80 per cent of the students receiving maintenance stipends. Students are paid wages for the labor-training periods.

Higher education is financed by the state. Budget allocations from 1950 to 1959 increased from 720 million to 1.1 billion rubles.

The number of specialists graduated from Soviet higher schools is growing yearly. Today there are better than a million certified engineers in the Soviet Union, more than in any other country in the world.

". . . It is necessary to open and make accessible to the working people all the treasures of art."

The Communist Party has fulfilled this pledge, as it has the others in the 1919 Program. All the theaters, concert halls, art galleries and museums were nationalized and declared the property of the entire people. Theaters (their number has tripled) and museums (their number has quadrupled) are being built everywhere. The number of movie projectors in the country has increased almost 100-fold since 1913.

Amateur art is being developed on an enormous scale. The number of participants in amateur art, dramatic, dance, music and literary circles runs into the millions. There are groups at every large plant, office and collective farm, whose activities are financed by the management of the enterprise. Amateur dramatic, instrumental and choral groups are developing into people's theaters whose level of art and skill is close to professional.

The printed word has become a mighty source of mass culture. Between 1918 and 1959 there were 1,519,000 books published in an aggregate printing of more than 22 billion copies. Annually an average of about six books are printed per Soviet citizen. More books are published in the Soviet Union than in any other country in the world. The collections of public libraries now exceed 800 million copies and keep growing, as do their book purchase budgets.

The 1919 Program of the Communist Party spoke of the new relations between the people who became the masters of their country and took upon themselves responsibility for the fate of production, for the building of a new life.

". . . The socialist mode of production can be consolidated only on the basis of the comradely discipline of the working people, their maximum initiative . . ."

Soviet society is a society of working people. The exploitation of man by man has been eliminated forever. No one person owns the implements with which he can extract profit from the labor of others. The means of production, as well as the fruits of labor, belong to the whole society, to all the working people. Every person receives his share not according to capital invested—there are no capitalists in the Soviet Union—but in accordance with the quantity and quality of labor he contributes.

Soviet people, conscious of the fact that they work for themselves, for their society, are interested in increasing labor productivity. They strive to supply the country with the maximum amount of goods, to utilize fully all the opportunities made available by modern techniques. It is precisely on this basis that the socialist emulation movements of workers, engineers and collective farmers were started in the Soviet Union.

They are competing with each other in order to produce the greatest quantity and the highest quality of goods, to create an abundance of material and cultural wealth for everyone in the country. This is competition that benefits all. It strengthens the spirit of comradeship and mutual assistance which reigns in Soviet society. People generously share their experience, making no secret of their achievements.

One of the first manifestations of the initiative of the working people in the economic sphere were the communist subbotniks in 1919. Workers in large numbers volunteered their free time to restore the country's economy, shattered by war and intervention. Later, in 1929, emulation movements acquired a mass character, with millions of working people participating. The forms of the emulation movements were constantly perfected, reflecting the changing economic and cultural picture.

Today socialist emulation has entered a new stage. Toward the end of 1958 the communist work team and shock workers' movement spread across the country. Soviet people started an emulation drive not only to work better and faster but also to live in a communist way. The participants of the communist work movement are striving to know more, to receive a secondary and higher education. They are always ready to come to the assistance of their fellow workers.

". . . . The trade unions must draw the largest possible numbers of working people into activity in the management of the economy."

The trade unions are the largest mass organizations of the Soviet working people. When the Party Program was adopted in 1919, there were some 5 million factory and office workers in the unions; today there are almost 55 million.

The role of the trade unions in the economic and political life of the country has grown enormously. Together with the planning and economic organs of the Soviet state they set wage scales and production quotas and elaborate measures for systematically raising the real earnings of those working in the national economy. The trade unions actively participate in drawing up national economic plans. They check on production and advance able and gifted representatives of the working class to leading state, economic and public positions.

The trade unions administer the social insurance fund, which is made up of contributions from the enterprises. They keep a sharp lookout to see that legislation is enforced. Trade union labor inspectors have the authority to resort to sanctions against any management that violates the labor laws. The trade unions have the final say in settling disputes between workers and management.

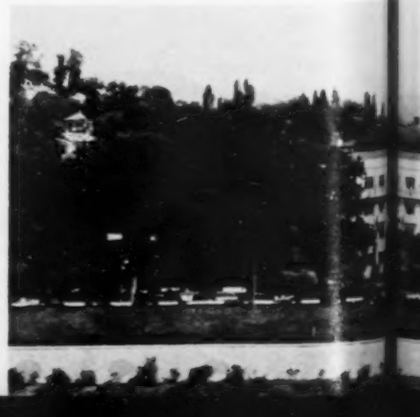
The unions run the country's 3,000-odd vacation resorts and spas and own thousands of Palaces of Culture, clubs, libraries and people's theaters.

"To exert every effort in improving the housing conditions of the working people . . ."

The Soviet state inherited a grave housing problem from the old regime. The housing was not only insufficient but primitive. Radical measures were needed and were taken. In the years between 1918 and 1959 almost 30 million apartments were built, 4.5 times more than all housing in prerevolutionary Russia.

But even building on this gigantic scale could not end the housing shortage. The country's rapid industrialization sharply increased the urban population. Today 50 per cent of the Soviet Union's people live in cities. The comparable figure in old Russia was 16 per cent.

The scale on which housing is built grows year by year, as does the housing budget. In the past five-year period alone 2,200,000 more new apartments were built than in the preceding ten years. In the remaining years of the seven-year plan, from 1961 to 1965, 5.2 to 5.3 billion additional square feet will be constructed, the equivalent of the housing in 30 cities the size of San Francisco.



MOLDING THE NEW MAN

"The setting up of a network of nurseries, kindergartens and other preschool institutions with the aim of improving public education and emancipating women. . . .

. . . Working women to be given maternity leave for eight weeks prior to and eight weeks after childbirth with full pay, free medical care and medicines."

That is how the 1919 Program of the Communist Party defined the obligations of the Soviet state to its women citizens.

To assist mothers in rearing their children, nurseries and kindergartens were established for those parents who wished their children to attend.

In 1960 some 1.3 million children were taken care of in nurseries and more than 3 million attended kindergartens. Almost 3 million children spent their vacations in summer camps. For these services parents paid only 20 per cent of the cost, the remainder being paid by the state.

The law gives expectant mothers who hold jobs 16 weeks of paid maternity leave—eight weeks prior to delivery and another eight weeks after delivery. In addition, working mothers are entitled to a leave of absence of up to 12 months without pay. They cannot be dismissed from their jobs in the interim.

A comprehensive system of maternal and child care has been set up. In each city and rural district there are consultation centers for women and children, maternity hospitals, children's hospitals and polyclinics. All services are free of charge.

". . . Full social maintenance for all working people . . . in case of sickness or disability . . ."

This point in the program has been embodied in one of the articles of the USSR Constitution as an achievement of Soviet power.

In case of sickness or injury on the job factory and office workers are paid benefits from the first day of disability until they go back at work. These payments, made from the social insurance fund, may run as high as 90 per cent of average earnings.

The social insurance fund also covers most of the bill for accommodations at sanatoriums and rest homes. Workers either get their accommodations free or pay only 30 per cent of the actual cost.

All working people without exception are covered by social insurance. There are no deductions made for the purpose from the worker's wages.

Old age and disability pensions are paid out of the social maintenance fund, allocated in the national budget. The retirement age for men is 60, after 25 years of employment; for women it is 55 after 20 years of employment. People who work underground or at jobs that may be detrimental to health get special pension privileges. The average old age pension is about 60 per cent of a worker's earnings.

The state presently pays 10 billion rubles a year for pensions and related items. This is more than double the amount paid ten years ago.

"The Communist Party bases its activities in public health primarily on large-scale prophylaxis and sanitation measures intended to prevent the spread of disease and provide free and skilled medical services to the general public."

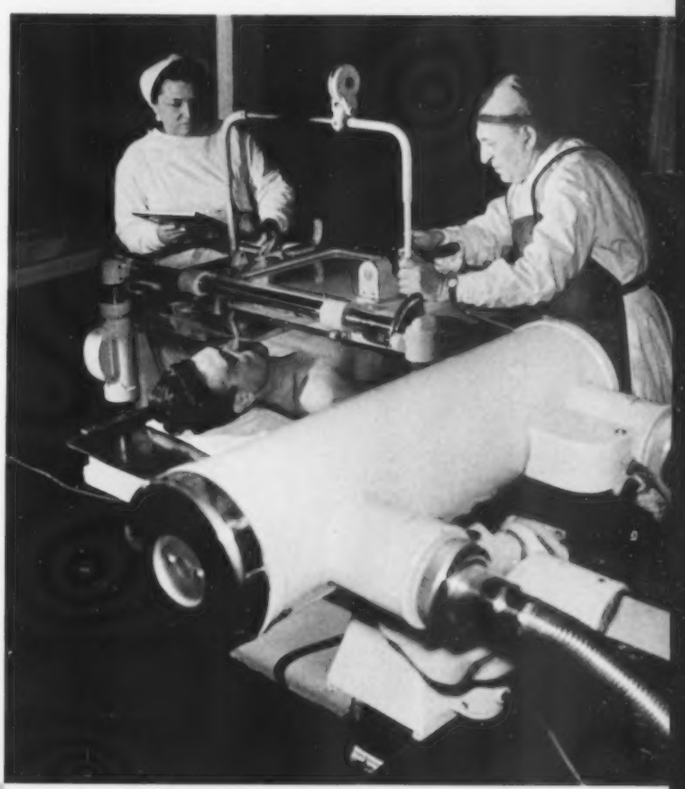
These health measures have yielded remarkable results. The Soviet Union leads the world in natural population growth. Sixty years ago the average life span was 32 years; today it is 68.

Free medical services are provided by hospitals, polyclinics and dispensaries in every urban and rural district. Specialists in every field of medicine treat people at these various institutions and make home calls, at no cost to the patient.

Factory and office workers also receive medical care at the polyclinics and medical centers set up at Soviet enterprises. Free consultation with any specialist, even the most prominent, is available to every patient.

The strong emphasis in Soviet medicine is on prevention. There is a constant check of sanitation conditions in places of work, living areas and public establishments. The polyclinics in residential districts and in industrial plants carry on periodic medical checkups to detect ailments in the earliest stage. People with chronic diseases are under the constant care of the clinics and dispensaries.

The whole of this enormous job of keeping the people healthy is financed from the State Budget, whose allocation for public health grew from 2.6 billion to 5.6 billion rubles between 1950 and 1960.



SECOND SOVIET CO

ORBITS EARTH 17 TIMES IN 25 HOURS

ON AUGUST 6, 1961, 9:00 A.M. Moscow time (2 A.M. Eastern Daylight Time), a new launching took place in the Soviet Union: The spaceship Vistok II, piloted by Pilot-Cosmonaut Major Gherman Stepanovich Titov, a citizen of the Soviet Union, was orbited around the earth. The tasks of the flight were to study the influence of prolonged orbital flight and subsequent landing on the human organism and the working capacity of a person during a prolonged condition of weightlessness.

According to preliminary data, the satellite spaceship was orbited along a course approximating that of the chosen orbit with the following parameters: the minimum distance from the earth's surface (perigee) was 178 kilometers (110.6 miles); the maximum distance (apogee) was 257 kilometers (160 miles); the orbital plane was inclined at 64 degrees 56 minutes to the equatorial plane. The initial period of the satellite spaceship's revolution was 88.6 minutes.

Vostok II weighed 4,731 kilograms (approximately 10,430 pounds) without the carrier rocket's final stage.

The equipment on board the spaceship included multichannel telemetric systems ensuring objective observation of the pilot's condition and control over the operation of all equipment on board, receiving and transmitting short-wave and ultrashort-wave communication equipment, including a sound recorder which taped the space pilot's words and automatically played it at an accelerated rate on command from the earth. The television systems made it possible to keep the space pilot's work under constant observation. Objects for biological study were also placed on board for obtaining additional data on the effect of space radiation on living organisms.

The spaceship Vostok II made more than 17 revolutions around the earth and in 25 hours 18 minutes covered more than 700,000 kilometers (434,959 miles).

After successfully completing its scientific research program, Vostok II landed in the set area of the Soviet Union near the historic spot where spaceship Vostok I had landed on April 12, 1961, with Pilot-Cosmonaut Yuri Alexeyevich Gagarin.

Titov is in good health after his long and successful space flight.

The results of the research open up extensive prospects for the further development of manned space flight.

Moscow, Red Square, August 9: Gherman Titov (left), Nikita Khrushchev and Yuri Gagarin.

COSMONAUT IN OUTER SPACE

TO THE COMMUNIST PARTY AND THE PEOPLES OF THE SOVIET UNION
TO THE PEOPLES AND GOVERNMENTS OF ALL COUNTRIES
TO THE WHOLE OF PROGRESSIVE MANKIND

MESSAGE

from the Central Committee of the Communist Party of the Soviet Union, the Presidium of the Supreme Soviet of the USSR and the Government of the Soviet Union

The Central Committee of the Communist Party of the Soviet Union, the Presidium of the Supreme Soviet of the USSR and the Government of the Soviet Union announce with great joy the new unparalleled victory scored by Soviet science and technology, the successful flight of the second manned spaceship.

On August 6, 1961, at 9 A.M. Moscow time, a powerful Soviet rocket put into orbit around the earth a new spaceship,* Vostok II, *piloted by Pilot-Cosmonaut Major Gherman Stepanovich Titov, a Communist and a citizen of the Union of Soviet Socialist Republics.

Comrade Titov safely made a 25-hour flight around the earth and, after completing the program successfully, landed on the territory of our country, the Union of Soviet Socialist Republics.

The Soviet spaceship* Vostok II, *piloted by Comrade Titov, circled the earth more than 17 times, covering a distance exceeding 700,000 kilometers, that is, almost twice the distance from the earth to the moon.

This exploit reflects the new, tremendous achievements of the Soviet Union, of our science and technology and entire national economy—the great superiority of the socialist system, the most advanced social system in the world.

All the peoples of the globe noted with tremendous inspiration and admiration the first flight of Soviet man into space. The remarkable flight of the new Soviet cosmonaut shows that the day is not far off when spaceships piloted by man will blaze new trails to the moon, Mars and Venus. Broad prospects open up to mankind for the conquest of space and flights to the planets of the solar system.

The Central Committee of the Communist Party, the Presidium of the Supreme Soviet of the USSR and the Government of the Soviet Union note with feelings of tremendous pride that our country, the country of victorious socialism, is confidently marching in the vanguard of mankind in the use of the achievements of science and technology for the benefit of the peoples of the world.

The second space flight of a Soviet man around the earth serves as fresh and vivid confirmation of the great might of the people who have built socialism. Our achievements in the conquest of space are not accidental. They reflect the natural course of victorious communism. Communism is irresistibly advancing, and there is no force in the world capable of hampering the vigorous advance of mankind to its bright future.

The enemies of peace are whipping up military hysteria. Against this hysteria we set up our great plans of communist construction, our firm belief in our strength and in the correctness of the road mapped out by Marxist-Leninist science.

All the people of the world are familiar with the plans and aims of our country. They are expressed in the draft of the new Program of the Communist Party of the Soviet Union that will be submitted for the consideration of the Twenty-second Congress of the Communist Party, a program for building a communist society. Communism is fulfilling the historic mission of ridding all peoples of social inequality, of all forms of oppression and exploitation, of the horrors of war, and will establish Peace, Labor, Freedom, Equality and Happiness for all peoples on earth. Everything for man! Everything for the good of man!—this is our loftiest goal.

The Soviet space flights mark the unswerving will and desire of all the Soviet people for a stable peace throughout the world. We are placing our achievements in the exploration of space at the service of peace, scientific progress, and for the benefit of all the people of our planet. The Soviet people firmly believe that the cause of peace will triumph all over the world. Peace will triumph if the peoples of all countries work indefatigably for its consolidation.

We call upon the governments of all countries, upon all the peoples, irrespective of race or nationality, social standing or religious beliefs, to exert every effort to ensure stable peace throughout the whole world.

The new glorious victory of our country inspires all the Soviet people to perform still greater exploits in building communism!

Forward to great victories in the name of peace, universal happiness and human progress!

CENTRAL COMMITTEE OF THE COMMUNIST PARTY OF THE SOVIET UNION
PRESIDIUM OF THE SUPREME SOVIET OF THE USSR
COUNCIL OF MINISTERS OF THE UNION OF SOVIET SOCIALIST REPUBLICS

By Yuri Gagarin

Pilot-Cosmonaut of the USSR, Hero of the Soviet Union

ROAD TO OUTER SPACE

(Continued from July and August issues)

A FEW DAYS after Nikita S. Khrushchev returned from his tour of the United States our scientists fired a third space probe. It shot around the moon, photographed the hidden side and relayed the picture back to us here on earth. Once again the whole world applauded.

Life was changing my plans. A while ago I thought I had plenty of time to think things over. Now I couldn't dally any longer. The very next day I applied to my commanding officers, as specified by Army Regulations, for enrollment as a prospective spaceman. It was high time. Shortly thereafter I was called up before a special medical commission.

Only one out of every ten of the applicants passed. I got through the first stage but with no guarantee, of course, that I wouldn't be eliminated at the next. I went back to my regiment to wait.

I was on tenterhooks, and the waiting was harder because I had kept the application a secret from Valya. This was so much out of the usual order of things that I thought it better policy to keep quiet. I had explained away the first medical exam as a routine trip. But my conscience bothered me because we never kept anything from each other.

At home in the evenings she would look at me quizzically, as though she had some notion of what was going on inside me. "You're not ill, are you, Yuri?" she kept asking me, insisting I take my temperature.

Obediently, I'd stick a thermometer in my mouth, but the column of mercury stayed obstinately at normal. Still I was feverish. This was a complaint for which medicine had no name, this yearning to fly into space; it was not anything a doctor could cure.

Finally, after I had given up hope, the summons came. Again I went off, telling Valya nothing. Once more I had to go through the whole rigmarole. It took several weeks. Again a lot of the men were eliminated. I was still among the prospective cosmonauts.

And now I had to say good-by to the regiment and my buddies. A new chapter of my life was beginning.

The day I got back home happened to be my birthday. Valya had made a cake for the occasion, decorated with my initials and the number 26. It was only yesterday that I had been 16, and here I was 26. Our friends came over to share the birthday cake. Although they had no idea of what was really going on, they knew that we were about to leave. I had told Valya that I had been assigned as a test pilot and that we would soon be going to Central Russia. She had passed on the news to our friends.

We flew to my new job. Valya and flying don't get along, but she agreed to travel by air because we were short of time. We found a place to live, and together with my mates I got started in earnest.

Army doctor Vladimir Ivanovich, one of the leading authorities in aviation medicine, told us what a man would be facing in space. He placed the hazards in three groups.

In the first were those that derived from the physical nature of space itself—the very low pressure in what was actually a vacuum, a different gaseous composition than ours, the various ionizing radiations and the danger from meteors.

In the second group were those that derived from the flight of the rocket —noise, vibration, overload stress and weightlessness.

In the third group he included the artificial climate in the spaceship, the very narrow range of movement in the small compartment, the restrictions of the space suit, and emotional stresses and strains.

This was all fascinatingly new and we almost held our breath as we listened so as not to miss a word. It was as though a window had been opened for us into the world of science.

We had ideal conditions. There was nothing to distract us from the fascinating lectures we were enjoying. We had great respect for our doctors who had not only worked out the techniques to keep a man hale and hearty in space flight but had taken an active part in creating the ship, the foolproof space suit and the scientific instrumentation.

School for Cosmonauts

The training program was very comprehensive, covering the theory behind the equipment of the ship and practice in its use. We had to study the fundamentals of rocketry and space techniques, spaceship design, astronomy, geophysics and space medicine. We had to fly in conditions of weightlessness and spend long training periods in a full-size model of the spaceship cabin, in specially outfitted soundproof and thermal chambers, on a centrifuge and on a vibration stand.

These were altogether different classes than the ones we had taken at the technical school, the Air Force school or in the regiment. Our teachers were eminent specialists; each had written several important theoretical works and had made major contributions to Soviet science.

Our day began with an hour of exercising in the open air under medical supervision. We also did gymnastics, exercised on the bars and trampoline, used dumb bells and played ball. We did a lot of swimming and diving. Anyone who has a fear of the water or doesn't know how to swim simply can't be a cosmonaut. All these special exercises helped us to orientate ourselves in space and increased our resistance to prolonged physical stress.

We did parachute-jumping at an airfield near the river. Over a short period I made about forty jumps, all of them different. Jumping gave me a terrific thrill, both the anticipation and the whirlwind feel of the jump itself.

In delayed parachute-jumping we would sometimes go into a spin, a very unpleasant business. Your body suddenly whirls dizzily on its own axis. Your head becomes heavy as as lead, your eyes hurt and you feel faint. As you spin about with great force, you lose your bearings and feel completely helpless.

The coach showed us how to pull ourselves out of this spin by swinging our arms and legs like ailerons and fins. He told us to lie spread-eagle, face down, a position that best assures stability in a free drop—something we proved for ourselves more than once.

4.5-Ton Spaceship Orbited

One morning all the papers carried the news that the Soviet Union had aligned the first Soviet spaceship in a sputnik orbit. The TASS announcement gave the ship's weight as an astonishing 4.5 tons and said it carried an airtight capsule with a dummy figure. We knew that was the kind of vehicle one of us would be going up in.

It was clear that the spaceship had already been built and all the techniques worked out for safe flight and recovery, and that the life-supporting systems it carried were being checked. We thought we'd better get going with our lessons or the ship might be ready before we were. We attacked our studies and training program with still greater zeal.

We began to train on the centrifuge. This simple device, used to accustom the body to big overloads, is a shaft set on an axis, a cabin with a seat inside it at one end and a balance load on the other. The faster it is spun, the greater the acceleration and the more overload the organism has to bear. The weight of the body is multiplied several times.

I had already experienced something like it in flight when my plane came out of a nose dive—as though I were pinned down to my seat by something incredibly heavy. I couldn't lift a finger, and my eyes seemed to be covered with a veil of fog. That is what overload does to you.

Centrifuge-training accustomed us to increasing acceleration and protracted multiple overloads. Attached to the device was an extremely sensitive and intricate electrophysiological instrument for recording the subject's physical condition and ability to function. As we whirled about madly, we had to identify the digits from one to ten as they flashed on a screen, their size diminishing progressively as they approached ten. At top speed I was able to differentiate between a seven and an eight.

Membership in Lenin's Party

If I were chosen, I wanted to go into space as a Communist Party member. Soviet people traditionally join the Party of Lenin on the eve of a decisive event in their lives. My probationary period as a candidate member had ended. My regimental mates up North had recommended that I be accepted for full membership—a recommendation that moved me deeply. They were my seniors, Communist Party members who had faith in me and were willing to pledge themselves in my behalf.

I racked my brain for quite a time about how to phrase my application for Party membership. Then I remembered how simply and matter-of-factly soldiers on the eve of battle had phrased their applications and I wrote, "I ask to be enrolled in the Communist Party of the Soviet Union. It is my wish to become an active Party member and energetically participate in my country's life." These few words said just about everything I felt and wanted to say.

On June 16, 1960—a sunny day, I remember—I was invited to a Party meeting, and, as is customary, was asked to tell about myself. I gave my autobiography in a few short sentences. It could have applied just as well to a million other young Soviet men and women. I heard one of the speakers say, "He's devoted to the Party and the country and is worthy of membership in the Party of Lenin."

The vote was unanimously in my favor.

A month later I was summoned to the Party office. So were several other young officers, all as excited as I. The door opened and I heard,

SPACEMAN ON VACATION

It took Major Yuri Gagarin, world's first cosmonaut, only 108 minutes to circle the globe on that history-making fight that launched man into space and an age of planetary exploration. But those were perhaps the longest 108 minutes that any man had ever lived through. Packed into them were endless hours on vibration stands, in whirling centrifuges, in chambers sealed away from the sight and sound and touch of other men. Months and months, these were, of the most wearing, most intensive kind of work. After work comes rest; and the harder the work, the longer the rest. That is the law in the Soviet Union. And laws are obligatory for every citizen, even for pioneer cosmonauts. So that here we go vacationing with Yuri Gagarin, his wife Valentina, and their two small children Yelena and Galina. With many other Soviet citizens, the Gagarins spent their holiday at one of the beautiful sanatoriums on the Black Sea coast not far from Sochi.

"Comrade Gagarin, come in, please." The political department chief was standing there with my red Party card in his hand. He shook my hand and said, "Always conduct yourself as the great Lenin taught us to."

I replied in a shaky voice, "I shall try to deserve the title of Communist."

I had never been so moved in my life. I felt as though I had been infused with an unusually great amount of energy.

My admission to the Party was one of the great days in my life.

First View of the *Vostok*

It was shortly afterward that we met the chief designer of the spaceship, something we had long looked forward to. He was a jolly, witty, broad-shouldered, honest-to-goodness Russian, a man you felt at home with. We liked him immediately. He treated us as equals, as his close colleagues. He wanted our detailed reaction to each stage of the training program. "It's a nuisance," he said, "but I have to know it all, otherwise you'll come a cropper up there," pointing to the sky.

When one of us complained that it was unbearably hot in the thermal chamber, he explained that in flight the temperature in the spaceship would fluctuate between 59 and 68 degrees. But, he continued, the cosmonaut must be ready for any contingency. When the ship penetrated the denser sections of the atmosphere, its outer shell was likely to heat up to several thousand degrees. It seemed incredible. Just imagine it—a man inside a shell heated up to such a temperature! We had mixed feelings about it—apprehension and awe.

The chief designer showed us around the spaceship. It was a remarkable achievement in modern engineering.

"Look at this," he said. "The outer surface and the pilot's cabin are protected by a thermal shield to prevent their burning to a crisp in descent."

We were looking at a flying machine that no living man had ever yet traveled in. The chief designer told us that the spaceship would be placed at the tip of a powerful multistage booster rocket that would separate from its last stage upon orbiting. Then he told us something we hadn't heard before—that the program for the first manned flight called for the ship to circle the earth only once. "But it can do more," he added.

We looked the ship over. The pilot's cabin was not the completely enclosed affair we had thought it would be; it had several portholes. "The glass in the portholes," we were told, "is also heat-resistant. You'll be able to make observations through the portholes in flight."

Each of us went into the pilot's cabin. It was much roomier than the cockpit of a plane. From his chair the cosmonaut could make observations, maintain contact with the ground, control the flight and steer the ship by himself if necessary. The cabin had all sorts of equipment, much different from an airplane cabin.

Everything we saw was sturdy but light. Everything was spotless, brand

No vacation from his daily dozen. Good for spacemen and everyone else, Yuri says.

A brisk trot around the grounds of the sanatorium gets the day off to a good start.

Basketball is really Yuri's forte, but he manages a pretty good game of tennis, too.

new. Nobody had ever used this equipment. Nobody had ever seen it except the men who had designed and turned it out.

We climbed out, speechless with wonder. The resources and energy of the whole nation had been invested in this ship. To build it we had had to make the kind of metal our open-hearth furnaces had never produced before, and unusual kinds of glass, plastics, superdurable fabrics and wear-resistant varnishes, as well as all sorts of ingenious instruments. Chemistry, metallurgy—all the pure and applied sciences—had contributed to fashion this wonder of wonders. We hadn't the words to describe what we felt.

"Pack My Bag"

We practiced on the vibration stand, a machine that simulates a ship's vibration when the rocket engines are in operation. We got into it for an hour or more and were shaken as though with fever, the whole body vibrating like a plucked string. But we got used to it. We also got used to the thermal chamber, where we were subjected to very high temperatures for considerable periods.

I would come home dog-tired, play with the baby for a few minutes and begin to nod. Valya persisted; she wanted to know what was wrong with me. Finally I blurted out, "I'm getting ready to fly into space. Pack my bag."

Although Valya took it as a joke, she asked no more questions.

Since the baby now spent the whole day at the nursery, Valya took a job as laboratory assistant. She didn't like staying home twiddling her thumbs and got down to business, as she always did, with her usual seriousness.

We were up to our necks in work. I barely had time to read the newspaper reports of the July Plenary Meeting of the Central Committee, devoted to scientific and technical progress. At the session Nikita S. Khrushchev had said, among other things, "Science must light the way for engineers and designers so that they can keep fashioning better and better machines."

The chief designer told us about his meetings with Nikita S. Khrushchev at Central Committee sessions, at laboratories and at the cosmodrome. Our country's leader, he said, was giving a great deal of his time to our project.

Dog Cosmonauts

The second Soviet spaceship was placed in orbit on August 19, 1960. In its cabin, equipped with every necessity for manned flight—that is to say, for one of us—were two dogs, Strelka and Belka.

We were shown a television film of the flight and saw the dogs looking about them in fright, their ears pricked up at the strange noise that followed the count-down. They strained at their harness; but as the acceleration increased, the mounting force of gravity pushed them down. At first Strelka tried to fight it. Then both dogs became immobile. When the vehicle moved into orbit, the acceleration load was followed by weightlessness and the dogs floated in air. Their heads and paws hung limp and they seemed to be dead. But then they came to and Belka barked angrily.

Seven-month-old Galina takes her first vacation with her famous daddy rather nonchalantly. She spends a good part of her time fast asleep.

After a while they got used to the zero gravity and began eating from the automatic feeder.

The film bolstered our confidence and gave us a good deal of food for thought and discussion. We now saw in living action what had been purely speculative. Experience, they say, is the best teacher. If Strelka and Belka, live but non-thinking creatures, could endure space conditions, so could healthy, trained, purposeful people.

We experienced this weightlessness by reaching zero gravity in high-speed jet aircraft. Through special maneuvering we were able to simulate weightlessness by balancing the centrifugal and centripetal forces. Although the condition lasted a minute or so, we found that it did not impede our radio communication, reading or visual orientation, eating or drinking.

We concluded, as a result of these tests, that the ability to work was not affected by prolonged spells of weightlessness. When we shared our impressions with the training instructor, he said, "You can conclude what you like, but we need practical experimental proof. And the only place we can get that is in outer space."

We made prolonged stays in a specially equipped sound-proof chamber. This "solitary confinement" was designed to test our emotional stability when cooped up in a small space and completely shut off from the outer world. It was often a trying experience, especially since we were never told how long our stay in the "cell" would be. Several hours? A day and night? Several days? The men reacted in different ways to this "solitary confinement" and to the heat chamber, the centrifuge and the vibration stand.

Autumn flew by, with the innumerable lectures and training sessions. On December 1, 1960, the third spaceship was launched with the dogs Pcholka and Mushka, other small animals, insects and plants aboard as part of the research program in preparation for manned flight. The flight provided valuable information, but not everything went well. Because of a shift in the preplanned descent trajectory, the space vehicle disintegrated.

Some of the experts were fearful of the effect this accident would have on us. But we were not too disturbed. It was unfortunate that the dogs had died and the ship that had cost so much money and effort had been destroyed. But in so large and complex an undertaking such losses were inevitable.

Simulated Flight

Our training continued apace. We spent more and more time in mock-up of a spaceship cabin to get to feel at home. We had to learn the precise location of every button and switch so as to develop an almost automatic response. Our hands almost knew what to do by themselves.

We practiced using the manual controls; the orientation and landing systems; the temperature, air-conditioning and pressure adjusters; the guidance and control systems. The scientists had thought out every one of our motions.

Yelena is very much in her element at the sanatorium. "Doctor" is one of her favorite games.

Yuri is not nearly as accustomed to civilian clothes as he is to a uniform or a space suit.

We were taught to communicate with the earth through different channels and by different means. We learned to think logically and precisely and to record our observations in the log book with a minimum of words and numbers. In the mock-up it was easy to imagine yourself in a real vessel circling the earth.

The engineers fixed up a training stand equipped with an ingenuous electronic analogue to simulate flight variants. When seated in the cabin, the cosmonaut faced the full battery of instruments and flashing varicolored lights needed to duplicate all possible contingencies in flight. We sent and received radio messages that were recorded on tape, made observations through portholes and optical orientation systems, did orientation by globe and made entries in the log book—plenty to keep us busy.

Our mock-up cabin simulated both normal flight according to program and emergency situations. We operated exactly as though in flight, all the way down the line, even to wearing a space suit with pressurized helmet and gauntlets for protection in the event of a drop in the cabin's pressure. We had to eat and drink in full rig too.

Whatever unhappy moments we may have had reading the news of the death of Pcholka and Mushka—feelings we probably wouldn't have acknowledged even to ourselves—faded when the six and a half ton sputnik was launched, followed a week later by the firing from a similar sputnik of a space rocket that placed an automatic interplanetary probe in a trajectory to the planet Venus. That probe, carrying a pennant with the Soviet coat-of-arms, blazed the trail out to the other planets of the solar system.

At home everything was fine. My only worry was Valya, who was expecting a child any time now. I wanted a boy, and she a girl. On the seventh of March she gave birth to a daughter.

On the ninth, my friends told me, "Well, Yuri, here's another birthday gift for you."

"What gift?" I asked.

"A fourth orbital spaceship has been launched."

It reentered the earth the same day with passengers—the dog Chernyushka and other, smaller animals, and with a dummy spaceman in the pilot's seat. The main purpose of this launching was to check the reliability of the ship's design and all its systems for manned flight. Everything indicated that such a flight was not far off.

Nikita S. Khrushchev said that very thing several days later at a conference of leading farm workers in the Tselinny Territory. "We are confident that the time is not far off when the first space vehicle with a man on board will sail into outer space."

Test Launching

There was a feeling of spring in the air and a spring mood in our family when our second daughter was born. We named her Galochka. I hadn't much time to fuss with the little one because I had to leave for the cosmodrome, where preparations were under way for the last test launching of

our spaceship with experimental animals on board and a dummy in the pilot's seat.

The cosmodrome is a big affair some distance from public roads, staffed by highly qualified engineers and technicians who assemble and prepare powerful rockets with spaceships for launching. This is where the spaceships start off for the sky.

We were shown a light red-haired dog with dark spots. I picked her up. Zvezdochka weighed no more than 13 pounds. I caressed the animal and she trustingly licked my hand.

I stared at the giant beacon-like structure towering above the cosmodrome. The people fussing around it looked very small by comparison. I looked on as the final touches were being put on the rocket carrier. Zvezdochka and her companions were raised in the lift and placed in the cabin that sealed itself hermetically. A complete checkup of all the systems, then a second, and finally a third. The time set was nearing. In a moment the order for launching would be given.

During those few moments I could almost visualize myself in the cabin of that spaceship heading upward toward the sky, going through that preflight check.. Then the brief order—like a shot—and the tall, heavy multistage rocket rose, almost unwillingly, above the launching pad amid the roar of the engines and the flames that forced their way out of the nozzles. The rocket, as though it were a living, thinking creature, hesitated for a moment, trembled slightly, for a second or two hovered over the earth, and then suddenly vanished from sight, leaving a seething whirlwind of flames in its wake. It was all exactly as I had imagined it would be.

"That's how we'll see you off, too, Yuri," one of the fellows remarked.

The next day I still carried the image of that launching with me. The ship had already circled the planet and returned to its predetermined place. Specialists, biologists and physicians were already fussing over the dog, who had stood up excellently under the flight conditions. But I kept thinking of what had taken place before my very eyes and what I myself might soon be going through.

At home Valya asked why I was so pleased with myself and where I kept disappearing to all the time.

"I'm going to fly to outer space. Get my bag ready, will you," I said, trying to be funny.

"It's packed," Valya answered, and I realized that she already knew all about it.

We put our little girls to bed, had supper, and then began to talk seriously. I said that the first flight to outer space would soon be coming and that it was possible I would be the one to make it.

"But why you?" she asked.

I explained to her as best I could why I might be the one chosen. From the way her face suddenly turned serious, from the expression in her eyes, from the way her lips quivered and her voice changed, I could see she was both proud and fearful, but that she was not going to say anything that might worry me.

We talked most of the night, didn't close our eyes for a minute, recalled the past and built plans for the future. We pictured our daughters already grown and married. We saw ourselves playing with our grandchildren. When we had talked ourselves out, I asked Valya how she felt about the test I was facing. She answered, "If you are sure of yourself, go ahead. Everything will turn out all right."

Cosmonaut No. 1

The time was drawing close. Almost any moment now we would be sent to the Baikonur cosmodrome. I was terribly impatient. Never before had I found it so hard to wait. I knew that the ship that was to make the flight had been named *Vostok (East)*—so named because the sun rises in the east.

There was a send-off meeting of the Party just before we left with speeches from those who were leaving for the cosmodrome and those who were staying behind. Everyone assumed I had been chosen for the first flight. My friends said, "We envy you, but in the way comrades should. . . . Here's wishing you a happy flight . . . When you come back from outer space, don't put on airs, don't turn up your nose, stay as modest as you are now."

Then I was given the floor. I said, "I am proud and happy to be among the first cosmonauts. I hope to do everything I can to carry out with honor the assignment given me by the Party and the Government. Just as the big collective of workers and scientists did with the spaceship they created, I want to dedicate my flight to the 22nd Congress of the Communist Party of the Soviet Union."

Several of the space pilots were flown to the cosmodrome in case of last minute emergency changes. All that had to happen was for the first candidate to get a speck in his eye, or for his temperature to go up half a degree, or for his pulse rate to speed up five beats and he would have to be replaced. The others were just as ready for the flight as I. A physician accompanied us to the cosmodrome. The ship was ready to start exactly at the hour and minute specified.

That very night we flew to the cosmodrome. Yevgeni Anatolyevich, our commander, doctor and mentor, went with us. He is a man of rare charm and tact who has been looking after flyers for twenty years. He worked with us from the very first day, and, as he said, we had no secrets from him. He knew more about each of us than we knew about ourselves. Nikolai Kamanin came along with us also. He was one of the first to win the Hero of the Soviet Union award and has trained many pilots.

Next to me sat my best friend, Cosmonaut No. 2, a fine flyer, a Communist, a man with a wonderfully wholesome buoyancy. He, too, was looking down at the earth as it floated past us, and was probably thinking the same things I was. At times our eyes met and we smiled, understanding each other without words. Some people had thought we ought not to be told of the scheduled time of the flight until the last minute, so that we wouldn't be nervous and edgy. But I felt fine, and so did my friend who was ready to take my place in the cabin of the *Vostok*.

At the cosmodrome they were waiting for us—many of the specialists we knew and the chief designer. Also present was the "theoretician of cosmonautics"—that is what we called the eminent Soviet scientist under whose guidance the calculations for the space flight had been made.

Eve of the Flight

Time sped by rapidly. The day before the flight we were allowed a complete rest. We listened to quiet music. In the evening we played a short game of billiards and the doctor joined us for supper. For several days we had been eating "à la cosmos," tasty, nourishing food that we squeezed into our mouths from tubes. We talked about our childhood, about books we had read, about the future—not a word about the flight. The conversation was lively, with a good deal of kidding around.

The chief designer came in. He was attentive and gracious, as usual. He asked us no questions this time, said smiling, "Five years from now we'll probably be flying to outer space on a trade union pass."

We laughed heartily. He liked the mood we were in. He glanced at his wrist watch and left. I couldn't detect the slightest apprehension. He seemed to be just as sure of me as he was of himself.

The doctor attached several pickups to my body which would record physiological functions. This is a rather lengthy and not particularly pleasant procedure, but I had gone through it so many times during the training period that I was used to it.

At 9:50 P.M. Yevgeni Anatolyevich checked my blood pressure, temperature, and pulse. Everything was normal—pressure, 115/75; temperature, 98.6; and pulse, 64.

"Now go to sleep," he said.

I got into bed obediently. For several days we had been living by the same schedule, like twins. We were indeed brothers, for we were united by one great goal to which we henceforth devoted our lives. We traded a joke or two. Yevgeni Anatolyevich came into the room. "Boys," he said, "how would you like something to help you fall asleep?" He put his hand into the pocket of his hospital coat for some sleeping pills.

But we both refused to take any. Frankly, I don't think he had any with him. He was sure that we wouldn't take any. I was asleep in a matter of minutes.

After the flight Yevgeni Anatolyevich told me that when he tiptoed into our bedroom half an hour later, I was lying on my back, hand pressed to my cheek, sleeping peacefully. Cosmonaut No. 2 was sound asleep too, lying on his right side. During the night the doctor looked in on us several times. I slept well, without dreaming. At three o'clock the chief designer looked in and found us asleep. We later heard that he couldn't fall asleep and stayed up reading.

Yevgeni Anatolyevich did not close an eye. He kept walking around the house all night long, worried lest the trucks driving by and the sounds that came over now and then from the assembly shop would awaken us. But we slept like newborn infants. All of this we learned later.

At 5:30 A.M. Yevgeni Anatolyevich came into the bedroom and touched my shoulder lightly. "Yuri, time to get up," I heard him say.

"Right you are," I answered and got up immediately. Cosmonaut No. 2 also got up, singing a funny song we had made up about lilies of the valley.

"How did you sleep?" he asked us.

"The way you taught us to," I answered.

After we had done our usual setting-up exercises and washed, we had breakfast from the tubes—meat purée, black currant jam and coffee. Then came the medical exam. Everything checked out normal and was so indicated in the medical report.

Dressing for Space

It was time to get into my space outfit. I put on a warm, soft, sky-blue flying suit over which, with my comrades' help, I donned a protective bright orange space suit that I would be able to work in even if the ship's cabin, in orbit, should not prove airtight. The instruments and equipment in the suit were also checked, a procedure that took quite a long time. Then I put on a white communication helmet and, over that, a hermetic helmet with CCCP (USSR) inscribed on it in large letters.

One of the people dressing me was Nikolai Konstantinovich, Honored Parachutist, who had taught us how to make difficult jumps. His advice was very valuable because he himself had been jettisoned several times from planes equipped with the type of special seat and parachute device installed in the spaceship. This variant landing, to be used if the ship came down in an unsuitable area, made it possible for the cosmonaut to jettison from the ship at a low altitude, and then to separate himself from the seat and drop by parachute.

The chief designer arrived. This was the first time I had ever seen him worried and looking tired, probably the result of his sleepless night but with his usual gentle smile. I felt like embracing him the way I would my

father. He made several suggestions that might help me in flight. He seemed to feel better after Cosmonaut No. 2 and I said almost simultaneously, "Everything will be fine. Everything will work out all right."

A specially equipped bus drove up. I took my place in the "space" seat that resembled the one in the ship's cabin. My suit had a ventilation device, connected to the power source in the bus, to which electric power and oxygen was supplied. Everything functioned well.

The bus sped along the highway. At a distance I saw the silvery tip of the rocket pointing to the sky. Its six engines had a combined capacity of 20 million horsepower. The closer we came to the launching pad, the taller the rocket loomed—a gigantic beacon with the first rays of the rising sun lighting up its tip.

The weather was favorable, the sky clear, with a few fleecy clouds somewhere far off in the distance. "A million miles of altitude, a million miles of visibility," I heard someone say.

The chief space scientist and the chief designer stood together at the launching pad, their faces glowing in the morning light. For them this was the hardest day of all. Standing around were the members of the state commission responsible for this first space flight; the men who headed the launching crew; scientists and engineers; my twin, Cosmonaut No. 2; and the other space pilots. The dawn's light flooded everything.

I became more and more impatient, and so did everyone else. People kept looking at the chronometers. At last the report came that the ship was ready. The only thing left was to get the cosmonaut set in the cabin and make a final check of all the systems.

I looked at the ship in which I would be setting off in a few minutes on a trip no one had ever before taken. It was beautiful, more beautiful than a locomotive, a steamer, a plane, a palace, a bridge—more beautiful than all of these creations put together. This was not only a monumental piece of engineering but a great work of art, and the thought occurred to me that this beauty was eternal and that it will remain for the people of all lands for all time to come.

Before going up in the lift to the ship's cabin, I made a statement for the press and radio. There was quiet all round me as I spoke, except for the sound of the tape recorder.

"To be the first to attempt what generations of people have dreamed of, to blaze man's trail into space, this is a tremendous responsibility. This is a responsibility not of a single person, not of dozens of people, or of a collective. It is a responsibility of all the Soviet people, of all mankind, present and future. And if nevertheless I venture on this flight it is because I am a Communist, because I draw inspiration from the great feats of my compatriots, Soviet people."

I noticed the chief designer steal a glance at his watch. "There are only a few minutes left before the launching," I continued. "I want to say what all people do when they start out on a long journey—'Till we meet again!' I should like to embrace you all, those of you I know and those I do not, close friends and strangers alike." I lifted both hands and said, "See you soon!"

"Earth, This is Me!"

I went into the cabin. The hatch closed noiselessly. I was alone with the instruments. They were no longer illumined by sunlight but by artificial light. I could hear everything going on down below, on the earth, which was now even dearer to me. The gantry was removed. Silence set in. I reported:

"Earth, this is me, Cosmonaut. Communications checkup complete. Tumblers on the control panel are set as directed. Horizon scanner is dead on the horizon. Pressure in the cabin is 1 atmosphere; humidity, 65 per cent; temperature, 66 degrees; pressure in the compartment, 1.2; pressure in orienting system, normal. Feel fine. Am ready to start."

The flight technical director announced 1.5 hours left to take-off, then an hour, then a half hour. A few minutes before the start they told me that my face was clearly visible on the TV screen, my pulse reading was 64, my respiration 24. Everyone was pleased to see me looking so cheerful.

I reported, "Heart beating normally. Feel fine. Have put on my gloves, closed my hermetic helmet and am ready to start."

The launching orders were passed on to me also. The flight technical director gave the order, "Up."

I responded, "Up we go! Everything proceeding normally. Feel fine."

I glanced at my watch. The hands pointed to 9:07 A.M. Moscow time. I heard a whistling noise and the mounting roar of the engine. The giant vehicle shuddered and slowly, very slowly, rose from the launching pad. The noise was no louder than in the cockpit of a jet aircraft, but it ran a gamut of tones and inflections that no musical instrument or human voice could reproduce. The mighty rocket engines were sounding the music of the future, probably more stirring and more wonderful than the greatest creations of the past.

The acceleration load began to mount. I was pushed back deeper and deeper into the seat. And even though I was seated in a way that reduced the effect of this great load to a minimum, I could hardly move hand or foot. I knew this would not last long, that it would ease up as soon as the vessel accelerated to orbital speed and went into orbit, but in the meantime the load kept growing.

"Seventy seconds since launching time," earth told me.

I reported back. "Roger. Seventy seconds. Feel fine. Flight continues. Loads mounting. All's well." My tone was brisk but I was telling myself —only seventy seconds. Each of them felt as long as an ordinary minute.

"How are you?" earth asked again.

"Fine. How are things with you?" I asked.

"Running on schedule."

I maintained two-way radio communication with earth on three channels. My transmitters worked on frequencies of 9.019 and 20.006 mc/sec. and on 143.625 mc/sec. in the ultrashort-wave band. The ground operators sounded as though they were sitting right next to me.

Beyond the dense layers of the atmosphere the nose cone jettisoned automatically and flew off at a tangent. The *Vostok* was passing over a broad Siberian river. I could clearly see islets and wooded shores lit up by the sun.

"How beautiful!" I said involuntarily, and hastily bit my tongue for my job was to collect information, not to admire the beauties of nature, especially since earth was calling for my report at that moment.

"I read you five by five," I reported. "Feel fine. Flight proceeding normally. Load increasing. I see the earth, woods, clouds . . ."

The acceleration load kept mounting, but my body seemed to be adjusting to it. It had been worse in the centrifuge, I thought. And the vibration in training sessions had also been much greater. In short, the devil wasn't as black as he'd been painted.

A multistage rocket is such a complex structure that it is hard to describe it by comparing it with anything conventional. When the fuel burns out, the worked-out rocket stage becomes superfluous and is automatically separated and cast off. The remaining section of the rocket continues to accelerate.

I hadn't met the scientists and engineers who developed the light, portable fuel for Soviet rocket motors, but as the engines kept boosting me higher and higher toward the designated orbit, I felt like shaking their hands and saying "Thanks." The intricate motors operated like clockwork.

One after another the burned-out stages separated off. I reported: "Have separated from carrier according to schedule. Feel well. Cabin readings are: pressure, one atmosphere; humidity, 65 per cent; temperature, 20 degrees; pressure in capsule, one atmosphere; pressure in altitude control systems normal."

Weightlessness

The ship moved into orbit, its highway through space, and I experienced the weightlessness that as a boy I had read about in Tsiolkovsky's books. It felt strange at first; but I soon became accustomed to it and continued to carry out the flight program.

Weightlessness is a curious feeling, but the body adapts itself quickly and one feels an amazing lightness in the legs and arms. The transition I made was gradual. I floated up from the seat and remained suspended in mid-air.

When the force of gravity began to ebb away, I felt wonderful. Everything was so easy to do. I felt that I was completely detached from my hands and feet and whole body. They weighed nothing. I neither sat nor lay, I simply floated. Everything that wasn't tied down—my map case, pencil, note pad—bobbed up in the air. It was all like a dream. Drops of water from the drinking hose formed sphericles and drifted till they touched the walls where they stuck like drops of dew on a flower.

My ability to work was not affected. I continued to take instrument readings, make observations through the portholes and note down entries in the log. I wrote with an ordinary lead pencil without taking off my hermetic gauntlets. I had no difficulty writing.

Forgetting for a moment where I was, I put the pencil down and it immediately drifted away. I was speaking into the tape recorder and didn't try to catch it. I continued to maintain radio communication with earth by microphone and telegraph key on several channels.

Wonderfully Beautiful!

Earth wanted to know what I saw. I told them that our planet looked much like it did from a jet plane at high altitude. Mountain ranges, big rivers and forests, islands and seas stood out in bold relief.

I saw clouds and the shadows they cast on that dear, distant earth of mine. It was the farm stock I came from that made the pitch black sky look to me like a plowed field sown with stars.

The stars were bright and pure. The sun, too, was wonderfully bright. Even through closed eyes the glare was almost unbearable—scores, probably hundreds of times as bright as on earth. It was brighter than the molten metal I had handled in the foundry. To keep out the glare of the sun I drew the protective blinds across the portholes.

From my observation point the expanses of water on earth were dark spots, sparkling a little. The roundness of our planet was readily apparent. At the horizon I saw the sharp division between bright earth and inky-black sky. The earth was surrounded by a delicate blue halo progressing from turquoise to dark blue to violet to carbon black—a very beautiful transition.

The cabin was filled with music from home—Russian voices singing one of my favorite songs, "Amur Waves." I was not alone. Hurtling through space, I continued to work for my country. The radio tied me to earth. I received commands, reported on the way the ship's systems were operating. In every word from earth I felt the support of my people, of the Government and Party.

I took continuous instrument readings and estimated that the *Vostok*

was following its preplanned orbit and would soon move into the globe's night side. The ship passed into the shadow very quietly. It grew pitch dark almost instantaneously. The ship, I thought, must be passing over the ocean because I didn't see the golden dust of city lights below.

At 9:51 A.M. the automatic altitude control system switched on. When the *Vostok* emerged from the earth's shadow, it used the sun for tracking and orientation. The sun's rays pierced the earth's atmosphere. The horizon became bright orange, gradually changing to all the colors of the rainbow—ultramarine to dark blue to violet, to black.

17,400 Miles an Hour

Passing over Cape Horn at 9:52 A.M., I reported: "Flight proceeding normally. Feel fine. Instruments operating well."

I checked and found that the *Vostok* was keeping to its schedule. It was traveling at almost 17,400 miles an hour, a velocity hard to imagine on earth. I wasn't hungry or thirsty but, following the schedule, I ate and drank from the special water supply system at the time indicated.

The food had been made up according to recipes prepared by the Academy of Medical Sciences. I ate just as we do on earth, except that I had to be careful not to open my mouth too wide. Although all my physiological functions were being checked from earth, every now and then I listened to my heart beat. My pulse and respiration, under conditions of weightlessness, were normal. I felt fine, my mind was clear, and I had no difficulty working.

Embedded in my space suit were light, well-placed transducers that transformed such physiological factors as the electric potential of the heart, the pulsations of the vascular walls and the respiratory motions of the chest into electric signals. Amplifying and measuring systems transmitted these impulses earthward. The earth, it struck me, knew more about my physical condition than I did.

From the moment the rocket left the launching pad, all its complex mechanisms were controlled by automatic systems. They operated the rudders guiding the rocket along its preplanned trajectory, controlled the engines that gave it the necessary velocity, and jettisoned the burned-out rocket stages. Automatic regulators kept the temperature inside the ship at the required level and controlled its altitude in space, actuated the measuring instruments and served other purposes.

Also at my disposal was a manually operated flight control system. All I had to do was to throw the appropriate switch and I could take over complete control of the flight and landing. I would then be checking the position of the craft against the instruments, calculating the landing spot, keeping the ship positioned with the altitude control lever, and firing the retarding rockets at the precise moment. There was no need to do any of this, however; the automatic systems worked flawlessly.

I looked out at the surrounding universe and tried to see everything at once. Myriads of bright, cold stars shone through the portholes like diamonds. How far away they were! Scores of flight years, perhaps, but they seemed much closer from the orbit than from earth.

At 10:15, as the vessel was approaching the African continent, I made my scheduled report: "Flight proceeding normally. Enduring weightlessness well."

Return to Earth

The final stage of the flight was approaching—the return to earth. I began preparing for it. I would have to pass from weightlessness to new, perhaps even greater loads, and the ship would be heating to enormous temperatures as we entered the dense layers of the atmosphere.

Until now what I had experienced had been more or less duplicated in the training sessions on earth. What would happen on this last, and most critical, leg of the flight? Would all the systems work efficiently or was there something unpleasant in store for me? Automation was all very well, but I took no chances and checked the ship's bearings so as to be ready to take control and descend to earth independently.

At 10:25 the retarding rockets were fired automatically. The ship slowed down and dropped from its orbit into a transitional ellipse. Soon it entered the dense layers of the atmosphere. The outer skin began to heat rapidly, and through the porthole blinds I could see crimson flames enveloping the ship. Although I was hurtling downward in a ball of fire, the temperature inside the cabin stayed at 68 degrees.

The weightless state had long since passed and the load pushed me back deep into the seat. It mounted rapidly and exceeded the load during the boost stage. The ship began to spin and I reported this to earth. I was alarmed by the spin, but it soon stopped and the descent continued normally. It was apparent that all the systems had functioned without a flaw and that the vessel was heading for the preplanned target area.

I was so happy, I started to sing aloud—my favorite song—". . . My country hears . . . My country knows . . ."

The vessel lost altitude quickly. I began preparing for the landing . . . ten thousand meters . . . nine thousand . . . eight . . . seven . . .

Landing

At 10:55, after circumnavigating the globe, the *Vostok* landed safely in the area designated, in a field of the Leninsky Put Collective Farm, not far from Smelovka village to the southwest of Engels. It was in this part of the country that I had made my first plane flight. How long ago that seemed! Only six years, but what a difference in the two flights. This time I had flown two hundred times faster and two hundred times higher. Soviet wings had grown two hundred fold.

When I reached the ground a woman and a little girl with a spotted calf stood nearby. They looked at me in astonishment. I walked toward them and they toward me. Then they hesitated. I was still wearing the bright orange space suit, and they must have found me alarming. They had never seen the likes of it before.

"A friend, comrades, a friend!" I called out, taking off my hermetic helmet.

The woman was Anna Takhtarova, the wife of a forester, and the child was her six-year-old granddaughter Rita.

"You've really come from outer space?" the woman asked.

"Believe it or not," I said.

At that moment several tractor drivers ran up to me yelling, "Yuri Gagarin, Yuri Gagarin!" We embraced each other like brothers.

Very soon a group of soldiers and an officer drove up in a truck. They hugged me and shook my hand. Someone called me "Major" and I realized that Defense Minister Marshal Malinovsky had skipped a rank in promoting me; it was a very pleasant surprise. Somebody with a camera took a group picture.

The men were very much interested in the spaceship. I gave the *Vostok* the once-over and found its instruments shipshape. They could be used for another flight.

The soldiers stood guard over the spaceship. Soon a helicopter arrived with specialists and aviation officials to register the record flight into space. They remained at the *Vostok*, and I was flown to the command post for my report to Moscow.

I had hardly said hello to my comrades waiting there for me when I was handed a congratulatory telegram from Nikita S. Khrushchev. A while later I was called to the telephone to speak to him. He was in Sochi.

"I am glad to hear your voice, dear Yuri Alexeyevich," was his cordial greeting.

I reported the success of the world's first manned space flight, and he congratulated me again. He asked about my health, whether I was married and had any children, where my mother and father lived and what their occupations were. And before saying good-by: "Once again I congratulate you with all my heart! Till an early meeting in Moscow! The best of luck to you!"

In these exciting first hours after my return to earth I had many happy reunions with old and new friends. Everyone was dear to me. My meeting with Cosmonaut No. 2, who had arrived by jet plane from the cosmodrome to the landing place with the other men who had trained with me, was especially moving.

"Well," he asked, "are you happy?"

"Very," I said. "And you'll be as happy the next time."

We all drove to a secluded house overlooking the Volga. I took a shower and had a combined lunch and dinner, this time terrestrial style and with a good, terrestrial appetite.

Meeting in Moscow

At ten in the morning the scientists and engineers who had prepared the *Vostok* for its first flight gathered in that little house on the Volga. I was glad to see the chief designer among them. He was smiling and he looked younger. Now that a man had actually flown to space, circled the globe and returned, the chief designer felt fine. He embraced me.

To this audience I reported on the operation of the ship's systems during the flight and described everything I had seen and felt. They listened with the closest attention. There were so many impressions and they were so unusual that I wanted to share them with others. I spoke for a long time trying to recall everything to the last detail. Then the questions began. I tried to answer as precisely as possible realizing how important my replies would be for further progress in the conquest of space.

An Il-18 plane came for me from Moscow. As we approached the capital, an escort of MIG fighters, like those I used to fly, met us. They flew so close to our airliner that I could see the pilots smiling at me. I smiled back.

The Il-18 landed and taxied to the air terminal. I put on my dress greatcoat with the new major's shoulder straps, took a last look at myself in the porthole glass, stepped out of the open door and down the gangway. I saw a platform crowded with people and bright with flowers. Leading up to it from the plane was a bright red carpet.

I had to walk the length of that carpet all alone. Never before, not even up there in the spaceship, have I ever been so excited. The carpet seemed endless. With television and movie cameras focused on me, and to the tune "We're Here to Make Fantasy Come True," the flyer's march, I walked along.

I recognized the members of the Party Presidium and the USSR Council of Ministers. I saw my father, mother and Valya, and met the warm, encouraging glance of Nikita S. Khrushchev. I approached him, saluted and reported, "Comrade First Secretary of the Central Committee of the Communist Party of the Soviet Union, Chairman of the Council of Ministers of the USSR, I am happy to report that the assignment of the Central Committee of the Communist Party and the Soviet Government has been fulfilled."

The End

SOVIET DIARY

REMARKABLE RESULTS

THE recently published report of the Central Statistical Board under the USSR Council of Ministers on the fulfillment of the state plan for the economic development of the USSR for the first half of 1961 shows that Soviet industry and agriculture are running well ahead of the target figures set for this third year of the seven-year plan.

In the first two and a half years of the plan Soviet industry produced 15 billion rubles' worth of goods over and above the quota. The output of this 2.5-year period was equal to the total production of the 1951-1955 five-year period.

Industrial production for the first six months of this year was 8.4 per cent higher than for the comparable period of 1960. Average daily output increased by 9 per cent. Almost 35 million tons of steel were smelted, 80 million tons of oil extracted, and 157 billion kilowatt-hours of electricity generated in the first half of 1961. Greater output in these basic industries affect all others, of course.

Production rose sharply in the machine-building industry, particularly in the output of farm equipment, where the comparable period of 1960 was topped by 28-30 per cent.

More machines made it possible for collective and state farmers to sow 18.3 million more acres of grain this spring than last. The acreage sown to fodder corn was also enlarged by 63 million acres.

The southern parts of the country started harvesting at the very tail end of the first half of the year so that they could not be included in the figures published by the Central Statistical Board. But everything thus far points to a fine wheat crop, with harvesting already completed in the Ukraine, the North Caucasus, the Volga Region and Southern Kazakhstan.

The continued rise in the living standards of every Soviet person is closely connected with the successful fulfillment of the seven-year plan. Full employment has long been a fact of life in the country where production is planned and the abilities and experience of every person are put to valued use.

The number of men and women engaged in productive labor keeps growing as the new graduates join the ranks of the workers, inasmuch as all branches of the economy, which develops according to plan, continually require more manpower. In the first half of the year the total of employed persons rose by 4.2 million. A million of them were new secondary school graduates, another 750,000 were just out of college and specialized secondary school.

Wages keep rising. During the six months under consideration earnings of factory and office workers rose by an average of four per cent. In certain industries and in construction the average rise was greater—five per cent—despite the cut in the workday to seven and six hours.

During the six-month period, more than 13 billion rubles were spent for education, public health and other social services, a billion more than in the corresponding period last year. The housing program is moving along fast. In the half year about 500,000 apartments were built at state expense.

CONFERENCE ON HIGHER EDUCATION

IN 40-odd years the Soviet schools of higher education have turned out almost five million well-trained specialists for the national economy. The present college and university student body totals 2,400,000, more than twice the number in all countries of Western Europe taken together.

More than 2,500 professors, teachers, scientists, representatives of the Economic Councils, enterprises and the ministries met in Moscow recently at the All-Union Conference of Workers in the Higher Schools to discuss the changes that had taken place in the work of the higher school since passage in 1958 of the Law on Strengthening Ties between School and Life and on Further Developing the Public Education System in the USSR. The purpose of this law was to relate classroom teaching more closely to life, giving students work experience in factories and on farms, thus improving both the theoretical and practical aspects of learning.

The conference noted that the two years during which the higher schools had worked in the new way had produced good results. The new college and university curriculum provides for more thoroughgoing theoretical study in such subjects as higher mathematics, physics, chemistry and mechanics. The course of study also requires two years of actual work experience.

The general feeling of the conference was that the practical experience in factories and on farms had helped students master their theoretical studies and organize their time more effectively, and had proved an important factor in character building.

Courses in industrial electronics, computing mechanisms and telemechanics are being introduced in the technical colleges. Vsevolod Yelyutin, Minister of Higher and Specialized Secondary Education of the USSR, made the point in his report to the conference that in the very near future every Soviet engineer would have to familiarize himself with electronic and computing machines.

Other educational areas discussed by the conference included the study of the humanities, evening schools of higher education and teacher training schools whose curriculums have undergone considerable improvement.

WINGS OF THE SOVIET UNION

THE annual parade of aircraft at Moscow's Tushino Airport drew hundreds of thousands of visitors this year as it has on previous Soviet Aviation Days. Fliers, glider pilots and parachutists — amateur and professional — passed overhead in thrilling review. The latest achievements in Soviet airplane construction were also demonstrated at the parade.

There were planes that flew at supersonic speed, a plane with a liquid-fuel jet engine capable of developing a velocity more than twice the speed of sound, jet planes with boosters, heavy airships of the most varied types and designs.

A multipassenger aircraft that combined the features of a helicopter and a plane whirled overhead. An armada of turbojet and turboprop passenger planes thundered by. It was led by the TU-114 that recently opened the new long-distance Moscow-Far East route. A helicopter transported a complete prefabricated building—the field laboratory of a geological expedition—and set it down at the airdrome.

Flying is a very popular sport in the Soviet Union. Airclubs, glider stations and model plane workshops provide instruction and use of equipment without cost. The number of flying amateurs keeps growing all the time. Some of them displayed their skill at Tushino, going through a whole repertoire of daredevil stunts. Amateur pilots Vadim Ovsyannikov, a worker at the Minsk Brick Yard, and Vladimir Voloven, a Kiev printer, won special acclaim.

Competing with the fliers and glider-pilots for the attention of the crowd at Tushino were parachutists, many holding world records.

The USSR leads all countries in aviation records. Soviet parachutists hold 56 of the 81 global records registered by the FAI. Among those who made spectators at Tushino hold their breath were Vasili Romanyuk and Ivan Savkin, who have 4,000 jumps to their credit.

HEROES OF OUR TIME

A COMMUNIST

PARTY MEMBER

By Anatoli Russov

Photos by Alexander Mokletsov

Anatoli Subbotin says, "Every furnace has its own personality. You've got to understand it if you're going to get good steel out of it." He won the Stalin Prize for cutting smelting time.

Anatoli prefers self-study to formal schooling. "I like to keep moving ahead, learning things," he explains. "Keeps a man feeling young." Here he is at the Lenin Library going through recent books on steel.

ASK THE PEOPLE working at the Hammer and Sickle Plant in Moscow about Anatoli Subbotin and they'll tell you—as one of them did me—"You know what they say about flower growers with green thumbs? Well, whatever the equivalent is for steelmakers, he has it."

After fifteen years or so of open-hearth furnaces and rolling mills, Anatoli looks a little as though he were cut out of steel himself. There is a quiet and confident strength in his face and an easy, unhurried calm in his motions.

When we came to the mill, Anatoli was trying out a new furnace. He wasn't altogether happy with it. "You know," he said, "all these improvements and new control gadgets are fine, but every furnace has its own personality. You've got to understand it if you're going to get good steel out of it."

Anatoli is the son of a Moscow factory worker. When he got through high school in 1941, he took a job as apprentice to a lathe operator. He was learning the trade and seemed happy in it when he saw some friends of his smelting steel at the Hammer and Sickle Plant. As he watched the fiery mass flow out of the furnace like quicksilver, he decided that this was where he belonged.

Although he was earning good pay as a lathe operator, Anatoli switched to the Hammer and Sickle Plant as an assistant steelmaker. It took him three years to qualify as an expert steelmaker—that was in 1948. Then, because techniques kept growing more complicated, he took a refresher course given by the plant.

While he was taking the course, he figured out that it should be possible to cut the smelting schedule by a half hour. He went to the superintendent and told him that. The superintendent said it was impossible. And he was not the only one who said that. But Subbotin was not alone either. He was supported by his shopmates, who, like him, were Young Communists.

In the spring of 1950 Anatoli reduced the smelting schedule from six hours 30 minutes to five hours 40 minutes, thereby showing the doubters that the impossible can be made to happen. He received a Stalin Prize —an award given for outstanding contributions in science, engineering, art and literature—for expediting an operation that added tons of metal to the country's annual output.

The Figures Tell the Story

Anatoli keeps informed on the rising production total of the basic metal. "Comparisons tell the story," he says. "Let me give you a few figures. In 1928, when we were starting out on our first five-year plan, we produced 4.3 million tons of steel. By the prewar year 1940 we had already climbed to 18.3 million tons. And in 1950 we were making 27.3 million tons. But that's all ancient history. By the time the seven-year plan ends, in 1965, we will be producing 90 million tons. You can plot quite a curve from these figures. And it's not the curve for steel production only. It also plots the country's industrial growth and the rise in living standards."

Presently, Communist Party members in the Soviet Union—more than eight million—are making preparations for the coming 22nd Party Congress. Anatoli has pledged to produce 1,500 tons of steel above plan by October 17, the day the congress opens.

"We don't push hard for more steel just to break production records," Anatoli says forcefully. "We need it to make life better today than it was yesterday and better tomorrow than it is today. What we're working for is a future where there will be enough produced to meet everyone's needs and where everyone will find his job a pleasure.

"But to get to that point," he continues, "we must produce an abundance of material goods and services. And that means working as well and as productively as one can."

Working the Communist Way

And that is precisely what Anatoli is doing. It was an obligation he undertook when he joined the Party at the age of 23. His membership gives him no special privileges; on the contrary, it imposes more responsibilities. He is expected to do more than his job calls for, to do better at it than others and in general, on the job and off, to lead by example. Anatoli calls this working and living the communist way. Even in small things, he explains. "Before I joined the Party, I would sometimes yell at a helper to let off steam. Not any more, even

With one of his boys, Alexander, at the Museum of the Revol[illegible] the first Soviet-made tractor, built in Stalingrad in 1930. "[illegible] long way since then," Anatoli is telling his son, "all the way to the [illegible]

Anatoli sponsors the Communist Party membership application of young steelworker Vyacheslav Koptev. Party membership, he explains, gives a person no privileges. On the contrary, it means new responsibilities.

Anatoli's wife Masha is the very young-looking mother of these two big boys. Vladimir is fourteen and Alexander twelve. Masha works in an industrial diamond factory as a grinder. She heads a team of three women.

though there are times when there's good reason for yelling."

As time went on, Anatoli became the person in the shop men looked to for answers, and in 1953 they nominated him for public office. He was elected a member of the District Soviet where he headed the Housing Committee.

"It meant seeing an endless stream of people," Anatoli recalls, "and listening to an endless string of suggestions and complaints. And though I held down my full-time job as a steelworker, I managed somehow or other to find time after work and on weekends to receive people at my home or at the District Soviet office, to look into complaints, to speak at meetings and to write for the newspapers. Every so often I'd have to go to the Moscow City Soviet to argue a point for my constituents. I wasn't able to do everything, but I did manage to get many families moved to new apartments; to get the District Soviet to fix up some of the older buildings; and to get a new laundry, a factory lunchroom and a nursery built. Incidentally, the nursery was built with funds made available by savings on other construction projects."

"By his work he justified our trust in him," Anatoli's constituents said after hearing his report at a meeting.

Self-Study

Books catch your eye as you walk into Anatoli's rather spacious apartment. The shelves are crowded with the novels of Tolstoy, Gorky and Dreiser, and the works of Lenin, Plekhanov, Chernyshevsky and Lunacharsky and the Utopian Socialists Campanella, Fourier and Robert Owen.

Unlike most of his friends who are continuing their formal schooling at one or another of the city's technical institutes, he prefers to study by himself—a personal bias, he says. "When I was taking courses, I studied the theory in my own way. I never followed the sequence outlined in the curriculum. When I came upon a problem I couldn't do, I rummaged through the textbooks. When the textbooks didn't help, I rummaged through technical magazines. As a last resort, I'd ask the instructor."

Anatoli devotes most of his spare time to serious reading and study. Last year, when the mill went over from an eight- to a seven-hour day, he decided to use the extra hour to learn English.

"I like to keep moving ahead, learning things," he says. "It keeps a man feeling young." And he recalls a picture of Father Time he came across in a magazine he was leafing through in his English class. "There was this gloomy-looking, baldheaded old fellow with a scythe in his hand and a malicious grin on his face. He was sitting in a cart that moved along toward some dreary destination, and he was looking backward to the past. But this isn't my idea of Time. I'd picture a group of young, excited geologists scaling a peak that had never been climbed before. Though theirs is not a path of roses, I am convinced they'll reach their goal."

Reaching Into the Future

I'm introduced to Masha, the young-looking mother of two boys—14-year-old Vladimir and 12-year-old Alexander. She works as a grinder of Yakut industrial diamonds at the Elektroprovod Plant, heading a team of three young women. She earns 85 to 90 rubles a month. Anatoli met his wife—he calls her Mashenka—during the war. He was still working as a lathe operator repairing all sorts of damaged weapons that were brought by rail straight from the front and dumped on the factory grounds.

He still remembers that 17th of April. It was a windy, cloudless day, and you could feel approaching summer in the air. He had slipped out of the shop for a smoke and he noticed a girl climbing a pile of slag to watch the unloading of a freight train piled high with wrecked tanks and guns. "She was slim and willowy, and in her light green dress and gay kerchief she reminded me of a spring flower blooming on that hill of broken metal," Anatoli reminisces.

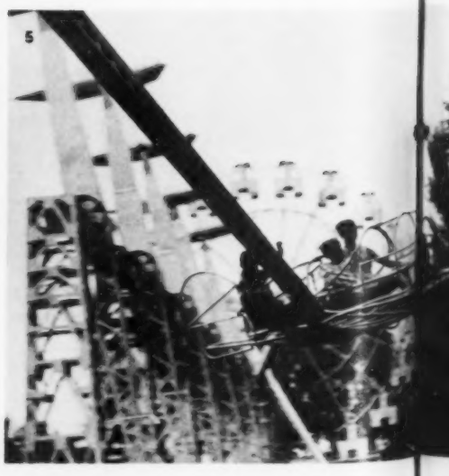
Masha comments with a quiet smile, "That was a long time ago."

"We've all of us gone a long way since," Anatoli says. "A while ago we took the kids to the Museum of the Revolution. The first Soviet-made tractor was on display. It had been built in 1930 at the Stalingrad Tractor Plant and had put in a quarter-century of work on collective farm fields.

"That tractor kept popping into my mind for weeks afterward. I was in the German Democratic Republic to pass on some of our steel know-how shortly after that museum visit and went with a group of German comrades to an art show of French abstractionists, with a few representational works thrown in for contrast, I suppose.

"What struck me at the show was Rodin's *Thinker*—it was only a copy, and of just the head at that. The eyes look into the future, the face is strained—the man is thinking, trying to fathom still unattainable knowledge. The figures seems to say: 'Man is almighty!' And I recalled Moscow, the solemn hush at the Museum of the Revolution and the caterpillars of our first tractor, polished by the earth so that they seemed to be wet. Then I recalled a Latin proverb I'd learned at school: *Ad astra per aspera*—through obstacles to the stars. And I thought about the long road my country had traveled. We were the first to touch the stars with our sputnik, but a mere thirty years ago we had only this one tractor."

My name is Alia Mamasbayeva. I am six years old. I live in Alma-Ata. That's the capital of Kazakhstan. My mommy and my daddy teach at the university.



A CHILD'S DAY

A picture story by Dmitri Ukhtomsky

1. The day really begins when I start out for the nearby kindergarten. The streets are very sunny; that's why I take my parasol.

2. Sometimes Daddy accompanies me. Near the building Daddy lets go my hand and says, "Go." But he watches me go through the door.

3. It's fun in the kindergarten. We play games and take walks with Teacher. I love to observe the goldfish in the animal corner.

4. I like to draw too, and after we nap I draw till suppertime. The other children play with the blocks and make things with clay.

5. After supper Daddy comes for me. Sometimes he takes me to the park and we go on the amusements. There's one like a plane.

6. If it weren't for Daddy, I would have stayed in the park longer. But Daddy said, "No!" and he would not change his mind.

7. So I had to go home to bed. But on the way we had a long talk and he promised me that next Sunday the whole family would go.

Lydia and August (right) Tomingas work as a team, whether it's raising a family or running a bus.

She's conductor and he's driver on the bus line between Tallinn and the seaside town of Kjasmu.

IF YOU TAKE THE BUS from Tallinn, the Estonian capital, to the seaside town of Kjasmu, you'll make friends—all the passengers do—with August and Lydia Tomingas, driver and conductor, respectively. They've been doing things together for a long time now.

Their passengers are local people and anglers and vacationers drawn to this region of shimmering pine-fringed lakes crowded with fish waiting to be lured. It doesn't take much to start Lydia or August or both of them talking local history and legend, and after a rest stop there is usually a small bouquet in the cab left by the passengers as a token of gratitude to the couple.

Running the daily bus to and from Kjasmu is one of their two major joint activities. The other is building a family. They've been doing a good job at both.

The Tomingases live in the Tallinn suburb of Paaskjula with their two sons, 10-year-old Matti and 12-year-old Gustas, and Grandma, who takes care of the youngsters while the parents are at work.

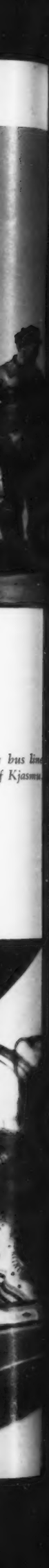
The Tomingases live simply. Together they earn 200 rubles a month—no great sum, but quite enough for their needs. Family life centers on the children, as it does in any household built on affection and mutual respect.

Matti and Gustas are nice, normal children who feel that school and homework are things to get over with as quickly as possible so they can get back to the really serious business of soccer. That leads, from time to time, to equally serious discussion about how much time is being spent on homework.

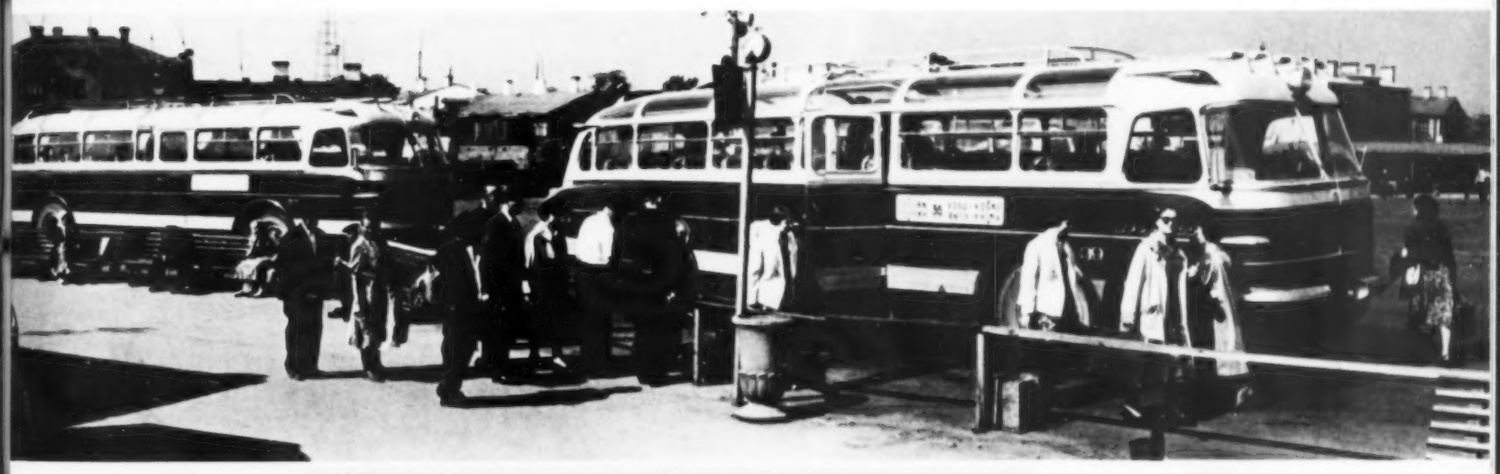
The Tomingases—young and old—like to do things together. Sundays they spend in the country fishing. Lydia's fish soup cooked over a campfire is very special indeed. Weekday evenings—in whatever little time is left from homework and soccer—the kids battle with Dad over a chessboard or show him the new stamps they've collected.

If you ask the Tomingases how things are going, chances are they'll answer, "Everything's OK." And as you take stock of this friendly family, where each one has the same gay but scrupulous attitude toward his duties and where all love a joke and a good laugh, you realize that the short phrase does indeed express their appreciation of life.

Lydia (left) is friendly on the job. The flowers in August's compartment (on the right) are from one of the regular and grateful riders.



BUS TO KJASMU



The way a man looks and how he drives are related, says August.

It takes work to keep three men--two little and one big — fed and happy.

The Tomingas juniors usually join forces against Dad. It's no walkaway. He has to work to win.

Time out from chores for glancing at the daily, printed in Estonian.

The younger Tomingas generation off to school. August and Lydia have a 10- and 12-year old.

This is their regular Sunday program. All four Tomingases are enthusiastic anglers.

The boys often bemoan the fact that they must take time out from soccer for school.

SOVIET ETHNOGRAPHIC STAMPS

By Ilya Zbarsky

THE FACT THAT all the many nations living within the borders of the Soviet Union enjoy the same political, economic, social and cultural rights is dramatized in stamp issues with ethnographic themes.

The first series, which included 21 stamps, came out in 1933 and pictured the people of the different Union and Autonomous Republics dressed in native costume and engaged in typical vocations.

Last year the first two stamps of another large ethnographic commemorative series were issued. These are big, square, multicolored stamps designed by Victor Pimenov to illustrate the national dress of the various peoples of the Soviet Union. The 10-kopeck stamp pictures Lithuanians performing a national dance, and the 60-kopeck (both in old currency) shows an Uzbek dance performed to the accompaniment of tambourines.

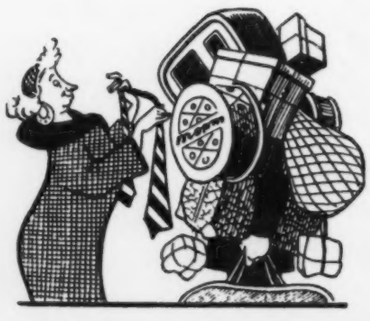
Additional stamps in this series have been appearing this year. Two stamps picture the national costumes of Georgia and a Moldavian folk dance. The denominations of both are two kopecks. Two others of three-kopeck denomination show a group of young Byelorussian women folk singing and two Ukrainian girls dancing to the accompaniment of dombras.

A four-kopeck stamp shows the Koryaks, a Northern people, with hunting trophies. A six-kopeck stamp pictures a girls' chorus and an accordionist in the Russian national dress. The ten-kopeck stamp, dedicated to sunny Armenia, shows men playing national instruments and women singing. Additional stamps in this very colorful national dress series are presently being designed by Victor Pimenov.

HUMOR

If at first you don't succeed . . . eat out.

A little isn't good, a lot may be better.



"Darling, I found just the thing for you."

"I thought no one had anything like it!"

FACTORY COLLEGE

Up until last year, to become an engineer in the Soviet Union you either studied full time at a technical college and lived on a maintenance stipend paid by the state, or else you worked at a job during the day and studied at an evening technical college. In either case tuition was free.

Now there is a third way of obtaining an engineering diploma—at a factory college. Since the fall of 1960 such educational establishments have been set up at several large industrial plants. One of these colleges—at the Moscow Auto Plant—is the subject of this article.

By Yulia Khoritskaya

Photos by Boris Kaufman

HIS WORK SHIFT over, fitter Ivan Oleinik takes a shower, changes his clothes, and has his dinner at the plant cafeteria. Then, instead of going home, he and a group of other workers head for the big gray school building near the plant.

It's five o'clock on the dot when Oleinik knocks on the classroom door. He's due for a consultation with Professor Pavel Terekhov. He introduces himself, and the Professor says with a smile, "Oh, yes. You're the student who confessed after our last lecture that the formula H_2O was all you knew about chemistry. Sit down. We've got a job to do."

Two hours later professor and student stop for a smoke. At nine, they take another few minutes for a stretch. And at ten the session ends.

For worker-student Oleinik this is the current week's program—the days at his bench in the plant, the evenings at school.

Next week his program will change and Oleinik will not go to the shop at all. He will attend lectures, study a foreign language and do laboratory work, or have a conference session.

Ivan will be leading this double life as a worker at the Moscow Auto Plant and a student at the Auto Mechanical Institute on the plant grounds until he gets his diploma and qualifies as an automotive engineer.

These factory colleges are designed to relate higher education more closely to practical training, the task posed by the law on the reorganization of higher schooling adopted by the USSR Supreme Soviet in 1958. The law has a wider intent than simply to give future specialists practical production experience while they are at school. Its more ambitious aim is to provide larger numbers of industrial workers and farmers with a higher education, to give men and women with practical job experience who have already chosen their vocations an opportunity to acquire professional skills.

This is the fundamental purpose of establishing these colleges directly at the factories and plants. These colleges, known as factory colleges, were set up at the larger industrial plants in Moscow, Leningrad, Rostov-on-Don, Dneprodzerzhinsk, Penza and other cities.

Back to School

Ivan Oleinik is 39 years old and has behind him study at a tank school, several years of service in the Soviet Army, including frontline service in the Second World War, several more years of advanced study at an army tank school, and more years of service in the Soviet peacetime army.

As a matter of fact, it was only two years ago that Captain Oleinik discarded his uniform. He came to Moscow with his wife and daughter and took a job as fitter on one of the conveyors of the Moscow Auto Plant.

Although graying at the temples, Oleinik gave serious thought to professional schooling. The machinery at the plant was getting more and more complex. This meant that the workers had to have an increasingly better technical background. Besides, he wanted to do more than merely operate the machines; he wanted to learn how to design them.

But there were the practical realities to consider. A day college was not feasible. He had a wife and children to support, and a student's stipend was not enough to keep them all. There was the alternative of holding down his job and going to school evenings, but the business of attending lectures after a hard day's work was not too appealing. It meant having hardly any family life.

It was just about then that Oleinik learned that a college was to be set up at the plant. Its student body was to be made up exclusively of auto workers, and its schedule was to be arranged to suit their convenience. One week students would work at their regular jobs in the shop during the day with laboratory or consultation sessions in the evening, and the following week they would study full time, just like students at any day college.

Apart from all this, they would be getting, in addition to their wages, a stipend 15 per cent larger than that paid to students at the regular day-time Auto Mechanical Institute.

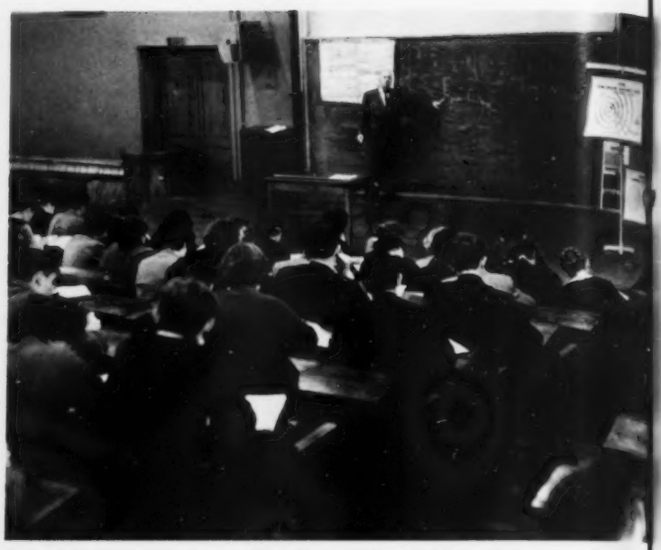
Oleinik decided that the factory college was the answer to his problem. He and some 200 of his coworkers at the plant passed the entrance exams and were admitted to the first-year class.

The Course of Study

The prospective engineers are given a thorough theoretical grounding. Like the students of any other higher technical school in the Soviet Union, they study higher mathematics, descriptive geometry, physics, chemistry and a foreign language. These subjects are given 15 to 20 per cent more time than in day colleges.

This additional time is borrowed, so to speak, from such courses as the technology of metals and the theory of automobile construction.

Factory institute students at an auto plant. This is a new type of Soviet engineering college that combines work and study.



Prospective engineers get a thorough grounding at these plant institutes. The stress here is on theory. This is a chemistry class.

One week students work at their jobs and study nights; the next, they study full time.

The curriculum planners saw no point in having men like Oleinik, who dug around the insides of cars every day, spend 120 hours on the theory of auto construction, and so they cut the course time in half. They also felt that whatever the student did not understand could be cleared up in conference with the instructor. A good portion of the time saved by this reorganization of the usual course of study is devoted to individual conferences and laboratory work.

The college has laboratories for chemistry, physics, machine parts, automobile technology and other subjects. The study halls and laboratories were equipped by the plant, and the apparatus is not only as good as that at the day college but in some cases even better.

The faculty is made up of the best instructors from the Moscow Auto Mechanical Institute, the chief sponsor of the factory college. Professor Pavel Terekhov teaches chemistry; Professor Vladimir Gordon, descriptive geometry; Konstantin Sheptunov, technology. They are all men with years of teaching experience who have made contributions to their specialties.

Growing Up to A Job

The aim of the curriculum is not only to give the student professional skills based on a solid theoretical background, it is also to furnish the prospective engineers with wide practical knowledge, a task no less important. That is why his job in the shop is considered part of the study process. In terms of the curriculum, this work is the equivalent of the practical training sessions at industrial enterprises required of students who attend college by day.

With an eye to the specialty of the future engineer, the studies department arranges with the plant management for the student to be assigned to the kind of job that has a direct bearing on his vocational

The school library has a growing collection of 110,000 volumes. The excellent laboratories were equipped by the plant.

Freshmen Irina Shostak and Valentin Babashkin learn engine construction. Besides their wages, students get maintenance stipends.

They will be well-qualified engineers after completing six years of study at the factory institute, with good jobs waiting for them.

choice. For example, Student Vadim Shchedrin, a fitter in the refrigeration department, was transferred to the motor assembly conveyor when he decided to specialize in motor design. Laboratory worker Eleonora Frolova was switched to a shop where she worked with semiconductors, the specialty she had selected.

Each student makes several such job shifts as he goes on with his studies. In his third year he will probably repair machine tools, in the fifth he will be working as a technician and designer, and in his sixth and last year as an engineer at a job which will be his permanently the day he gets his diploma.

The college at the Moscow Auto Plant was founded only a year ago, and its first class will therefore be graduating in 1966. All signs point to a fine, even brilliant, crop of automotive engineers and designers. These will be good theoreticians and first-class mechanics, people able to assemble autos and turn out a part on a lathe, if need be.

The factory college is training engineers for all phases of automobile and tractor building—specialists on internal combustion engines, metal working, thermal treatment of metals, foundry work, and so on.

Ask any freshman what he expects to be doing after graduation, and you'll get pretty much the same answer, "Working right here as an engineer or designer at the Moscow Auto Plant."

He has no doubt that the job will be waiting for him. The directors of the institute and the plant management have worked out an employment plan for the next fifteen years that guarantees every graduate a job for that period. The guarantee is buttressed by the plant's continuous expansion program, improvement in technological processes and the growing demands of the country for motor transport of every kind.

Nor will there be any problem for the graduate who may prefer to work elsewhere. The factory college diploma gives its owner the right to work as an engineer in any plant in the country.

By Sergei Kurashov
Minister of Public Health of the USSR

SOVIET PUBLIC HEALTH SERVICE

A GREAT ARMY OF MEDICAL WORKERS is busy keeping people in the Soviet Union healthy. We have 420,000 doctors, a third of the world's total complement. That gives us one doctor and slightly more than three medical assistants for every 520 people. This pool of health workers is replenished annually by 28-29 thousand new graduates of the country's medical schools. The present medical student body totals 160,000.

There are unlimited facilities available to every citizen for free treatment by not only the general practitioner but also specialists. This includes surgery at clinics. The Soviet Union was the first country in history to shoulder the complete responsibility for the health of its citizens. There is an article in the Constitution of the USSR which establishes the right of every citizen to material security in old age and in the event of sickness or disability.

In a very short period, considered from the historical viewpoint, the Soviet Union has changed from a country with low standards of sanitation and a high mortality rate into one with an enviable health record.

Medical progress is especially striking in those regions that were backward outposts of the Russian Empire and where, before the Socialist Revolution, there were hardly any doctors at all. In these regions the number of practicing physicians is growing at an even faster rate than that of the country as a whole.

Today, for example, Kazakhstan and the Central Asian republics have more doctors than the whole of czarist Russia had in 1913. The ratio of doctors per 10,000 of the population is higher in these regions than in some of the more developed countries of the world and several times that of Turkey, Iran or Pakistan.

The aftereffects of the past war, so far as Soviet health service goes, were cleared up in a comparatively short time. The incidence of sickness and death has dropped sharply. The death rate per thousand is 7.2, the lowest in the world, while the average life expectancy, in comparison with prerevolutionary times, has risen from 32 to 68 years.

Emphasis on Prevention

The Soviet public health service emphasizes prevention, the creation of a physical, biological and social environment that will reduce the possibility of the breakout of new disease to the very minimum. Prevention entails the enforcement of sanitary and safety regulations at places of work, the organization of public catering along scientific lines, the setting of high housing standards for air, light, greenery, and so on.

Any Soviet citizen, wherever he lives, may go to the doctor or, if necessary, request that the doctor come to his home. In both cases the patient receives qualified medical assistance free of charge. For more convenience each physician at a public health institution is responsible for a definite precinct. He is, in effect, the family doctor.

The polyclinic, the largest type of medical facility, corresponds roughly to an American medical center. It has facilities for the diag-

SOVIET MEDICAL EXHIBITS

On view in New York, Chicago and Oklahoma City this fall is an exhibition of Soviet public health facilities and services. The medical equipment section will display some hundred instruments and pieces of equipment used for reasearch and for the more complex types of surgery. The exhibit will interest both practicing physicians and the scientifically-minded layman. The equipment was developed by various Soviet research bodies, among them the Institute of Medical Equipment, the Central Institute of Traumatology and the Institute of Experimental Surgical Equipment. Most of the items shown are mass-produced.

These extraordinarily ingenious instruments for suturing blood vessels are used by surgeons all over the world. Soviet medical men and engineers, working jointly, devised these instruments that simplify a once very delicate surgical procedure and save precious time. Included are instruments for suturing the major blood vessels, the auricular appendages, the lung root, and various areas within the gastrointestinal tract.

noses and treatment of every kind of ailment as well as for dentistry. A polyclinic serves a district which for convenience, sake is divided into wards, each with a population density of about 4,000.

Assigned to each ward are at least six doctors. Two of these six are general practitioners who not only treat patients at the clinic or at home but also carry out a variety of prophylactic measures designed to improve the health of the people in their ward. Each child in the ward is under the care of a pediatrician. The larger industrial establishments have clinics of their own to serve their personnel.

The Soviet health service has special emergency facilities with thousands of doctors standing by for calls at any time of the day or night. When necessary, the patient is taken to the hospital by ambulance. Nearly 17 million such emergency calls are made a year. Planes equipped for emergency treatment serve remote areas. These flying hospitals treat 900,000-odd patients a year.

Mass Physical Checkups

A highly organized health registration system makes for early diagnosis and a larger percentage of cures. It covers the whole population under one or another category. Children from birth to the age of 14 fall into one category; teenagers, another; students of secondary and higher schools, a third; expectant mothers, a fourth; certain chronic disease sufferers, a fifth; people working at special kinds of jobs, a sixth.

This registration system provides for systematic mass medical checkups for detecting in their early stages cardiovascular diseases, malignant tumors, tuberculosis and other ailments. In 1959, for example, more than 26 million people were checked for TB.

The trade unions do a great deal of work in the field of health protection by keeping an eye on working conditions and the enforcement of safety regulations and by providing recreational facilities. The Soviet Union's more than 3,000 health and vacation resorts accommodating six million people a year are managed by the trade unions.

The larger plants have overnight and daytime sanatoriums where their personnel go for treatment and rest after working hours.

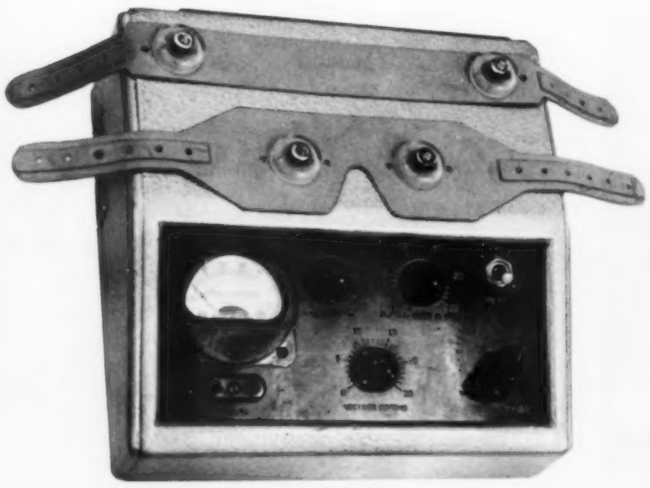
The sports societies also do their part to keep the country healthy by popularizing physical training and sports participation. Millions of Soviet citizens do their daily dozen and setting-up exercises during working hours.

Mother and Child Care

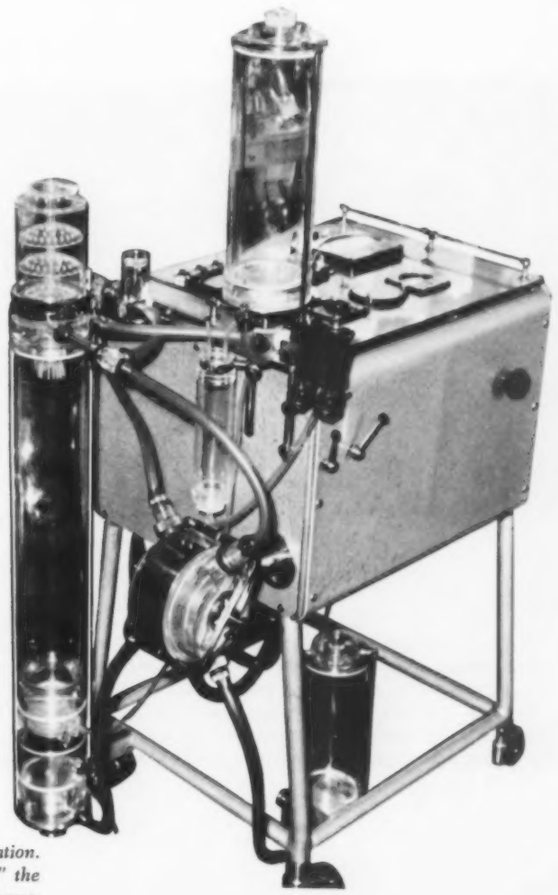
Maternal and child welfare is given special attention. The country's nurseries and kindergartens accommodate more than four million youngsters. They provide conditions for proper upbringing from every angle, including hygiene and nutrition. In addition, in the summer millions of youngsters are cared for at seasonal nurseries, kindergartens and Young Pioneer camps in the country and recreation centers in the cities. Special children's sanatoriums accommodate 120,000 children annually.

Soviet laws regulating the work done by women, especially expectant

TS in the U.S.A.



A portable "electric sleep" unit for use by surgeons, psychiatrists and therapists. Electrodes are placed on the patient's eyes and back of the head. They inhibit the nerve cells, produce a drowsy state and then sleep. In most cases the patient keeps on sleeping after the current is turned off.



This piece of equipment does the job of the heart during an operation. With the organ mechanically duplicated, the surgeon can "switch off" the real heart and operate with complete confidence that the unit will serve. These machines, now in general use, have saved many hundreds of lives.

and nursing mothers, are stringent. A factory or office executive may be prosecuted for refusing to hire a woman or for cutting her pay because of pregnancy. Women are not permitted to work overtime during the entire period of pregnancy. After the fifth month an expectant mother may not be sent on a business trip that will take her any distance from her home. Upon the doctor's recommendation managers are required to transfer pregnant women to lighter jobs at the same wages they were paid previously.

Paid maternity leave is fixed by law at 112 days—56 before birth and 56 after. If twins are born, or the birth is a complicated one, postnatal leave is extended to 70 days. Mothers are permitted time off from work with no loss of pay for nursing their children. Parents are paid a lump sum by the state at the birth of their third and every successive child and, in addition, a monthly allowance upon the birth of the fourth and every successive child.

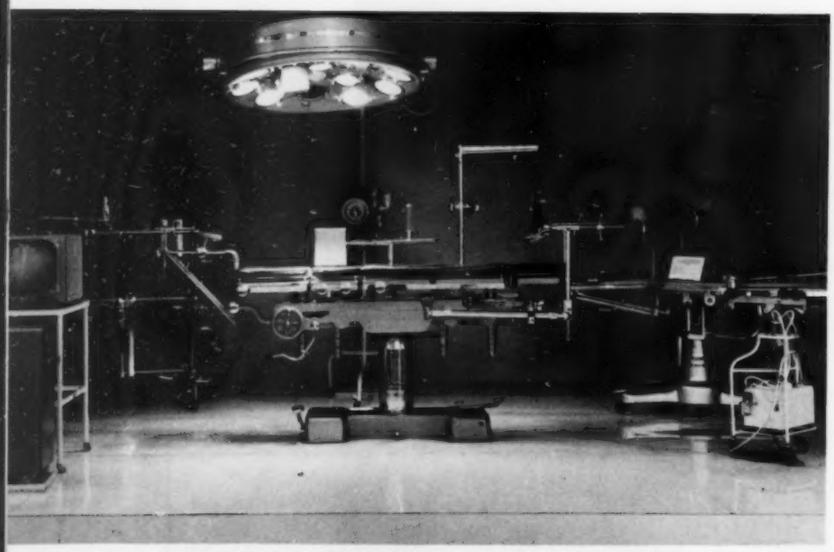
The birth rate in the Soviet Union is high. Last year it was 24.9 per thousand of the population, topping that of every other country. There are more than 16,000 maternity hospitals, which are to be found in all towns and rural district centers. All births in urban areas and three out of four births in rural areas take place in hospitals. Home confinements must be attended by an obstetrician or midwife. As a result of this precaution the number of deaths of mothers in childbirth have dropped by nearly half in the postwar years alone. The incidence now is a very low 0.05 per cent. There are more than 27,000 obstetricians and gynecologists and more than 207,000 midwives at Soviet hospitals, maternity homes and consultation centers and better than 55,000 pediatricians at children's clinics.

Death Rate Cut

Economic and cultural growth and the progress of the public health service in the Soviet Union create objective conditions for a drastic reduction in the incidence of many diseases, if not their complete disappearance. Several previously widespread contagious diseases have already been wiped out. Last year malaria was added to the growing number.

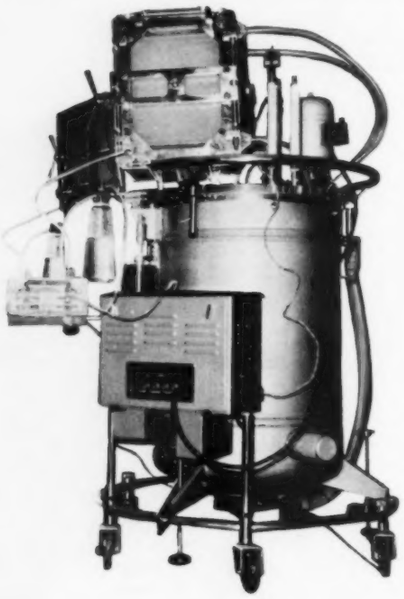
There has been a big drop in the incidence of diphtheria, whooping cough, brucellosis, intestinal infections and poliomyelitis. Last year the incidence of polio in the Soviet Union as a whole was almost half that of the previous year as a result of a large-scale vaccination program in which live antipolio vaccine was used. The vaccination of 80 million persons was made possible by the very simple and convenient dragée vaccine developed by Professor Chumakov's poliomyelitis institute. This year everybody in the Soviet Union between the ages of two months and 20 years will be inoculated with antipolio vaccine.

Soviet scientists have accumulated a great deal of experience with live vaccines, particularly those for use against brucellosis and tularemia. Their work in this field has won recognition in several countries.



With this multipurpose orthopedic table of new design, a product of Soviet medical engineering, all kinds of surgical operations can be performed, including the placing of a plaster cast, if that is required, without moving the patient. The unit has facilities for X-ray photography and a built-in device that makes it possible to follow the operation on a television screen. The findings of electronic and nuclear physics research are built into most of the currently designed medical units.

This artificial kidney can block off the natural organ for hours or even for days while necessary treatment is carried on. It can also, attached to a blood vessel in the arm or leg, be used to drain excess fluid and to inject various drugs and glucose.



They are presently working on an experimental antimeasles vaccine with very encouraging preliminary results.

Heart Disease and Cancer

In the Soviet Union as in many other countries the cardiovascular diseases cause more deaths than any other. In 1958 there were 315 men and 279 women out of every 100,000 who died of heart ailments. This is far less than in Britain, for example, where the corresponding figures for the year were 505 and 410, or for the United States, where they were 578 and 447.

The pioneer strides made in the study of the causes of vascular diseases by such investigators as Nikolai Anichkov, Semyon Khalatov and Georgi Lange have won world recognition. Heart ailments are fought on many fronts—sanitation and hygiene, housing, nutrition, leisure time activity—in general, by creating an environment conducive to longevity.

A good deal of attention is paid to the prevention of circulatory disorders. Physical training and sports play a large role in this connection. Trade-union sponsored overnight sanatoriums at the factories have also done much to combat hypertension.

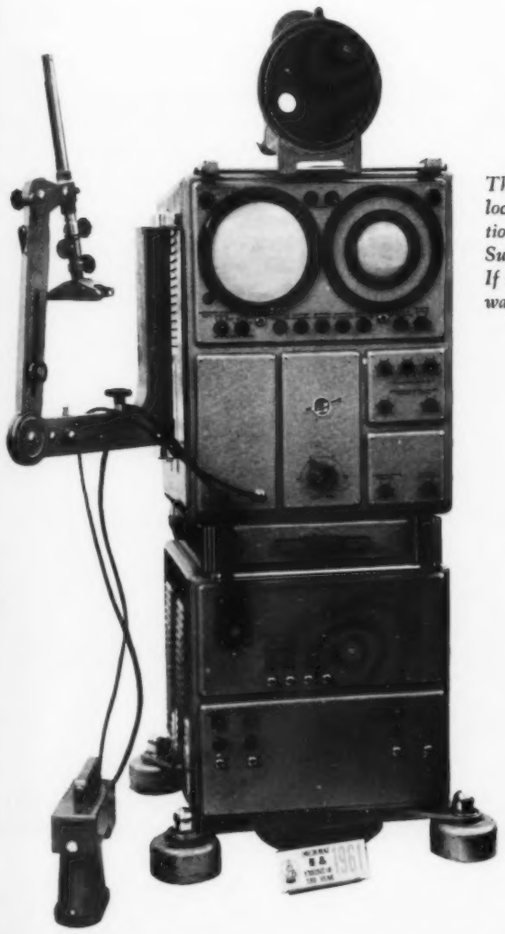
Cancer ranks second only to heart disease as a killer. The oncological division of the public health service has more than 226 clinics, 1,500 special wards and 18 research institutes working in the field. A special committee has been formed to coordinate research, diagnosis and treatment. Furthermore, the government has instituted annual prizes for the scientific elaboration of problems involved in the organization of a model oncological service.

An effective drive against cancer, in our opinion, can be carried on effectively only on a nationwide scale by all health institutions, free of charge, and with the participation of public organizations. One of our basic methods of early cancer detection is mass examination of the population. Last year in the Soviet Union nearly 32 million people had cancer detection checkups.

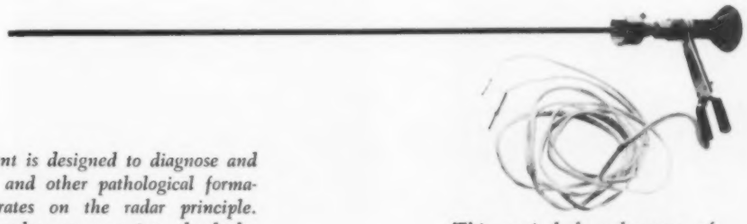
Soviet oncologists maintain constant and close contact with their counterparts abroad. Moscow will be the scene of an International Congress on Cancer in 1962.

Before the Revolution Russia had no pharmaceutical industry of its own. The industry built up since not only provides for our own needs but produces enough pharmaceuticals and medical appliances for export.

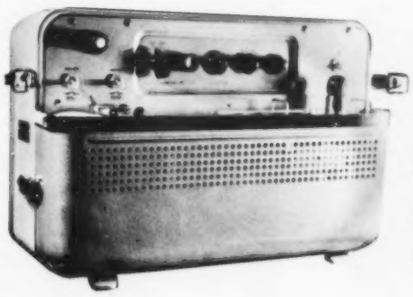
We make several thousand kinds of medicine, including such new antibiotics as colimycin, micerin, erythromycin, sarcolisin and thiophophamide. In one year alone production of some 200 of the latest types of surgical instruments and other medical equipment was begun. Our apparatus for artificial blood circulation, the artificial kidney, the unique instrument for suturing blood vessels and bronchial tubes, and many other surgical implements are in general use by the country's clinicians.



This instrument is designed to diagnose and locate tumors and other pathological formations. It operates on the radar principle. Supersonic impulses are sent into the body. If they meet a tumor or other neoplasm on the way, the impulses are reflected on the screen.



This optical bronchoscope of very original design is used for visual examination of the bronchi and their branches. The lenses placed throughout the length of the optical tube expand its diagnostic usefulness.



This electrogastrograph is a boon to both doctor and patient. It eliminates the need for swallowing a rubber tube to examine the stomach. A number of electrodes are applied to the body to give the organ's biological potential.

QUERIES FROM READERS

QUESTION: A number of Detroit readers ask about the procedure for hiring and firing workers.

ANSWER: One of the most important constitutional rights guaranteed the Soviet citizen is his right to a job. Nor is this merely a formal right. There are jobs available to suit every skill and interest. Socialist planning did away with unemployment several decades ago.

Every working citizen has a passport and a workbook. The passport is his official document for identification. The workbook lists his job background and his citations and bonuses for good work. It does not list the reprimands or admonitions he may have received; the law forbids that. Both passport and workbook are presented by the worker when applying for a job. He need not supply any kind of reference.

There is a short trial period with full pay—about a week for factory personnel, no more than two weeks for office workers. Before a person takes a job, the management is required to tell him exactly what the pay and working conditions will be. The hired worker is issued a paybook in which are entered his monthly earnings.

A worker who wants to leave a job is required to give two weeks' notice to enable the management to find a replacement. If the management wants to fire a worker on its own initiative, it has to follow through a carefully detailed procedure set up to protect workers against arbitrary dismissal. This procedure must be followed even when the incompetence of the worker is obvious. Under any and all conditions a worker may be fired only with the consent of the trade union committee in the enterprise where he works. That is the law.

Does this mean that the trade unions defend incompetence? Nothing of the sort. But firing is an extreme measure to be taken as a last resort, and the job of the trade union is to make sure that all other steps short of that have been taken.

The first question the trade union asks when the management wants to fire a worker for incompetence is: "What steps have been taken to improve the worker's qualifications?" The second question: "Have efforts been made to transfer him to work for which he may be better suited?"

Soviet law stipulates that heads of enterprises who violate the rules for hiring and firing industrial, office and professional workers are liable to court prosecution and administrative punishment.

That is why every worker can be sure that the state and judicial organs will always be on his side if anyone violates his lawful rights.

QUESTION: What is the difference between collective and state farms?

ANSWER: Collective farms are cooperative agricultural enterprises in which the farmers of one or several villages have joined voluntarily to carry on farming in common. The means of production (machines, buildings, equipment, etc.) and the yields (crops and livestock) are the collective property of the members. The land remains state property,

Let's talk HATS

By Galina Vasilyeva

THE HAT is the most perverse item in a woman's attire. Displayed in the millinery shop, a woman finds it irresistibly elegant. She puts it on and looks a frump. A hat can do wonders for a woman or can prove her sad undoing. There is the line of the hat to consider, its color and trimmings, and whether it complements clothes, hairdo and accessories—all weighty considerations.

Perennial questions in millinery shops: "Do you have a chic hat that I can wear with a gray suit?" "Does this go well with my hairdo?" Salesladies are sympathetic and helpful. They get special training, learn clothes styling and—no small part of a saleslady's job—how to advise an elderly, largish customer tactfully that the hat she's crazy about is strictly for a pretty young thing. Many of the salesladies are graduates of special schools sponsored by the Ministry of Trade.

Soviet women are now shopping for their fall hats. They have a wide choice of styles and colors in soft felt, wool and artificial fur. The demand is mostly for pastels—light blues, pinks, beiges, lavenders—not nearly so much for such eye-catching, flashy colors as shocking pink, for instance.

The latest thing in hats is displayed at the USSR Fashion House in Moscow, where the designs originate. Nina Zamorskaya, one of the Fashion House designers, says, "We often use folk motifs in creating new models and, of course, we try to do the most modern styling."

New designs are submitted for consideration to the Art Council of the Millinery and Fur Modeling Trust made up of designers, art critics, specialists in costume history, actresses, women journalists and representatives of the millinery industry.

Once approved, the new model goes to the Price Bureau of the Trade Board where the retail sales price of the hat is fixed on the basis of the cost of the material and the quality of workmanship.

A summer hat made of raffia or monofiber is sold at one or two rubles, straw hats for three. Prices for felt hats range from five to seven rubles, and velour hats run from nine to eleven rubles.

Many of the new models are made of synthetic materials. Velvet, silk and felt are gradually being supplanted by anid, lavsan, nitron and capron.

The USSR Fashion House takes part in annual international fashion conferences, and USSR Fashion House hats are displayed at numerous exhibitions. At the Brussels Fair Soviet hat designs won the Bronze Medal.

that is, belongs to the whole people, but is deeded to the collective farm members for free use in perpetuity.

State farms are set up on unused land and are owned and operated by the state. Their means of production and yields are state property. Occasionally a collective farm is transformed into a state farm, but only with the consent of the member farmers.

The highest organ of management of the collective farm is the general meeting of its members, without which no question is decided. The general meeting elects the managing board and chairman. They direct all farm affairs and report regularly to the collective farmers.

The state farm is run by a government-appointed director, whose orders and instructions are binding on all the farm's workers. But the director, like any other Soviet executive, always takes into account the opinion of the personnel and relies on their initiative. He consults with the workers in drawing up the production plan, in planning measures for improving the operation of the plan, and in other activities.

State farm employees in the Soviet Union are not seasonal workers. Their jobs are permanent and they have the same rights and privileges as workers in industry. They have their trade union and, like industrial workers, may not be dismissed without the consent of the union committee on the farm where they are employed.

The workday unit is used to calculate the collective farm member's share—in cash and kind—of the farm's income. The workday unit takes into account the quality and quantity of his labor. The more complex the work, the more effort and skill it takes, the more workday units the farmer gets. In the course of one working day he may earn more than one workday unit.

The income of the collective farmers also depends on the value of the workday unit in terms of cash and kind. This is determined by the results of the common effort. The higher the farm's income, the more the workday unit is worth. Consequently, the farmer is as much interested in improving the farm as a whole as he is in earning more workday units.

All outlays for machinery, implements, seed, fertilizer, etc., come out of general, not individual, income. Collective farmers pay no income tax.

In recent years collective farms have been switching over to direct cash payment for work done. This preferable form of settling accounts has been made possible by the growing cash income of the farms. Between 1958 and 1960 their incomes increased by a billion rubles to a total of 12.9 billions (in new rubles).

A state farm employee is paid wages set by the state in the same way as an industrial or office worker. How much he makes depends on his qualifications and experience. On jobs where the piece-rate system is used, it also depends on the amount of work he does. As in industry, an incentive system is used under which, in addition to wages, bonuses are paid for especially efficient work.

Each collective farmer has his personal kitchen garden, orchard, livestock, poultry and garden tools. This is aside from the property owned by the members in common. The income received from the sale of the produce raised on his personal plot adds to the income he receives from the collective farm.

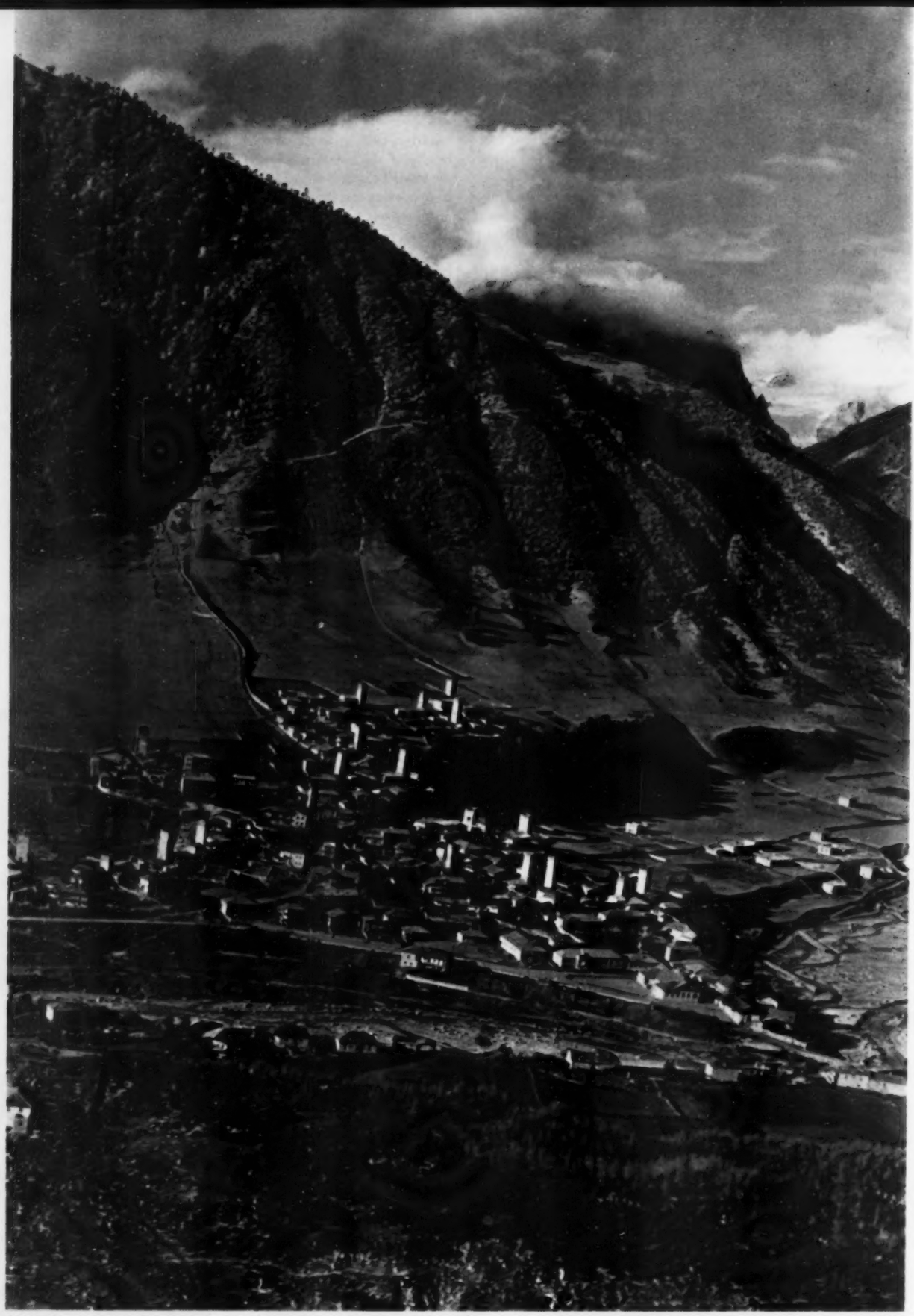
A fetching braided straw hat, with ribbon trim, for summer.

A close-fitting fur felt for cool weather.

A rakish fur felt chapeau for fall.

A lightweight felt for early autumn.

Airy, hand-woven rice straw for the summer.



Although quite isolated geographically, the people of this mountainous area are by no means separated from the main stream of Soviet life.

IN SVANETIA

On the right is the House of Culture in Mestia, the region's administrative and cultural center, where Svanetians gather for films and concerts.

By Leon Machaidze
Photos by Alexander Mokletsov
Drawing by Dinara Nodi

DAWN COMES early in the heavily wooded mountain country of Svanetia, a soaring mile and more above sea level. But the sun's rays have a daily struggle with the dense cold mists that rise reluctantly from the Inguri River Valley to fade into the narrow strip of sky above the peaks.

Now, mingling with the roar of the river and the rumble of huge rocks tossed about like pebbles by the racing waters, come the new morning sounds. They grow insistently louder.

A man clambers up the mountain path. The road grows steeper and more difficult as he climbs, until it ends abruptly at a cleft in the mountains. He jumps across with agility.

Every Svan is trained from childhood to scale the mountain ridges and be a good mountain guide. Alpinists come from England, France, Italy and other countries to climb beautiful, and formidable, double-crested Mt. Ushba.

Our climber stops at a clearing, the ground strewn with felled timber. From a distance comes the hum of power saws. Then suddenly, a towering fir lunges forward and, with a fluttering of its branches, drops gently to the ground.

With the yells of the lumberjacks as accompaniment one centennial fir after another falls with a heavy thud. After a while, the men come through the trees into the clearing. They all have the same tall, lean build and wear the white Svan cap, traditional to the region.

Ramin Kvitsiani, who manages the lumberyard, has just come into the clearing.

"Morning, Ramin," the men greet him.

Lemin Shampriani, a team leader says, "You're early this morning. Anything worrying you? You look pretty much upset about something."

"Yes," answers Ramin, "we've got to get moving. The flood's high, the river's all ready to do the work for us. And I've had a call from Zugdidi. The pulp mill wants the order in earlier, so we've got to step on it."

Seeing these men so companionable, it's hard to believe that many of their fathers and grandfathers were involved in centuries-old vendettas which took an enormous toll of lives.

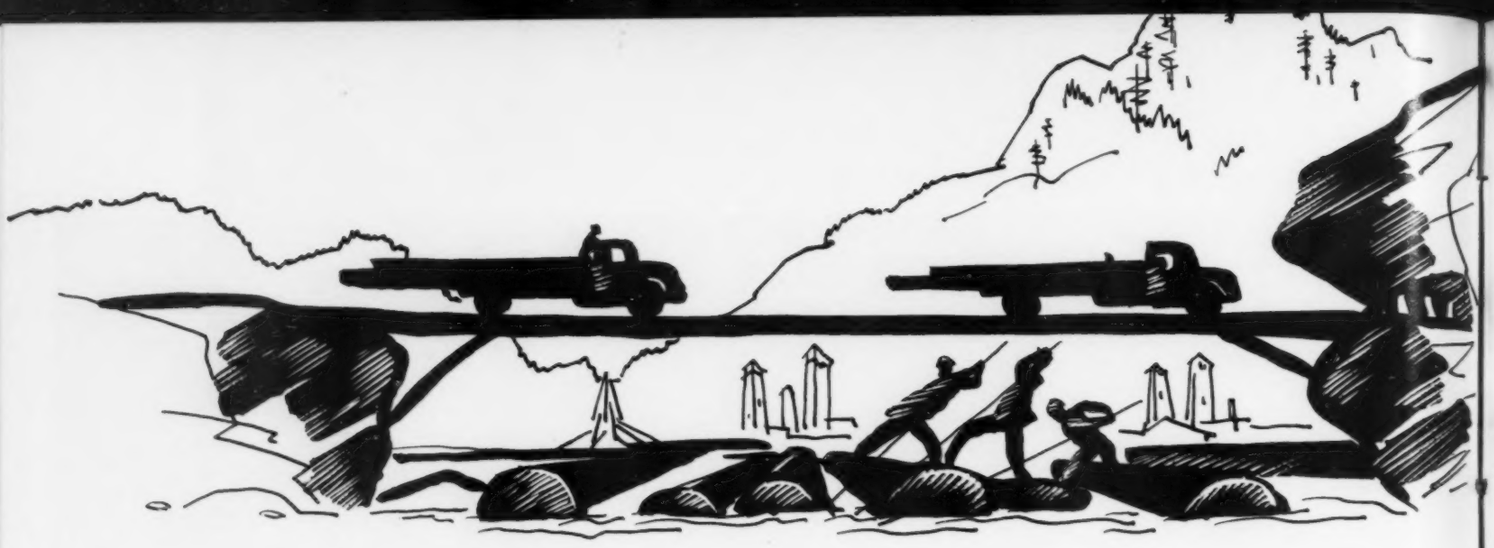
The old stone towers, seen everywhere in Svanetia, stand as mute reminders of those terrible times. Each clan had its own tower, sole refuge from the avenging hand of an enemy clan.

The feudal lords of Svanetia encouraged these vendettas as a way of diverting the downtrodden peasantry from rebelling against their rule. There were natural afflictions besides. Wheat would not grow in this mountain soil, and the lack of salt was as frequent a cause of death as the blood feuds. Hunger and the complete absence of medical care decimated the Svanetians. It is only in the past few decades that this small nationality of perhaps thirty thousand people was given a new lease on life.

A New Life for New Times

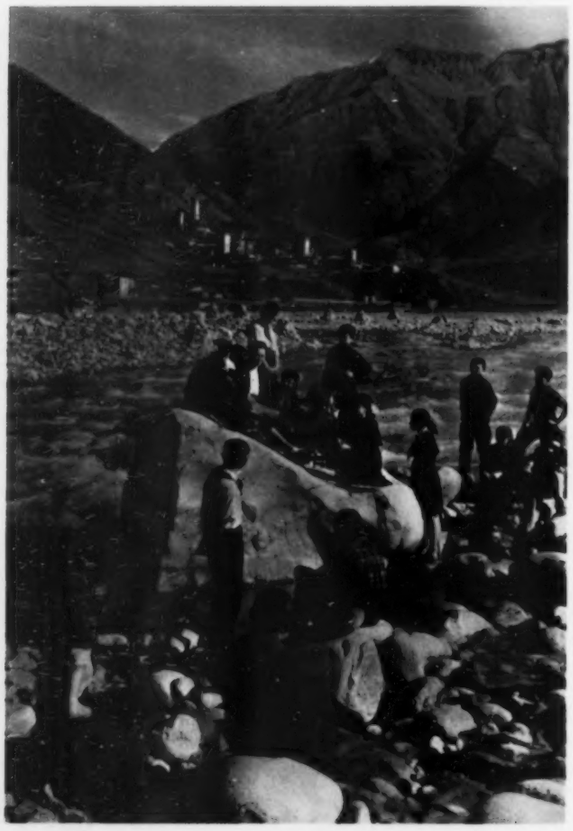
Today, in Mestia, which is the cultural and administrative center of this mountain region, alongside the ancient towers, Houses of Culture have been built where Svanetians gather for films, concerts, lectures and amateur shows.

Popular with the younger folk are two venerable amateur performers



Shepherds Seid Djaparidze (left) and 102-year-old Tariel Djaparidze (right) are the most popular performers in the amateur song ensemble.

In Savanetia, a rugged region a mile above sea level, every citizen is trained from childhood to scale the mountain ridges and be a guide.



Seid Djaparidze and 102-year old Tariel Djaparidze for their rendition of "Lile," an ancient Svan hymn to the sun that goes back 2,000 years. Both these ancients are still hale and hearty, with no intention of departing this life for a long time to come, and both insist upon holding on to their jobs as shepherds.

There are 23 Houses of Culture, 14 village clubs, 13 libraries and 11 museums in Svanetia. This region, whose population was almost completely illiterate, now has 53 schools, with 600 teachers and 20,000 students in attendance. Tina Gvarliani is typical of the Svan teachers. She is a graduate of Stalin University in Tbilisi, the Georgian capital.

Svanetia is an administrative part of Georgia, and although the region is difficult of access, the republic does everything possible to make certain these mountain people are not isolated from the main stream of Soviet life.

All the Svanetian villages have electricity. A power station which will have the highest dam in the world is presently being built in the mountains. Telephones and radios are in general use. Foodstuffs and consumer goods are delivered by plane as well as by trucks over a highway that cuts through the mountains to Mestia.

The region has a large central hospital, five precinct hospitals and 18 medical aid stations staffed by 40 physicians and their 90 assistants. The practice of Dr. Estate Kvitsiani, who heads the Medical Center in the village of Becho, is representative of most of the physicians in the region.

After a day's work at the center, he mounts his horse and visits patients in the remote mountain villages. He makes his rounds in all kinds of weather, storm or blizzard notwithstanding. His main concern is the prevention of disease.

In the period since the Revolution, Svanetia has witnessed the birth of its own intellectuals and its own working class. Lumber is the major source of wealth, but other industries are developing fast. In the local industrial combine being built one of the components is an up-to-date cannery.

This is a region and a people reborn. It is evident in every aspect of Svanetia's life.

Soviet research physiologist Professor Negovsky demonstrating his method of resuscitation after clinical death to American, Dr. Claude Beck (with glasses).

SOVIET AND AMERICAN
RESEARCHERS MEET

By Stanislav Pshennikov

SCIENTISTS in many countries are working on the most dramatic of medical problems—the revival of an organism after clinical death. Professor Negovsky, head of the USSR Academy of Medical Sciences' laboratory of experimental physiology, has made important contributions to the study.

The laboratory was recently visited by Dr. Claude Beck, eminent American heart surgeon, who was first to get a patient's heart beating again after clinical death. This was fourteen years ago.

Both researchers have been corresponding and exchanging papers for some two decades, but this was their first meeting.

Dr. Beck told Professor Negovsky about the success the latter's article had had in the United States when it was published. The Soviet surgeon was the first in the world to revive a dog two hours after its heart had stopped beating and clinical death had set in. This scientific contribution is of enormous importance, opening up new possibilities for resuscitating human beings.

Professor Negovsky demonstrated his method. Blood is injected under pressure into an artery. At the same time a special apparatus pumps air with a high oxygen content into the lungs. This restores the work of the cortex.

Dr. Beck spent an interesting day talking to Professor Negovsky and his staff. He later told a newspaper correspondent that the importance of Professor Negovsky's work could not be overestimated. He said that the Soviet scientist's achievements, the experiment itself, and detailed study of the laboratory's work had provided him with a wealth of new data on the problem of resuscitation.

Dr. Beck spoke to the laboratory staff on his own method of surgical treatment of coronary disease and illustrated his talk with a film.

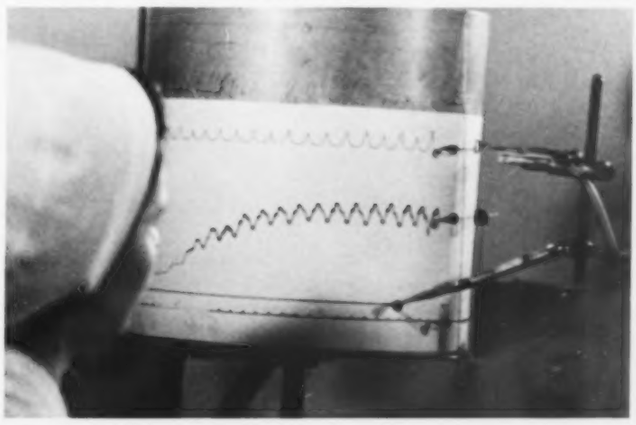
At the Institute of Thoracic Surgery the American scientist witnessed two operations on the heart.

Dr. Beck said he was happy to have had the opportunity to meet Soviet scientists and thanked the Union of Soviet Societies for Friendship and Cultural Relations with Foreign Countries for their invitation to visit the Soviet Union.

He declared himself very much in favor of more USSR-USA scientific exchange. It would help greatly, he said, in the solution of complex scientific problems, particularly those in medicine.

Both men have made major contributions in this field of research. They had been corresponding for twenty years, but this was the first time they met.

The dog's heart begins to beat again. The experimental animal died twice, once from loss of blood and then from electric shock, and was twice revived.



GORKY is the fifth largest city in the Soviet Union, and the Gorky Economic Area, after Moscow and Leningrad, is the country's third largest machine-building and metal-working center. The Gorky trademark appears on the Volga and Chaika passenger cars, on trucks of all types, on program-controlled automatic machine tools and on river boats. The factories of this economic area manufacture synthetic fabrics, leather substitutes, washing machines, refrigerators, and far too many other items to list.

Previous to 1958 the plants were run by various ministries and departments in Moscow. Now they are all administered by the Gorky Economic Council. The council is made up of 17 leading specialists in various spheres of production who have the authority to make independent decisions on production problems. They cannot, obviously, be expected to deal with the multiplicity of details that arise. Another, and larger body, the Technical Council, helps them.

This Technical Council depends on public assistance in all its activities. It has two major functions: the first, to consider scientific, technical and economic problems pertaining to the development of the industries in the area; the second, to study and introduce into production new types of machines and equipment and new methods.

Nikolai Anishchenkov, who works in the open-hearth shop of the Krasnoye Sormovo Iron and Steel Mill, has been a member of the Technical Council since it was formed in the fall of 1958. He was nominated by the Communist Party Committee and the Trade Union Committee of the plant after a preliminary discussion by the men in his shop. They thought him one of the best steelmen in the mill, a man who generously shared his experience with others and kept himself well informed on current steel developments by attending an evening technical school. For these reasons they thought he would make a decided contribution to the council's work.

In addition to Anishchenkov, the Krasnoye Sormovo nominees for the Technical Council included Mikhail Yuryev, the mill director; chief metallurgist Nikolai Mayorov; designer Rostislav Alexeyev; engineers Yuri Chigir and Victor Moskovkin; lathe operator Anatoli Godyayev; smelter Ivan Belov and fitter Pyotr Shachkov. Their candidacy was also discussed at meetings of the men in the various shops and departments, and on the recommendation of these meetings the Communist Party Committee and the Trade Union Committee of the plant presented their names for the approval of the Economic Council.

Other plants in the city chose their nominees in the same way. So did such institutions as Gorky University, the Polytechnical Institute and the Scientific Design Research Institute. After the Gorky Economic Council had approved the nominees, they were formally constituted as the Technical Economic Council.

This advisory body has a membership of about 300—approximately 150 engineers and benchworkers; 50 scientists; 40 representatives of the Communist Party, trade unions, youth leagues and other public organizations; and some 60 staff members of the Economic Council proper.

The Technical Council meets in plenary session once every three months. In the interim the council's presidium of some 80 people acts on its behalf. Every member of the council is active in one of its 70 sections or standing committees, depending upon his speciality and experience.

Participating in the work of the sections are engineers, benchworkers and scientists other than the Technical Council members. The membership of the sections total 1,500—more than 1,000 engineers and benchworkers, about 150 scientists, and 300 or so staff members of the Gorky Economic Council. Such eminent scientists as Grigori Rasuvayev, Corresponding Member of the USSR Academy of Sciences; Professor Nikolai Mazokhin of the Gorky Polytechnical Institute; and Professor Sergei Prokhorov are active participants in this industrial planning.

The Technical Council and its sections depend a great deal on the plant production council, which bears the same relation to plant management as the Technical Council does to the Gorky Economic Council. The plant production council serves as a kind of advisory body to the plant's chief engineer. With these plant councils the total number of consultants comes to 6,000.

Every major technical problem is first discussed at the plant level, then in the respective section of the Technical Council, then at its plenary session. The decisions finally reached therefore carry the authority not of the Economic Council alone but of the many hundreds of people who contributed their knowledge and experience.

New Machinery

Nikolai Mazokhin designs engines at the Gorky Auto Plant—where he rose from technologist to deputy chief designer—and teaches at the Polytechnical Institute, where he is professor and holds the chair of internal combustion engineering.

With a group of design bureau staff workers he recently developed an original type of so-called prechamber engine that runs on leaner gasoline mixtures than the customary type, weighs about the same and boosts power by 10-14 per cent with less fuel.

Mazokhin gives credit for the new engine not only to the designers but to the automobile section of the Technical Economic Council that nursed the project along. An active member, Mazokhin reported to the section periodically on the progress being made in the experiment and asked advice and help on verious problems. Members of the section visited the plant, familiarized themselves with the laboratory installation and gave invaluable advice.

The Technical Council played an important role in introducing an installation for continuous pouring of metal in the region's steel mills. The method, favored by both Soviet and foreign specialists, is time-saving, increases the output of the open-hearth shops, and lightens the work load considerably.

The installation project was supervised by Nikolai Mayorov, chief metallurgist of the Krasnoye Sormovo Mill. Steelman Nikolai Anishchenkov, previously mentioned, worked on the project.

The project was discussed at several sessions of the Technical Council's metallurgical section and, on its recommendation, was approved by the Gorky Economic Council. For setting up the first installation of this kind in the Soviet Union, a group of workers at the Krasnoye Sormovo Mill were given the Lenin Prize, the country's highest award for achievement in science and technology.

The operation of this pilot installation was followed closely by the metallurgical section and the Technical Council. Nikolai Anishchenkov was assigned by the council to head a group to study possible improvements. The group submitted a detailed report of its findings. The second installation benefited very considerably from the study. By incorporating more recent applications in automation and telemechanics, a better and more productive unit was obtained.

The question of introducing the latest machinery is under perennial discussion at sessions of the Technical Economic Council. The plants in the Gorky Economic Area install new machines almost constantly. An interesting example is the champagne factory where an entirely new method has been introduced. The automated method, which speeds up production time and improves quality, won a Lenin Prize for the group of scientists and engineers who devised it.

The proposal to automate the winery originated at a session of the food industry section of the Technical Economic Council. Now three mass-production lines for champagne making are in operation. Using

PRODUCTION PARLIAMENT

By Yuri Grafsky

Photos by Alexander Mokletsov

Members of the Technical Council of the Gorky Economic Area going through an auto plant for improvements. This advisory council has some 1,500 members in the various industrial specialties.

Nikolai Mazokhin, a council member, is chief designer at the Gorky Auto Plant. He headed up a group that designed a new type of engine. It is 10-14 per cent more powerful than the old type, weighs no more and even uses less gas.

Engineer Dorofei Kozlov is a member of the power section of the Technical Council. He and others worked out a project for cooling the generator at the Gorky Hydroelectric Station and thereby raising its power capacity.

the same number of workers, production was stepped up 33 per cent.

The Technical Council and its sections are most receptive to new ideas. Some time ago a group of engineers from the Gorky Hydroelectric Plant attended a session of the power section. Dorofei Kozlov, superintendent of the electrical shop at the time and now chief engineer, raised the question of whether the turbines at the station could not take a greater load and thereby increase the station's capacity.

The opinion of one of Moscow's research institutes was sought. Simultaneously the engineers and technicians of the station itself—Nikolai Vasilyev, Dorofei Kozlov and Konstantin Sokolov—tackled the problem and worked out a project for ventilating and cooling the generator that raised the capacity of the power plant from 400,000 to 520,000 kilowatts.

The Technical Council does a good deal to popularize improved working methods. Faina Klebanova, an engineer at the Gorky Auto Plant, who heads the varnish and paint section of the Technical Council, gives this illustration.

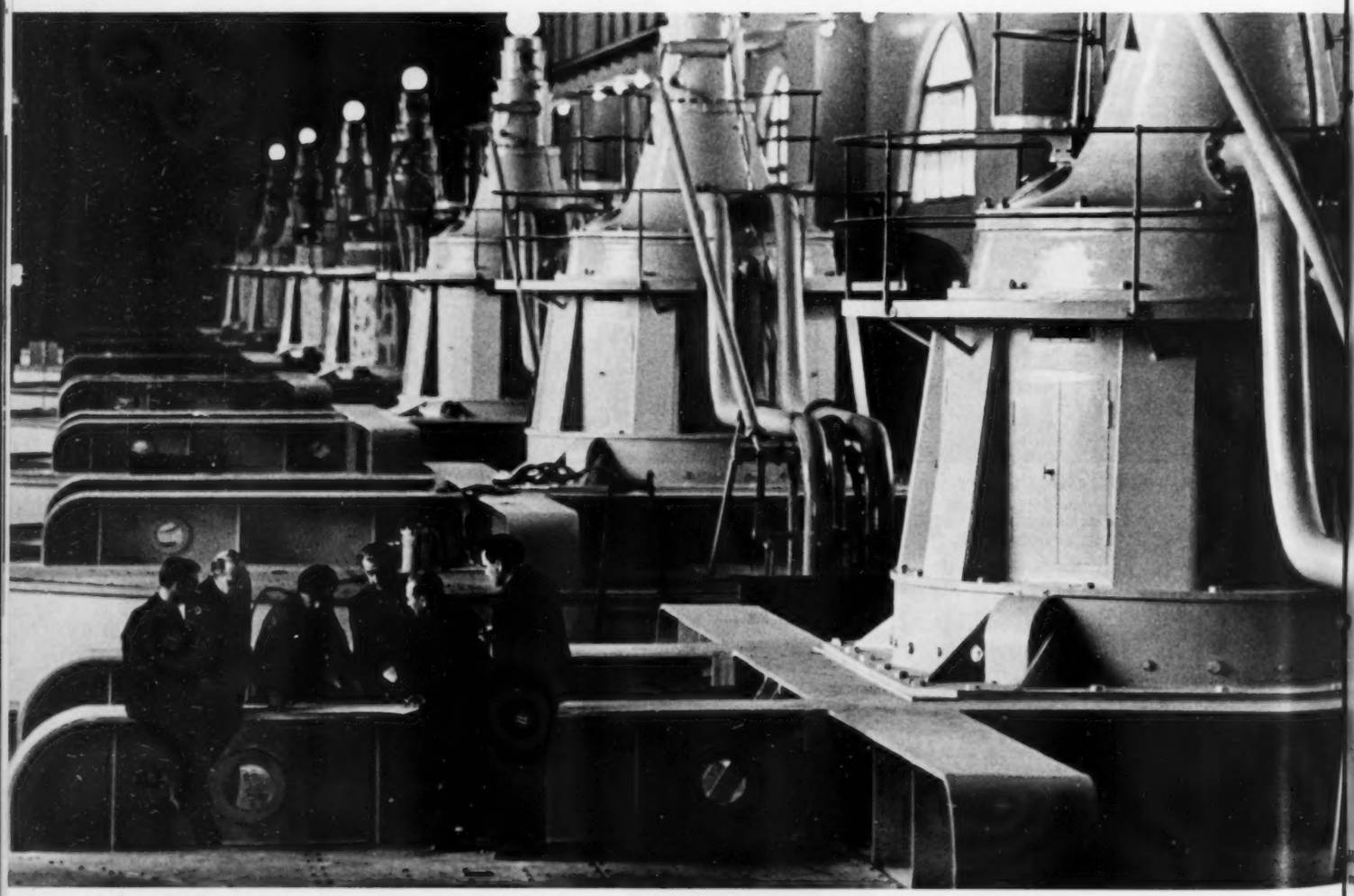
"Car-painting is a difficult job, but at our plant we have it down to a science. Other plants kept asking us how we did it. Finally, somebody at a paints and varnish section meeting suggested that we work out organized procedures for popularizing our method. And so we did. Members of the section spent time in our paint shops, got acquainted with our process and then visited paint shops in other plants. The results of every visit were discussed in the section. Thus the experience of the automobile plant workers was shared with the workers of other enterprises."

The methods of work in use at metallurgical plants in Kulebaki and Vyksa, towns not far from Gorky, and at the paper mill in the nearby town of Balakhna were discussed at various section meetings and by the Technical Council as a whole. So were the work quotas at the Dvigatel Revolutsii Machine Tool Plant and the Krasnoye Sormovo Shipbuilding Yards. The Gorky Economic Council issued a memorandum in which the positive aspects were noted and the shortcomings criticized, which was of invaluable help in improving the work of these enterprises.

Such discussions are especially valuable for new plants. When the construction of the Zavolzhsky Engine Works was being considered, designers of the Gorky Auto Plant took a very active part in the planning. It was discussed at a plenary session of the Technical Council and then at a session of the Economic Council. The Zavolzhsky Works, already in operation though still under construction, is, so to speak, the brain child of the whole economic area.

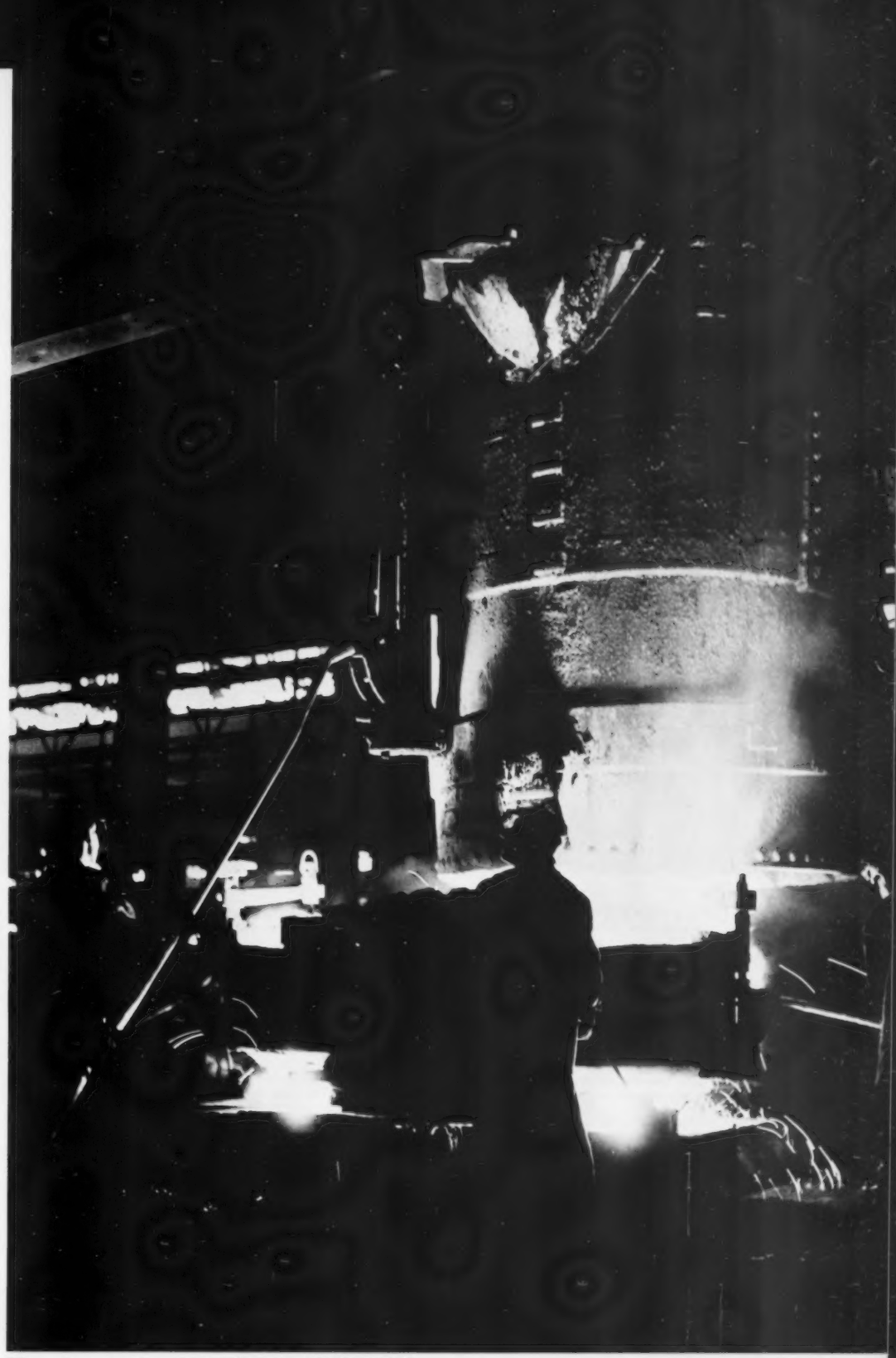
In the three years of its existence the Technical Council has won prestige with the plants and the management of the Economic Council. Deputy Chairman of the Gorky Economic Council Timofei Lapin likes to call it a "production parliament." He says, "That is what it actually is."

"Does the Economic Council ever reject the recommendations of its production parliament?" someone once asked Timofei Lapin. He thought a while and then answered: "I don't seem to remember any such case. Perhaps there was something so far as petty details were concerned. But for the most part our production parliament is doing all right. Almost all of its proposals are accepted and carried out."



Foreman Nikolai Vasilyev, who helped work out the ventilating project at the Gorky Hyaroelectric Station that raised its power capacity from 400,000 to 520,000 kw., says: The idea came from a group of workers.

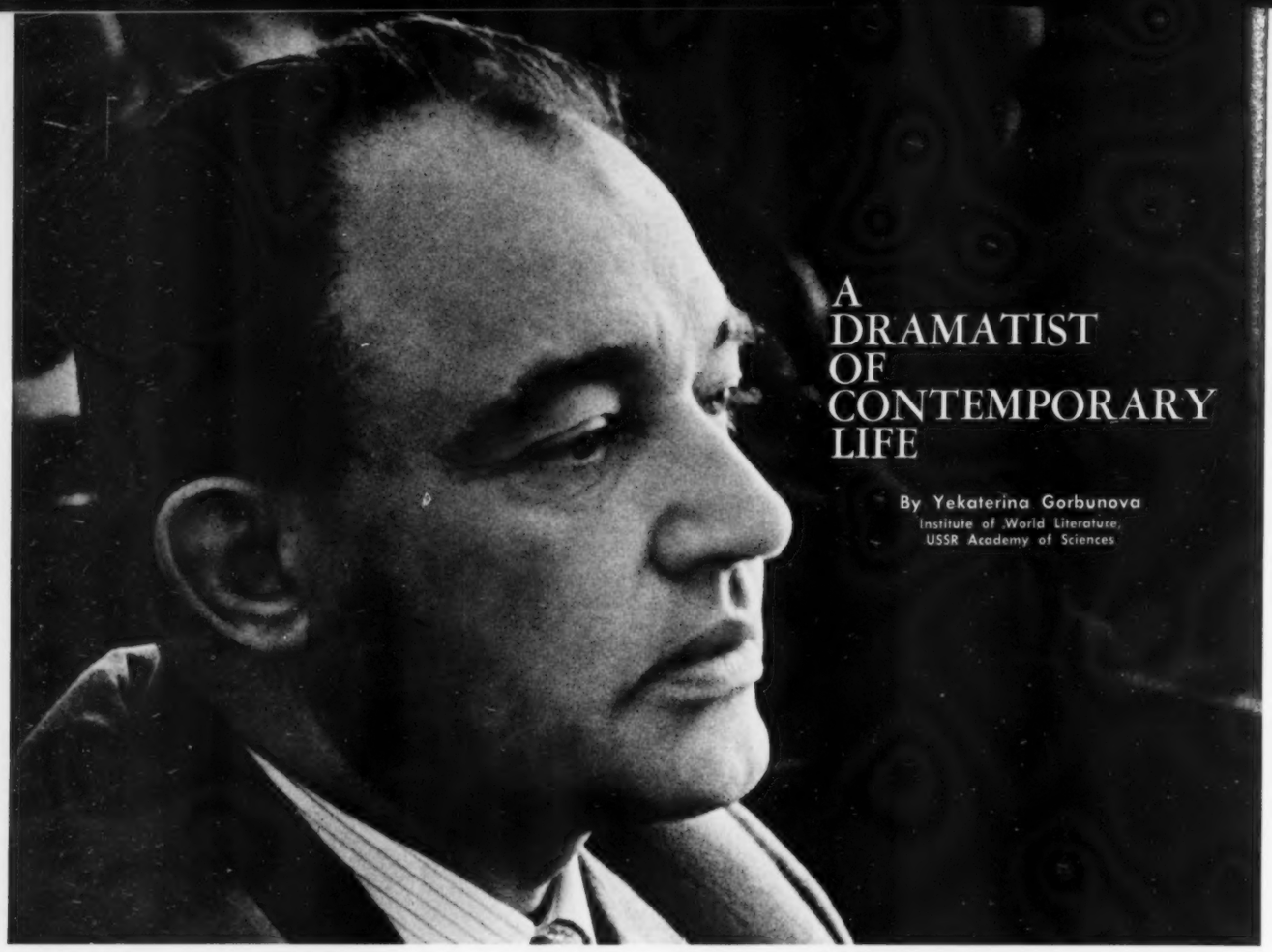
Says metallurgist Nikolai Mayorov: We wanted to do continuous steel pouring at our Krasnoye Sormovo Mill and discussed a number of variant projects at very helpful Technical Council sessions before setting this up.



The continuous steel pouring installation at the Krasnoye Sormovo Mill has increased production and cut the work load.

Setter-up Dmitri Nazarov says: With other members of the Technical Council I made a study of truck loading in the Gorky Economic Area. We found too many trucks half-loaded. We set up controls and saved a lot of money thereby.

Workers and engineers of the Gorky Power Station figure out ways to get more electricity out of the big generators.



A DRAMATIST OF CONTEMPORARY LIFE

By Yekaterina Gorbunova
Institute of World Literature,
USSR Academy of Sciences

ALEXANDER KORNEICHUK is one of those fortunate people on whom the fates have showered their bounty. He is a gifted and exceedingly popular playwright, an academician and a statesman. He was the friend of such world-famous men as the late Alexander Fadeyev and Frederick Joliot-Curie and a welcome guest in the house of any Soviet collective farmer.

His father was a locomotive engineer, and he himself worked on the railroads. He lost his parents when he was 14, but thereafter his life was a very happy one as he moved from one triumph to another. He is a personification of the millions to whom the new social order opened up unbounded creative vistas.

His first work was published in 1925 when he was a student at Kiev University. In 1933 he won general recognition for *Death of a Squadron*, a dramatization of one of the most momentous events of the October Revolution—the scuttling of the Black Sea Fleet to keep it from falling into the hands of the enemy.

The play, free in form, was an excellent vehicle for the young Ukrainian's talent—it demonstrated his discerning artistic eye, his ability to convey ideas through character-types, a versatility of style that ranged from the heroic to the lyrical, and a rollicking sense of humor.

A Rare Dramatic Gift

Korneichuk possesses that quality of the born playwright—the ability to project contemporary problems in dramatic terms. This quality, Vladimir Nemirovich-Danchenko, founder of the Moscow Art Theater, said, in speaking of Korneichuk, is a much rarer one than people are inclined to think. The number of writers who had it, he thought, was remarkably small.

Korneichuk thinks in scenic images, his laughter is contagious, his tears rend the heart, his plays hold audiences spellbound. He finds his very real and richly variegated characters in the life around him. It is his closeness to people and today's currents of living that gives his themes, images, people and style such unusual diversity.

Comic satire is his best medium, but he has also won plaudits for *Bogdan Khmelnitsky* (1940), a historical tragedy; *The Truth* (1937), a heroic revolutionary epic; *Platon Krechet* (1934), a lyrical drama; and *The Front* (1942), a fictionalized documentary play.

Korneichuk has an almost unerring instinct for putting his finger on the most significant of contemporary trends and problems. That is why his work is likely to remain in the permanent library of Soviet literature. He borrows his ideas and characters from the life around him and returns them as artistic generalizations, as realistic symbols of actual event and types.

Korneichuk has coined words with his characters. There is, for example, his young surgeon Platon Krechet, who personifies the new Soviet intellectual with his spiritual integrity and his unity of thought and action. Those Soviet scientists who boldly venture into new fields of knowledge are known as "Krechets." First staged in 1934, the play ran for twenty years at the Moscow Art Theater. On the other hand, Galushka, Gorlov and Dremlyuga—the heroes of *In the Steppes of the Ukraine*, *The Front* and *Wings*—are synonyms for stagnant routine and rank conservatism.

Men like his hereditary miner hero Makar Dubrava (1947), who thought in terms as large as the country and who rebuilt the economies of great areas ruined by the fascists, symbolize the finest traditions of the revolutionary working class and embody the traits and qualities of the new Soviet man.

Collective Farm Life His Theme

Collective farm life is the theme of many of Korneichuk's plays. He knows the Ukrainian village and has written a number of realistic plays around the problems encountered in the process of altering the social outlook of the peasantry. His first comedy on this subject, handled with refreshing originality, was *In the Steppes of the Ukraine* (1941).

Although he writes of men and events with a sharp and biting pen, Korneichuk never loses his sense of perspective, never lets his criticism of shortcomings overshadow the great achievements. His dramatizations of the inadequacies of collective farm construction in the prewar and postwar periods were an inspiration to work for everything that was new, advanced and beautiful in the life of the people.

That is why his satirical comedies *In the Steppes of the Ukraine* (1941), *Come to Zvonkovoye* (1946), *The Snowball Copse* (1950), *Why the Stars Smiled* (1957), and *Over the Dnieper* (1960) evoke feelings of high enthusiasm rather than pessimism.

Two of his plays, *The Front* and *Wings*, deserve an additional word in this regard. Their straightforward but always constructive criticism helped keep morale high during the hardest period of socialist construction.

During the bloody battles against the Nazi invaders when the Red Army was retreating to the foothills of the Caucasus, the newspaper *Pravda* printed Korneichuk's *The Front*. Written hot on the heels of events the playwright himself witnessed during his service in the army, it stirred readers deeply.

Korneichuk aimed his satire at a General Gorlov, the type of frontline commander who had fought in the Civil War with success but had not grown with the times. In General Gorlov Korneichuk satirized those generals who held on to outmoded methods, paid no attention to the progress that had been made in military science and thereby stood in the way of victory. Opposed to Gorlov are the young and talented General Ognev and the ordinary people in the rear.

The clarity of his thinking, the dynamic composition of his plays and the reality of his characters make Korneichuk's works eminently stageworthy. A Korneichuk première is always an occasion, and his plays invariably make the rounds of professional and amateur Soviet theaters as well as those of foreign countries.

His plays are sometimes described as folk-heroic and sometimes as lyrical-romantic or folk-humoristic, and there is a measure of truth in each of these characterizations. Rich and diverse in form and content, they reflect the variety of Soviet life today, in which the playwright so actively participates.

"Burning Issues"

He is a thoroughgoing advocate of socialist realism in art and demands above all that artistic work reflect contemporary life. He is not afraid of the controversial, of what he terms the "burning issues."

"Why should we be fearful of 'burning issues?'" he asks. "Burning issues are precisely what is stirring men's minds today, what the efforts of millions of men are directed at. Is it not an honor for the writer to help resolve these burning issues? . . . The men of letters and the art are in error who think their work will win them immortality if it is far removed from the burning issues of the day, if it deals with problems of the distant past or those that leave millions unmoved and please only a handful. The permanency of a work of art lies elsewhere—in the solution of the important, the central, problems of life, in depicting life truthfully, in the folk character of the work. And folk character presupposes close organic ties with the contemporary."

According to Korneichuk the theater is a school of life and not merely a form of entertainment for the sated. The stage magnifies both virtue and vice. That is why the playwright's role is such a responsible one.

For Korneichuk the judgment of the audience is law. I recall how worried he was at the premiere of his latest play in Moscow. I was surprised, for he must have attended hundreds of performances of his own plays.

"It's true," he replied, "I have been seeing premières of my plays for thirty years, but I'm as nervous right now as I was at the first one. The older I grow, the more nervous I get."

Alexander Korneichuk is not only a leading playwright; he is an eminent statesman as well. He is the Chairman of the Supreme Soviet of the Ukrainian Republic and a member of the Central Committee of the Communist Party of the Soviet Union. He is one of the secretaries of the Union of Soviet Writers, and as Deputy Chairman of the Soviet Peace Committee he has made large contributions to the international peace movement.

THE FRONT

By Alexander Korneichuk

This is the slightly abbreviated second scene from Act II of The Front, *written in 1942, a few months after Nazi Germany invaded the Soviet Union.*

The play criticizes some of the Soviet generals of the older generation who, though brave and devoted to their country, were unable to adjust to modern methods of warfare. Instead of taking advantage of the arms at their disposal, they depended wholly on the heroism of the soldiers. General Gorlov, front commander, is such a man.

The excerpt dramatizes an episode in the war. A small artillery anti-tank battery beats off an attack by numerically superior Nazi forces. The commander, Guards[1] Lieutenant Sergei Gorlov (General Gorlov's son), is killed in the action.

ACT II

SCENE II (Abridged)

THE CHARACTERS

JUNIOR SERGEANT GOMELAURI
SERGEANT OSTAPENKO
JUNIOR SERGEANT SHAYAMETOV
SERGEANT BASHLYKOV
LIEUTENANT GORLOV, *battery commander*
COLONEL SVECHKA, *division commander*
FIRST SOLDIER *(Stepan Pechonka)*
SECOND SOLDIER
MARUSYA, *a nurse*

A trench at the roadside. On the right a village can be seen not far away: white crowns of trees, a few houses, but far more black ruins over which the chimneys rear starkly. On the road near the trench stands a post with a sign in German. From the other side of the village comes the sound of cannonade and the distant crackle of machine-gun fire. In the trench sit Sergeants Ostapenko and Bashlykov, and Junior Sergeants Shayametov and Gomelauri. Antitank rifles are lined up along the trench top.

GOMELAURI: It's damned cold today. Think it's 35 below?

OSTAPENKO: I suppose so.

SHAYAMETOV: The cold's not so bad. It's the wind that's getting me down. Blows as hard as in our Kazakh steppes.

BASHLYKOV: This is nothing compared to the frosts we have in Siberia . . .

OSTAPENKO: In Poltava we have galushki[2] . . .

BASHLYKOV: Now for heaven's sake, Ostapenko, don't barge in with your galushki.

OSTAPENKO: Then don't go boasting about your Siberian frosts. My guts are frozen to my belly button as it is. Tell us, Gomelauri, what's going on in your Georgia?

GOMELAURI: Eh, better not think of it now. *(Listens to the cannonade.)* There's fighting over there. What are we sitting here for?

SHAYAMETOV: Orders. The Commander knows what he's doing.

OSTAPENKO: Tell me, boys, why is it our papers write that winter helps us to fight; that the colder it is, the worse it is for the fascists?

GOMELAURI: The papers are right.

OSTAPENKO: Why right? Jerry sits in a hut, makes a hole in the wall and shoots through it, while we have to crawl over the snow . . .

BASHLYKOV: Sure, but what happens when we drive him out of the village? He freezes to death.

OSTAPENKO: Why should he freeze? When we drive him out of one village, he runs to another. It's the guy who runs who always feels hot.

BASHLYKOV: Back to your places, boys!

Everybody lies down. The sound of an approaching car is heard. Enter Division Commander Colonel Svechka and Regiment Commander Major Yasni.

YASNI: The battery has a machine-gun outfit, and there are enough grenades to go around.

SVECHKA: Good.

YASNI: I can't understand why we're retreating, Comrade Division Commander.

SVECHKA: We've strayed too far. The Commander wants to gather us in a "fist."

YASNI: I see. *(Yells)* Gorlov!

A voice calls "Here!" Battery Commander Gorlov enters.

GORLOV: Battery Commander Guards Lieutenant Gorlov.

SVECHKA: Hello. *(Holds out his hand.)* Have you seen your father?

GORLOV: Yes. He asked me to give you his regards.

SVECHKA: Thanks. How does the Lieutenant General look? Is he all right?

GORLOV: He is. He told me: "Tell Guards Colonel Svechka that I'll soon be paying my old friend a visit."

SVECHKA: I'm glad he remembers me. As for coming for a visit—the road out here is not so good. *(Laughs)* Your battery, Gorlov, will remain here. I'm warning you—nothing, not even a mouse, must be allowed to pass over this road. Get me?

GORLOV: Right.

SVECHKA: No matter what happens, you stay here until you get further orders. Even if . . .

GORLOV: We shall do our duty.

SVECHKA: Thank you, Comrade Guards Lieutenant!

GORLOV: Thank you, Comrade Guards Colonel!

Svechka goes out.

YASNI *(quietly)*: Seryozha . . .

GORLOV: Don't worry, Pyotr Petrovich.

Yasni goes out. Gorlov looks down into the trench.

Well, how are you, boys? Feeling hot?

OSTAPENKO: Yes, Comrade Guards Lieutenant. I'm actually sweating. My throat's dry from the heat.

GORLOV: Your throat's always dry, Ostapenko.

OSTAPENKO: True, but today it's worse than ever. Give us a drink. I'll never forget your kindness.

GORLOV: The devil you won't. *(Unstraps his flask.)* Here, just see that everybody gets a swig.

OSTAPENKO: Much obliged. *(Pulls a small cup out of his pocket and fills it.)* Your health!

GORLOV: Go ahead.

OSTAPENKO *(drinking)*: Tastes like tea.

GORLOV: The devil it does! It's pure alcohol!

OSTAPENKO: You don't say? I'll see in a minute. *(Pours another cupful.)*

GOMELAURI: No you don't! *(Takes the cup.)* I'll do the seeing.

OSTAPENKO: What do you know about spirits? All you've ever drunk is sour wine.

GOMELAURI: Don't let that worry you! *(Lifts the cup.)* Here in this trench amid the snow, I raise my little cup with deep feeling to our meeting after the war in my sunny Kakhetia. My mother Veriko and father Besso and wife Tamara will welcome you as their own kin. Here's to our meeting! *(Drinking)*

OSTAPENKO: First come to Poltava. Of course, my mother, father, wife Oxana and son may all have been killed by the fascists. *(Pauses)* In that event I'll welcome you by myself . . .

SHAYAMETOV: That's all right, Ostapenko. I'll visit you. I'll make the pilau myself . . . Then we'll go to Kazakhstan.

GORLOV: Here, give me the flask. *(Takes it.)* Cleaned it out, I see.

BASHLYOV: You bet. In the regular Guards' way.

GORLOV: Now, boys, keep your eyes open. Not a single fascist louse must be allowed to pass on this road.

OSTAPENKO: I don't think you have to warn us, Comrade Commander.

GORLOV: And see you don't run around without your valenki,[3] Gomelauri. I saw you tripping about barefoot over the snow yesterday.

GOMELAURI: Please forgive me, Comrade Commander, but I couldn't help myself. I'm very high-strung, you know. It was this way: We put a tank out of action, and its commander tried to get away. We didn't have any more cartridges; and since I couldn't stand seeing the man get away, I asked our Comrade Sergeant to let me catch him. He says: "You'll never get him." He tells that to me, a Georgian! Ever see a Georgian who couldn't get his man? Naturally, that made me real mad. Before I knew it, I'd pulled my valenki off and went after the man like the wind. I jumped on him and we both fell to the ground. He bit my ear, but I got a strangle hold on him. "You're not getting away!" I yelled, and that was the end of him.

GORLOV: Good work. But you have no right to leave Ostapenko. You can miss a tank running after a man like that.

OSTAPENKO: Don't worry, I'll tie the rascal to me.

GORLOV: If everything's quiet in the evening, come and have tea with me.

ALL: Thanks, Comrade Commander!

Gorlov leaves. Long pause.

GOMELAURI: What are you thinking about, Ostapenko?

BASHLYKOV: Leave him alone.

SHAYAMETOV: *(in a low voice)* Thinking about Oxana? Tell me . . .

OSTAPENKO: Yes. Read your letter, Gomelauri.

GOMELAURI: Which letter?

OSTAPENKO: The one you got on New Year's Day.

GOMELAURI: I read it to you already.

OSTAPENKO: I know. Read it again. Nobody writes to me. I'll feel better after hearing your letter.

SHAYAMETOV: That's right, read it. I haven't received any letters either. Bashlykov, you watch while we listen. Did you get a letter?

BASHLYKOV: Only two. *(Steps away to take up the watch.)*

OSTAPENKO: Come on.

Discussing stage settings for Wings *with Maly Theater artists.*

The Snowball Copse

GOMELAURI *(pulls out his letter and reads quickly)*: "My dearest beloved Akaki, let me kiss you first and tell you . . ."
OSTAPENKO: Don't rush. Begin from the beginning.
SHAYAMETOV: Please read it word for word.
GOMELAURI: *(slowly)*: "My dearest, beloved Akaki . . ."
SHAYAMETOV: Beloved . . .
GOMELAURI: ". . . let me kiss you first and tell you that Papa and Mama are well and send you their love, and your little boy Goga . . ."
OSTAPENKO: Little boy . . . *(Drops his head on his hands.)*
GOMELAURI: ". . . says nothing but 'Papa, Papa, bang, bang!' There is a lot of work on the collective farm. We can hardly cope with it. Why haven't you written a single letter? I cry into my pillow every night . . ."
OSTAPENKO: Every night . . .
GOMELAURI: ". . . How I want to see you . . . I dream of you every night. I even dreamed you had a bear. Aunt Nina says that's an ill omen. I was badly frightened. See that you don't catch cold in the winter. I'm knitting you two pairs of woolen socks and will send them to you on September 25th . . ." They'll get here in five days. I'll give you a pair, Ostapenko.
OSTAPENKO: Why in five days?
GOMELAURI: She wrote on September 1, and I received the letter on January 1. She sent the socks on September 25th, and today's January 20th. That means I'll get them in five days.
SHAYAMETOV: Keep reading.
GOMELAURI: ". . . Give all your comrades regards from me, Papa and Mama. We want you to hurry up and beat the fascists, and then all come and visit us. We'll have ten barrels of wine ready; Aunt Nina has five. A big kiss to you from me, Goga, Papa, Mama, Aunt Nina and our whole collective farm. Your Tamara. September 1, 1941."
SHAYAMETOV: I don't know what I'd do if I got such a letter.
OSTAPENKO: Nor I . . .

Two soldiers pull in a cable and set up a telephone in the trench.

BASHLYKOV: Is the Lieutenant coming here, boys?
FIRST SOLDIER: Yes.
BASHLYKOV: Is the battery still there?
SECOND SOLDIER: He ordered us to roll on out into the open.
OSTAPENKO: That's just like him. Doesn't like shooting from behind a corner. Did you see the kitchen anywhere?
FIRST SOLDIER: No. Everybody's gone.
BASHLYKOV: Gone? When?
FIRST SOLDIER: Just now. We're the only two left behind.
GOMELAURI: And where did they all go to?
SECOND SOLDIER: That way. *(Points)*
BASHLYKOV: Back. Looks like we're retreating.
FIRST SOLDIER: That's right. And they left us behind. We're in for it, boys. Looks like we're done for. They left us to die here, as sure as I'm talking to you.
OSTAPENKO: Gomelauri, sock him in the jaw!
GOMELAURI: You sock him. You've got a bigger fist.
OSTAPENKO: 'tenshun!
FIRST SOLDIER: What's the matter?

Ostapenko grabs the soldier by his collar with his left hand and punches him with his right. Lieutenant Gorlov enters.

GORLOV: What's happening here?
FIRST SOLDIER: He hit me.
GOMELAURI: He's a coward. He said we'd been left here to die.
GORLOV: You shouldn't beat the man. Try to explain things. *(Addressing the soldier)* Your name?
FIRST SOLDIER: Stepan Pechonka.
OSTAPENKO: I'm sorry, Comrade Commander. Come on and I'll explain everything to you. Come along.

Ostapenko and Pechonka go out.

GORLOV *(picks up telephone receiver)*: Chekalenko . . . Chekalenko . . . How're things? Don't be so stingy with the snow. I can see a black spot from here. *(Calls again.)* Let's have Petrov. Petrov, do you see the tree to the left of the hill? That's it. Yes, Yes, go ahead. *(Puts the receiver down.)*

Voice of Pechonka can be heard saying: "I understand, ouch . . . I understand, ouch! . . .

What's going on there? What is he doing?
GOMELAURI: Ostapenko's driving his point home. Don't you worry about them, Comrade Commander.

Ostapenko enters, followed by Pechonka.

OSTAPENKO: Comrade Commander, we had a little heart-to-heart talk, and he understands everything now. He's a fine lad. He just made a mistake.
GORLOV: I see. Why were you left behind, then?
PECHONKA: If the fascists show up, we're here to beat them in the Guards' way.
OSTAPENKO: Good boy!
GORLOV: But perhaps we've been left behind to perish?
PECHONKA: Of course not. A man who fights can't perish.
OSTAPENKA: See that? He'll be a swell Guardsman, just see if he isn't.
GORLOV: We'll see. At ease! *(Picks up the receiver.)* Chekalenko . . . Chekalenko, put on a bit more snow. That's right.

Pechonka sits down. Ostapenko approaches him and offers him his tobacco pouch.

OSTAPENKO: Here, have a smoke, Pechonka.

Pechonka takes the pouch.

It's a little frightening at first, but then you get used to it. How about something to eat?
PECHONKA: Oh, yes.
OSTAPENKO: Here. *(Gives him a small package.)* There's a piece of sausage in that. Don't be angry at me, brother. I've nothing against you. It's all for the cause, understand? For science sake. My father used to give me a hell of a walloping. I'm thankful for it now.
PECHONKA: You're not mad at me?
OSTAPENKO: Not if you've realized your mistake.
PECHONKA: Give me your hand.
OSTAPENKO *(holding out his hand)*: That's better. I feel fine now. Think I don't feel lousy when I can't tell whether it's a friend or a swine fighting by my side? You've got to get your bearings, boy. You're still young. Remember what I told you and never bellyache. Understand?
PECHONKA: Yes.
GORLOV *(looking through his field glasses)*: Tell the battery I see enemy tanks to the right, near the windmill. Hold your fire until I give you the signal.
SECOND SOLDIER: Right. *(Goes to the telephone.)*

The men rush to their places.

GORLOV: Well, boys, here's a chance to perform miracles. Ostapenko!
OSTAPENKO: Here!
GORLOV: Climb out on the left and crawl over to the telegraph pole.
OSTAPENKO: Right. Let's go, Gomelauri!

They crawl out.

GORLOV *(looking through his field glasses)*: Tell the machine-gun outfit the tanks are carrying men.
SECOND SOLDIER: Right. *(He phones.)*
GORLOV: So. Oho! *(Watches)*
BASHLYKOV: Are there many of them?
GORLOV: Plenty.
SHAYAMETOV: Now I can see them too. One, two, three . . .
BASHLYKOV: How many are there?
SHAYAMETOV *(counting)*: Thirty-five, thirty-six . . .
GORLOV: Bashlykov!
BASHLYKOV: Here!
GORLOV: Climb out and crawl straight ahead about 100 yards.
BASHLYKOV: Right. Shayametov, forward!

They crawl toward the road. Pechonka pulls a few

Why the Stars Smiled

Wings

grenades out of his bag and puts them next to him.

GORLOV: That's right. *(Laughs)* You've got a whole ammunition dump there.

PECHONKA: Just in case, Comrade Commander.

GORLOV: Keep a sharp lookout, Pechonka, not only in front, on all sides.

PECHONKA: Right, Comrade Commander. I can already see somebody crawling toward us.

GORLOV: That's a nurse. Hurry up, there! *(Looks through his field glasses again.)*

PECHONKA: Hurry up, sister . . . She's pulling a sled. Here she is.

A nurse crawls into the trench with a sled.

NURSE: Phew, am I hot!

GORLOV: Marusya, what have you come here for? Who's at the battery?

MARUSYA: Katya's there. I'll stay here in case anything happens.

GORLOV *(picking up receiver)*: Petrenko, have your shrapnel ready. There are gunners on the tanks.

The rumble of engines can be heard faintly.

MARUSYA: There's a lot of them . . .

PECHONKA: Don't be afraid, sister. We'll beat them.

MARUSYA: I know you will. Comrade Guards Lieutenant Gorlov always wins. He's got crack gunners. Do you know Vasya Sokol?

PECHONKA: What's he like?

MARUSYA: Oh, he's . . . His eyes are deep blue. And his black eyebrows are like the wings of a bird. Oh, there isn't another man like him in the whole Guards . . . Katya is crazy about him. But he doesn't pay any attention to her. She's a redhead with freckles. We worked together before the war. I was a messenger girl and she was a charwoman. We came here together. Haven't you seen her?

PECHONKA: Quiet. They're pretty near now.

MARUSYA: To hell with them. They're still far away. Vasya told me today, "I don't care if there are a hundred tanks, Marusya, I can handle them all!" I gave him a kiss, and he said, "Now I don't care if there's a thousand!" That's how brave he is! Terribly brave! Didn't you see Katya? Well, you haven't missed anything. Vasya told me yesterday: "You know, Marusya, Katya isn't so exciting to look at, but she writes nice letters." I told him, "Maybe she's got somebody to write them for her, Vasya . . ."

The engines are louder now.

GORLOV *(speaking into the receiver)*: Battery, fire straight at the tanks!

MARUSYA: Ooh, the vipers. Look at them crawling all over the place! Come on, Vasya, give it to them!

A volley, then rapid fire.

Look, they're ablaze! One, two, three. That's Vasya Sokol for you! The darling! *(Throws a kiss in his direction.)*

Machine-gun fire from both directions.

GORLOV *(into the receiver)*: Increase fire! More! Don't miss your targets, you devils! Chekalenko, shrapnel the third!

The roar of an approaching tank is heard.

PECHONKA: Tanks are coming down on us, Comrade Commander.

GORLOV: To your place! *(Over the phone)* Hit the third with shrapnel! Hurry up!

PECHONKA: It's stopped. It's burning! The second's stopped too.

GORLOV: Good boy, Ostapenko!

Voice calls: "Nurse, nurse!"

MARUSYA: Here I come! *(She crawls out with her sled.)*

Another voice: "Nurse! Nurse!"

PECHONKA: Nine are hit!

GORLOV: Eleven!

The whistle of a mortar shell.

Marusya, down!

An explosion near at hand.

PECHONKA: Oh, they've killed her!

GORLOV *(looking through his field glasses)*: No, they haven't. She's still crawling.

Voice: "Nurse! Nurse!"

PECHONKA: Ten tanks on the left.

GORLOV *(into the receiver)*: Ten to the right of the road, skirting it. Chekalenko, fire at them. Quick!

Firing increases.

PECHONKA: They're rolling back. They're running like hell!

GORLOV: They'll come back in a minute. *(Over the phone)* Chekalenko, how are things over there? What? Get ready, they'll be skirting the road soon. They'll be coming back right away. I'm well defended here. Don't shoot this way. Watch out for the gunners, and give them hell!

Marusya crawls in.

MARUSYA: Comrade Commander, Junior Sergeant Shayametov and Senior Sergeant Ostapenko are dead. Here are their identification papers.

Sergei opens them. A piece of paper falls out of one of them. Pechonka picks it up.

PECHONKA *(reading)*: "Please admit me to the ranks of the Party of Lenin and Stalin. If I'm killed, please consider that I died as a Communist. Death to the fascists! Guards Sergeant Ostapenko." *(Pause)* . . . Friend . . . My friend . . . *(Wipes his eyes.)* Dead, so suddenly . . .

GORLOV: Don't cry, brother. He wouldn't have liked it.

Roar of approaching motors.

PECHONKA *(looks in the direction of the noise)*: I'll give it to you! Come on, come closer! *(Picks up a grenade.)*

GORLOV *(into the receiver)*: Twenty-five to the left of the road, thirty-one to the right. Ten on the road. Fire only to left and right without waiting for orders! Boys, here's a chance to perform miracles! For our country, men! *(Puts down receiver.)* Pechonka, grab your grenades and crawl over to Gomelauri. Quick!

PECHONKA: Right, Comrade Commander. *(Picks up grenades and crawls away.)*

GORLOV *(pulls out grenades)*: Sit here, Marusya. *(To the second soldier)* Have you got any grenades?

SECOND SOLDIER *(showing him)*: Sure.

GORLOV: I'm going over to Bashlykov. Hold the fort, boys!

Crawls off.

MARUSYA: Oh, the devils. You'll get it, you will! Did you hear what our Commander said? "For our country, men!" He was thinking of Vasya Sokol when he said that.

SECOND SOLDIER: What Vasya?

MARUSYA: Oh, you're a new man, that's why you don't know him. I'll tell you what he's like. Vasya has deep blue eyes . . . As big as this. And eyebrows like birds' wings. He's the best gunner in the Guards. An eagle. A real eagle! You can tell that at once.

The rumble of motors is louder. Machine-gun bursts.

SECOND SOLDIER: Watch our Commander . . .

MARUSYA: They're surrounding him . . . *(Shouts)* Bashlykov! Bashlykov! That's right! One of them is stopped. But the others are still coming on. Help him with your grenades. The Commander's surrounded! Hurry up!

SECOND SOLDIER: I can't. We're lost!

MARUSYA: You dirty louse, give me the grenades! *(Grabs them from him.)* Tell Vasya over the phone . . . *(Runs off with the grenades.)*

The soldier follows her with his eyes. Covers his head with his hands and drops to the bottom of the trench. The din increases. Crackling of machine-guns. Marusya's voice from the distance: "Vasya . . . Vasya!" An explosion, then another.

—Reprinted from *Collection of Plays*, published by Sovietsky Pisatel, Moscow, 1950

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[1] Honorary title bestowed on Soviet military units for heroism during World War II.

[2] Dumplings

[3] Felt boots

USA-USSR SP

STRONGMEN IN MOSCOW

IT LOOKS like 1961 will be a banner year in American-Soviet sports exchange. In July there was more English spoken at Lenin Stadium in Moscow than in a long time. First a quintet of musclemen arrived for a test of strength and skill with their Soviet opposite numbers. The team included Olympic winners Charles Vinci and Isaac Berger, two strongmen slight in stature but mighty in strength. Three newcomers also came along—weightlifters Louis Reicke, Bill March and Sid Henry—about whom team coach Bob Hoffman said, "They've got a big future."

Selectors here had trouble naming the USSR squad since results have been coming in in droves. They finally settled on four different lineups. Since each of them was first-rate, the visitors were impressed.

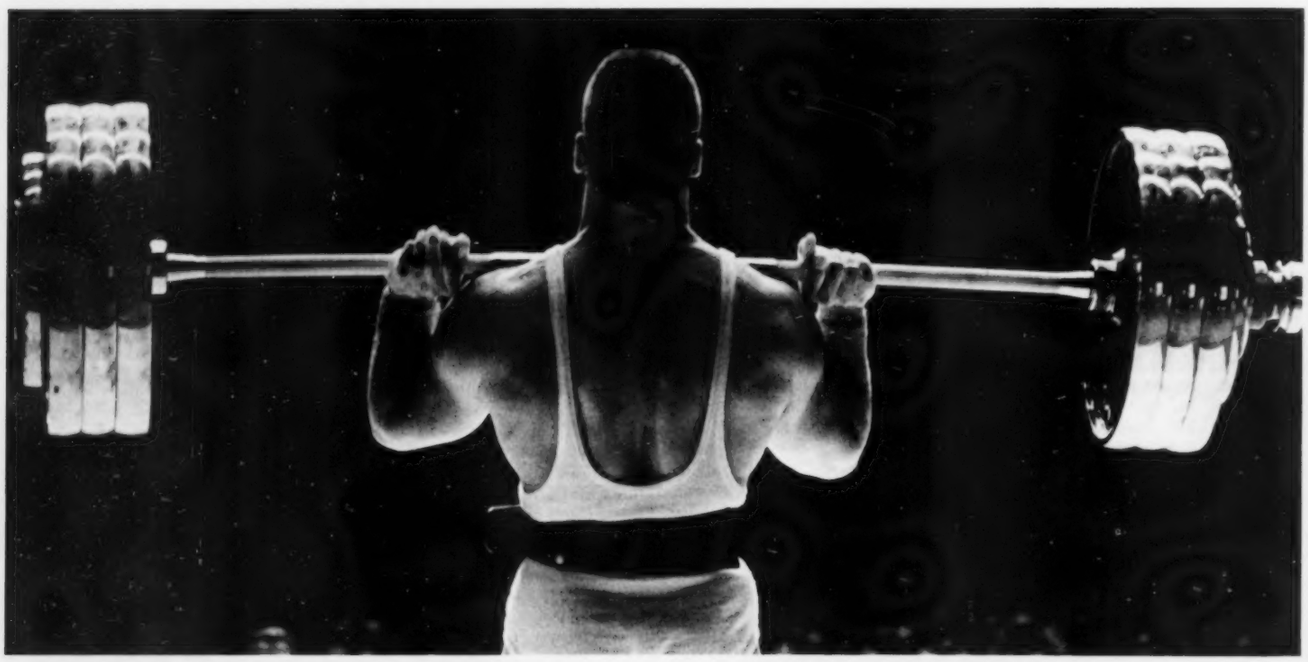
The USA weightlifters were not at peak form. Charles Vinci told correspondents that he had not been training as he should have but that he would be ready by the time the world championships open in Vienna. Isaac Berger was the only one on the American team who seemed to be in close to peak form and proved it by a string of brilliant victories.

On the Soviet side Yuri Vlasov once again impressed the fans. New records may be expected from this phenomenal athlete.

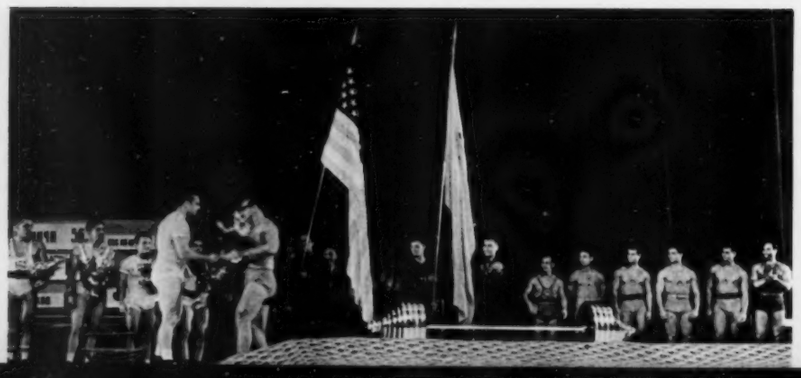
The American tour of the Soviet Union was more than just a matching of muscles. Said Bob Hoffman, American team coach: "These exchanges are a good idea—we've become great friends." Isaac Berger voiced the same sentiment. He enjoyed his stay, he said, and added: "These matches are a great thing not only for friendship between sportsmen but also for friendship between countries."

In a radio broadcast from Moscow Clarence Johnson, head of the International Weightlifting Federation, said: "We always enjoy ourselves when we come here. This time was no exception . . . We were very much impressed with the fans—they're very fair."

And we can reply, on behalf of the fans: We are glad to see American athletes compete. Let's have more exchanges!



One of the musclemen at the USA-USSR exchange matches in Moscow this summer. The U.S. quintet included Olympic winners Charles Vinci and Isaac Berger. Soviet contender included Yuri Vlasov, World's No. 1 strongman, and Sergei Lopatin, the athlete with the thoughtful expression in the photo on the right, who is considering how to get that terrific load off the floor. He did, as the record books show. In the photo at the bottom, Yuri Vlasov presents a bouquet to American Sid Henry. These two heavyweights lifted a ton of metal between them. Bob Hoffman, U.S. coach, said "These exchanges are a good idea . . . We've become great friends."



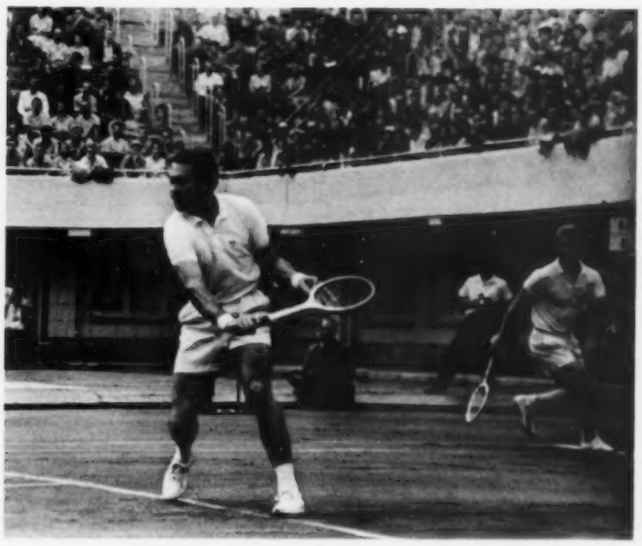
PORTS EXCHANGES

By Victor Kuprianov
Photos by Lev Borodulin and Vladimir Bloch

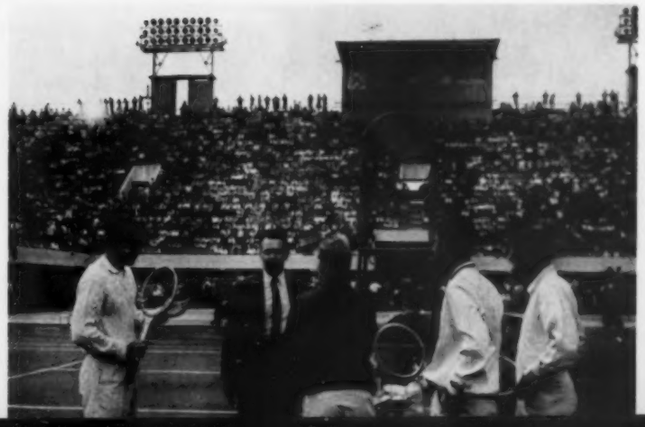
TENNIS

Sandwiched in between two headline events was the arrival of Jack Kramer's "circus." This exhibition tour of the world's top professionals was planned to give fans here a glimpse of top-flight techniques. The visitors all agreed that their stay was pleasant and had nice things to say about the Soviet players. They noted a definite improvement in their skill and ability, and predicted a great future for Soviet tennis, particularly after the victory of 16-year-old schoolgirl Galina Baksheyeva at Wimbledon.

Tennis is rapidly gaining favor in the Soviet Union. We have been developing junior players of first magnitude, a sign that the game is catching on. The annual invitation meets held here draw an impressive entry list, with the United States also represented.



Jack Kramer's tennis "circus" made sports headlines. This exhibition tour of the world's top professionals gave aspiring Soviet champs something to think about. They saw very high caliber playing indeed. In the photo to the right are Jack and charming Mrs. Kramer, all smiles before the Moscow debut, and in the photo below Jack gives a last minute pep talk to the players. As is evident in this photo and the one above, the exhibition games drew overflow audiences. Tennis is a relatively new game for Soviet sportsmen but is rapidly gaining favor. That the game is really catching on and has a very promising future is indicated by the fact that the USSR is developing international winners. Galina Baksheyeva, the smiling Soviet sixteen-year-old miss in the top right photo, captured first place in the junior division at Wimbledon.



SUMMIT ATHLETICS

The American weightlifting team and Jack Kramer's group were still making headlines when the USA-USSR track-and-field meet took over the news columns. Editors had titled the previous meets "match of the century" and "match of titans." This time, with all superlatives used up, they were nearly frantic trying to figure out what to call the current contest. After many sleepless nights they hit on "Summit athletics! Track and field at top level!" And a very apt title it was—six world records were broken in the two-day meet. Never before have records taken the kind of beating they did in Moscow this July.

THREE WORLD RECORDS A DAY

First the women's relay: Jet-propelled anchor man Wilma Rudolph pulled her team out of the hole by overcoming a sizable Soviet lead and establishing a new world record—44.3 seconds. That was what won the relay for the U. S.—the Soviet team was coming up fast, in better than Europe's best time.

The U. S. men's relay team also had to turn in a world record performance to beat the USSR. In this race both sides did better than the world's best. The United States clocked 39.1 seconds—4/10 of a second faster than the previous world high. The Soviet Union clipped 1/10 of a second off the record. This is going to start the longevity debate going again since Leonid Barteniev and Yuri Konovalov, two old-timers, were on the Soviet team. What's more, on the second day of the match fans were startled to see Leonid Barteniev run 440 yards.

The first day's record parade ended with Tamara Press throwing the discus 188 feet 4 inches which bettered the world record.

On the second day three more world records were broken. Tatyana Schelkanova, Leningrad electrical engineer, did 21 feet 3 inches in the broad jump—better than the world record—in her very first try. Last season she also turned in a record performance; but the high wind behind her, blowing at a velocity of more than seven feet a second, caused the judges to rule out the jump. This time the 70,000 fans in Lenin Stadium sat in hushed silence as the officials measured the velocity of the wind and broke out in cheers at the announcement that the velocity measured less than five feet per second, and a side wind at that. Willye White, her American rival, jumped 20 feet 11¾ inches for a new U. S. record.

Another record was set by Ralph Boston when he jumped 27 feet 1¾ inches in his second try. This was one of the most keenly contested events. Tension ran so high that all the jumpers failed in their first try. The record measurements were made with a special optical device; and while the officials were busy, Boston turned his back on the proceedings to keep his own excitement down.

Out on the field the air was electric. High jumpers John Thomas and Valeri Brumel meant business. They said as much in interviews before the match. And soon they had left their rivals behind at 7 feet 3 inches. When it came to the next height, John Thomas called for 7 feet, 4 inches, higher than the world record. Afterward he explained: "I told myself if Brumel is going to beat me, he's going to have to make a world record. And he did."

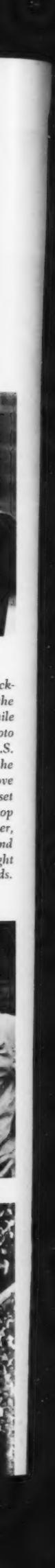
Thomas failed in all three attempts. Brumel, too, dislodged the bar on his first two tries. Meanwhile it started to rain, but no one in the stands budged. The fans were so engrossed, they even forgot to put on raincoats or use umbrellas. In his third attempt Brumel made it. The stands rocked with deafening cheers that must have been heard within a ten-mile radius.

The American athletes also chalked up a new national record in the 3,000-meter steeplechase. Pincus Sober, head of the Track-and-Field Committee of the AAU, expressed his satisfaction with the progress the Americans had made in the steeplechase and the three-mile run, in which Max Truex placed second to Pyotr Bolotnikov, and the progress the Russians had made in the sprints and hurdles. For the American team he said: "We have been received most hospitably." Jim Beatty, one-mile run winner, added, "We enjoyed our stay very much. Lenin Stadium is very beautiful. This was a pleasant trip."

A fitting climax to the USA-USSR match was the announcement that the Soviet Union would compete at Stanford, California in 1962.

And now for the historians, here are the Moscow statistics: Men's events: USA—124, USSR—111. Women's events: USA—39, USSR—68. The USSR took first place in 17, the USA in 15.

With six world records broken in the two-day track-and-field meet, three for each of the teams, both the American and Soviet coaches had something to smile about. And that's what they're doing in the photo directly below. In the photo below that, the U.S. women's relay team is taking a bow after breaking the record. Ralph Boston, shown in photo directly above with his Soviet opponent Igor Ter-Ovanesyan, set another record with his 27-foot-plus jump. At the top of the page are Tamara Press, discus record breaker, with her American competitors Melody MacCarthy and Sharon Shepard. And in the large photo to the right USSR's Valeri Brumel sets one of the six new records.



THE LENINGRAD BALLET

Legend of Love
Shirin—Emma Menchonok
Ferkhad—Igor Uksusnikov

Legend of Love
The Stranger—Konstantin Rassadin

THE FAMED Leningrad Ballet Company, currently performing for foreign audiences, is featuring two of Tchaikovsky's masterworks in a varied program—*Swan Lake*, originally choreographed by Marius Petipa, Lev Ivanov and Mikhail Fokine, and Petipa's brilliantly choreographed *Sleeping Beauty*. Both ballets have been given new interpretation by the company's present chief ballet master, Konstantin Sergeyev, that enhances the fundamental concepts of his great Russian predecessors.

Other well-loved dances in the company's program include the "Shadows" from Minkus' *La Bayadere*, the "Dance of the Flowers" from Tchaikovsky's *The Nutcracker*, the Sech scene from Solovyov-Sedoi's *Taras Bulba*, and various divertissements.

One of the most interesting of the new ballets on the program is *Legend of Love* by the young Azerbaijan composer Arif Melikov, choreographed by Yuri Grigorovich, one of the company's budding ballet masters. This ballet is based on a dramatic poem written in prison by the talented Turkish poet Nazim Hikmet. The poet drew on an old legend about Queen Mehmeneh Banu, whose love was unrequited, and the beautiful tale of the tragic love of Princess Shirin and Ferkhad.

The artists performing include prima ballerina Alla Shelest, hailed for her moving and perceptive character portraits; Askold Makarov; Ninel Kurgapkina; Emma Menchonok; Tatyana Legat; Boris Bregvadze; Olga Zabotkina; and the younger Kaleria Fedicheva, Konstantin Rassadin and Alexander Gribov. The company is headed by People's Artist of the USSR Konstantin Sergeyev.

A Brief History

The Leningrad Ballet was founded nearly 225 years ago when a group of 12 Russian girls and boys—the children of serfs—were given ballet lessons with the object of forming a national ballet company. The group grew into a company that became world famous as the Mariinsky Ballet of St. Petersburg and is now known as the Leningrad Kirov Ballet.

In the first years after the October Revolution the old repertory was used, but it had to be danced in a new way. In the prerevolutionary ballet of the Mariinsky Theater, classical and character dancing were used to create a purely external effect of brilliance and virtuosity. Now the dancers had to find a bond with a new, eager audience, one that came to the theater expecting to see something vitally important. Conventional mime was replaced by expressive acting capable of projecting the characterization across the footlights.

By the thirties the Leningrad Ballet had a strong company of gifted dancers, and the next problem was to create new Soviet ballets with a more profound dramatic content.

Under the tutelage of Professor Agrippina Vaganova—one of the greatest ballet teachers of all time–the Russian school of classical dance acquired new features, making it a fully Soviet school. The first great ballerinas taught by Vaganova—Marina Semyonova and Galina Ulanova—were also the first to introduce new content into the age-old steps of the classical ballet. Even ballets of the prerevolutionary reper-

Scenes from The Seventh Symphony

The Seventh Symphony

tory acquired a contemporary note when performed by the new generation of dancers.

In molding her system, Vaganova based it not only on old and known methods but on everything she saw around her. She took something from each of the works of Soviet choreographers.

Though she taught only girls, her scientific method, embodying all the best achievements of many generations of Russian teachers, also influenced the quality of male dancing. The Leningrad Ballet produced strong and virile dancers—Alexei Yermolayev, Vakhtang Chabukiani—to perform heroic roles in the new ballets.

The extremely fruitful period of the Leningrad Ballet in the thirties, when outstanding creations by young Soviet choreographers appeared one after another, was due in no small measure to Vaganova's work. The new ballets had genuine dramatic impact and formed a new and very valuable type of actor- dancer in Soviet ballet.

During the war the company was evacuated to the Urals where its creative work was continued, and in 1945 Fyodor Lopukhov, veteran choreographer, produced a new version of *Swan Lake*. In 1950 Konstantin Sergeyev did another new version of *Swan Lake*, bringing it much closer to the Petipa-Ivanov production of 1895. This version as well as Konstantin Sergeyev's 1952 production of *The Sleeping Beauty* —a loving revival of the Petipa masterpiece—are the ones we see performed today.

A great role belongs in these productions to the excellent designer Virsaladze, who has the rare ability of being able to blend his settings with the choreography and is a past master in creating harmonious color schemes. In 1958, when Yuri Grigorovich, a gifted young choreographer, did his own version of Prokofiev's *The Stone Flower*, he worked very closely with Virsaladze. The result was a production of exceptional beauty. Grigorovich has just produced his second ballet, *Legend of Love*, to music by Ariff Melikov.

Igor Belsky, only yesterday a leading character dancer, is now working on his second ballet to Shostakovich's Seventh Symphony, choreographing it in the modern idiom.