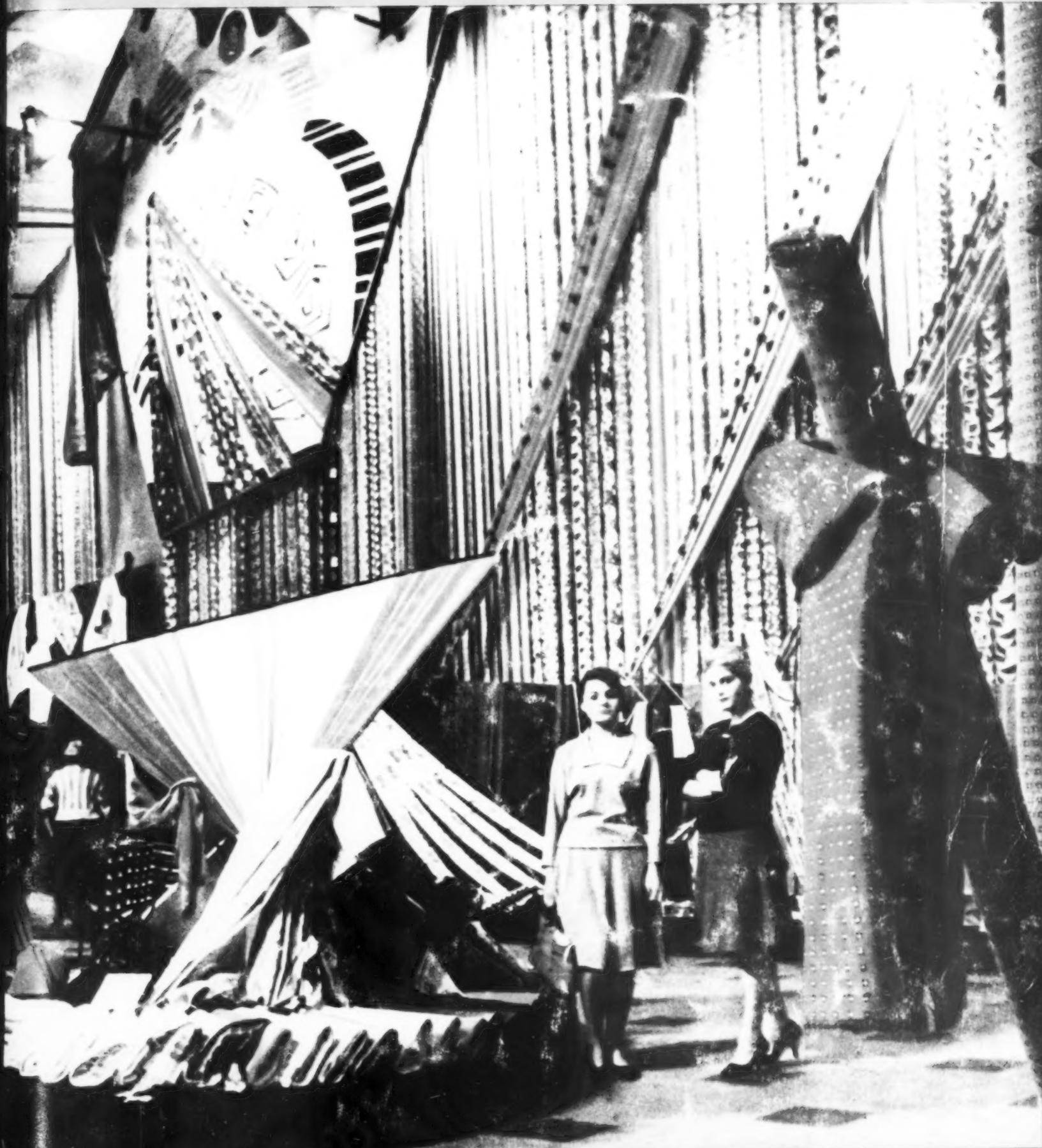


# USSR

PAGES FROM  
THE  
GREAT LIFE

See page 1

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# Pages From The Great Life

By Academician Mark Mitin

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**T**HE LIFE STORIES of great men, from Plutarch to Einstein, have engrossed people of all countries and continents. Both the young reader and the graybeard are drawn to the biographies of those individuals of whom mankind has reason to be proud.

The life story of one of the world's most illustrious men was published recently in the Soviet Union under the simple title *Vladimir Ilyich Lenin. A Biography*. It was written by a group of eminent scholars, and a first printing was sold out within a few hours. Translated into many languages, it has been made available to foreign readers and is now exciting wide interest abroad.

The primary attraction of this biography is unquestionably that its subject is the man who founded the Communist Party of the Soviet Union and the world's first socialist state.

According to UNESCO figures for 1955, there have been as many as 371 editions of Lenin's works published in translation all over the world. Lenin's name is spoken in all languages, to all people it stands for greatness. In the words of Maxim Gorky, "No other man has so clearly earned eternal remembrance."

The new book presents a wealth of interesting and authentic factual detail about Lenin. But it does more, it cuts through the limitations of the more usual biography by showing the man as inseparable from his time. When the book tells the story of this man of genius, describes his struggle for the happiness of the workingman and summarizes his teachings, it also relates the history of a country and of a new society to which people on all continents look with hope.

The biography gives considerable background material on Lenin's family, his childhood and early education, and the way in which his revolutionary world outlook was decisively shaped by the scientific views of the outstanding thinkers Karl Marx and Friedrich Engels.

### A Revolutionary Party

Vladimir Ilyich Ulyanov—Lenin—was born in Simbirsk (now Ulyanovsk), a provincial town on the Volga, on April 22, 1870. His youth and schooldays coincided with one of the most oppressive periods in Russia's history, a time, he described later, "of unbridled, incredibly senseless and brutal reaction." In the eighties of the past century the revolutionary teachings of Marxism broke through the suffocating gloom of Russia like fresh air and sunlight. Marxism was the penetrating and all-inclusive concept that answered the questions posed by life. A creative approach was, however, required to apply Marxism to the specific conditions that prevailed in each country.

The great scientific discoveries of Marx and Engels supplied the theoretical foundation for Lenin's revolutionary activities. When he was a mere youth, just becoming acquainted with the works of Marx and Engels, he grasped their essential validity and power and threw in his lot, completely and permanently, with the revolutionary struggle for the emancipation of the working people.

Lenin's genius lay in his ability to develop Marxist theory and to apply it in the solution of the important problems facing the Russian people.

In the eighties and nineties, the period when he began his intensive political work, a new class was emerging as an independent force in Russia's political arena—the class of industrial workers, the proletariat. Bent under the heavy yoke of exploitation in capitalist factories, they were beginning to raise their heads, to fight for their rights. It must be remembered that the Russian workers of the time, for the most part peasants who had left the villages to seek a livelihood in the cities, were largely illiterate, with no understanding of politics. Organizers had to be found within their own ranks to unite them and teach them their political tasks.

Lenin rallied around him the most progressive people and fused them into a revolutionary party that in spite of the brutal persecution of the

czarist government and its gendarmes was able to open the eyes of the workers and mobilize them for the socialist revolution.

### The Land Question

Among the most critical problems facing Russia at the time was the land question. Millions of peasants in this predominantly agrarian country were landless or had so little productive land that crop failure was an ever present threat. They lived in the most extreme poverty, on the fringe of starvation. The best land was owned by the landlords, who leased it to the peasants on the most oppressive terms.

In this brutally exploited working peasantry that constituted the overwhelming majority of Russia's population Lenin saw the natural ally of the working class. He undertook to build an enduring alliance between the two exploited classes for the revolutionary reorganization of society. The proletariat—the more politically unified and the more uncompromisingly revolutionary class—was to play the leading role in this alliance.

The biography emphasizes the fact that "Lenin's life cannot be separated from the activity of the Communist Party. He was the organizer and leader of the revolutionary Marxist party of the Russian proletariat. He saw the enormous possibilities for a victorious revolution in Russia if the labor movement were led by a well-organized vanguard of the proletariat, a revolutionary Marxist party."

The book touches on major episodes of his life and work—how he organized the party of the working class and prepared the people for the great revolution that was to sweep away the rule of the exploiters, how he directed the founding of the first socialist state in history, how he guided every step of this people's state which became the symbol of freedom and world peace. Presented in the book are the most important of the many contributions Lenin made to the treasury of Marxist writings on economics, philosophy and the strategy and tactics of the labor movement.

Lenin's pre-eminence as a thinker and fighter, as a social theorist and practical revolutionary, has given him a unique place in history, the entire development of which in the twentieth century bears the imprint of his pulsating energy, his tireless struggle for a just social system.

The world's first socialist revolution, inseparably associated with Lenin, changed the destiny of Russia and of the world. It altered the course of social development, initiated the transition to a new and the most harmonious society on earth.

This does not in any way imply that in order to make a social transition all peoples have to carry through a revolution similar to the October Revolution of 1917. What it does mean is that the glow of the October Revolution is a beacon that lights man's way to a better and brighter future and that every people will reach that future in its own way.

Lenin taught that revolution cannot and must not be forced upon peoples from without. It is the result of internal developments in each country and cannot be either exported or imported. If a revolution does break out in a country, it means that living conditions have become so unendurable that the people unconditionally reject them in favor of new and better forms of social organization. This was Lenin's view and he adhered to it throughout his life.

### Social Utopias

Progressive thinkers of earlier periods speculated on the possibility of creating a social system that would forward the interests of the overwhelming majority of the people and thereby make it possible for society to move steadily toward universal well-being. These great minds were thinking, too, of how the interests of the individual and the community could be reconciled and harmoniously combined in the common



Family portrait. Vladimir Ilyich Ulyanov (Lenin), who was then nine years old, is on the extreme right—1879.



Lenin united all the Marxist workers' circles in St. Petersburg into the League of Struggle for the Emancipation of the Working Class. A group of members—1897.

endeavor to subordinate nature to man's will, to harness its forces in man's service.

Many such projects and plans were proposed for an ideal society. In 1516 the Englishman Thomas More wrote his famous *Utopia*, depicting a fantastic island governed by a system of his invention. The Italian Tomasso Campanella in 1623 described his plan for an ideal social system in *City of the Sun*. The Frenchman Etienne Cabet outlined another such project for a just social system in 1840 in his *Icaria*. His countrymen, Claude Henry de Saint Simon and Charles Fourier, and the Englishman Robert Owen were among many other thinkers who searched for a more rational and more equitable society.

#### The Marxist Answer

But while these men and others worked out their ideal social systems in great detail, none of them indicated how they were to be achieved. None of them had perceived the objective historic laws governing the evolution of society. Nor could they point to that force inherent in society which would be able to initiate its reorganization.

Most social thinkers were not clear as to whether historical social development was a process governed by law or by pure chance, dependent upon the whims and drives of outstanding individuals, kings, generals and conquerors. That this "great man" theory of history, widely current among historians and social scientists before Marx, was very far from the truth was demonstrated by historical materialism—the science dealing with the development of society.

Only Karl Marx and Friedrich Engels had the scientific answer to the many questions that perturbed thinkers. Their answer was derived from a study of the entire course of the development of society. On the basis of a critical analysis of the history of the struggle among

classes and by generalizing the achievements in philosophy, political economy and other sciences, they proved that social development is governed by definite laws which do not depend upon man's will and consciousness. They discovered the basic factor that decisively affects the entire course of human development. That factor in any given epoch is the method by which the material values required by the society are produced.

Man has moved upward in the animal kingdom and gradually developed into a human being because of his ability to work. In a sense one can say that "work created man." Work developed his body and enriched his reasoning power. It is a fact that it was through labor that the human hand and brain achieved the almost magic perfection that was able to create the paintings of Raphael and Leonardo da Vinci, of Rembrandt and Repin, the sculpture of Phidias and Michelangelo, the music of Liszt, Paganini, Beethoven and Tchaikovsky.

Production is an unchanging requirement for man's existence, a natural and everlasting necessity. Without production there could be no material interchange between man and nature, no human life. Production can be carried on only collectively, it must be social. That is the way, and the only way, in which man can stand up against nature. It was Aristotle who long ago expressed the idea that "man is a social animal."

Those who are carried away by the Robinson Crusoe idea, who insist that man can live alone, isolated from society, have always been ridiculed by sober, realistic people. Even Daniel Defoe's celebrated hero was able to survive on his uninhabited island only because of the scraps and remnants of things people had produced that were cast ashore, to say nothing of the company of his man Friday.

In the process of production people act upon nature and also influence one another. Production reflects the attitude of people toward nature

## IMPORTANT PLACES IN LENIN'S LIFE

Drawings by Vladimir Kobelev

Shushenskoye Village



Ulyanovsk



League of  
Nations—1897.



Lenin was living abroad to escape the czarist government's persecution—1914.



The year the Eighth All-Russian Congress of Soviets approved Lenin's electrification program—1920.



Lenin addresses the men of the newly trained People's Army in Red Square as they are about to leave for the front—1919.

(productive forces of society) and their mutual relationships (production relations).

The method of production prevailing in a given society determines, in the final analysis, its characteristic state system, its political forces and parties; the predominant ideology, ethics, religion and psychology of its members—in short their whole manner of thinking. Moreover, the social class that plays the leading role in production is also the dominant one in the political, ideological and other spheres of life of the society.

A change in the mode of production leads to changes in the whole social structure. Most significantly it creates a new class, one which is the standard-bearer of a new, more progressive mode of production and which consequently becomes the ruling class when this mode of production becomes the dominant one.

The socialist mode of production is the economic foundation of socialist society, where all the means of production are public property and the operative principle is "He who does not work, neither shall he eat." This system of society is only the initial stage of communism, a society where the material and intellectual requirements of people will be wholly and unconditionally satisfied, one in which labor for the common good will have become a prime necessity for the free man.

#### Communism—Society of the Future

Lenin applied the Marxist ideas to the Russia of his time and further developed them in relation to the new era that opened with the twentieth century, the era of imperialism and proletarian revolution, the era of the transition from capitalism to communism introduced by the great October Socialist Revolution in Russia.

Lenin had the rare faculty of seeing into the future. He worked out

a scientifically substantiated program for converting an economically backward Russia into a modern and powerful country. The program called for the socialist industrialization of the country, the all-round development of heavy industry, complete electrification, the implementation of the cooperative plan for reorganizing agriculture along socialist lines, and a cultural revolution.

The founder of the Soviet state was no idle dreamer indulging himself in fantasy; he was a scientist who saw the outlines of the harmonious society of the future, communism.

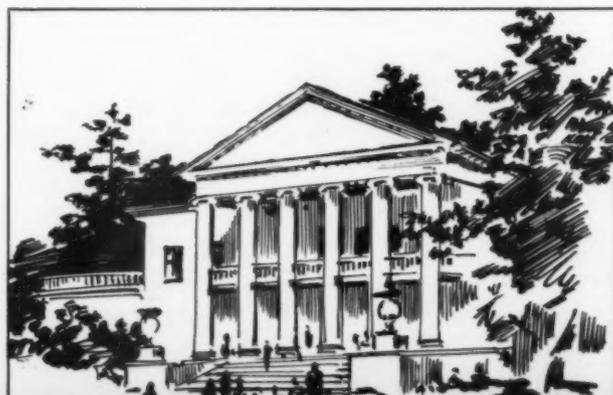
He saw the vast possibilities that communism opened for education, science and the arts. He saw it as a society of creative labor with an abundance of material wealth and intellectual riches, a society living by the principle, "To each according to his needs," one where creative labor would be sovereign.

Lenin's vision is materializing in the Soviet Union and the other countries of the socialist world. Following the course he charted, backward Russia grew into one of the world's most advanced industrial powers, and it is steadily continuing to make greater progress. Lenin's ideas serve as an endless source of inspiration for the Soviet people in their creative labor.

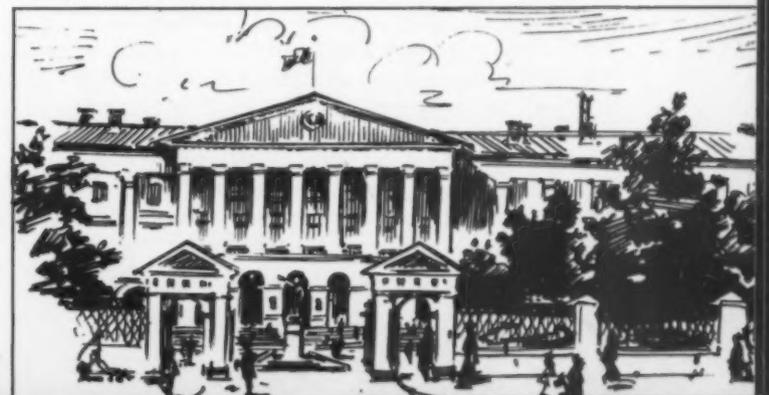
His own great effectiveness as a leader and organizer stemmed from his close contact with the people, his unflinching knowledge of their needs and wishes. He emphasized repeatedly that the unconquerable strength of the Communist Party lay in its ever-growing ties with the greatest numbers of people. "That means," he wrote:

- "To live *in the midst of the people.*
- "To know *their sentiments.*
- "To know *everything.*
- "To understand them.
- "To be able to get close to them.

Gorki



Smolny Palace, Leningrad



## Pages From The Great Life

"To win their *complete* confidence. It means that the leaders do not separate themselves from the people they lead, that the vanguard does not separate itself from the whole army of labor."

For their part, the working people loved the man they called "Ilyich." He was near and dear to them, and they showed their concern for him. His biographers note that when Lenin was seriously ill "there was not a meeting of workers, peasants or Red Army men at which the reporters were not asked questions about Ilyich, how his health was."

Lenin received thousands of letters and telegrams at the time wishing him many more years of excellent health and fruitful labor for the good of the working people. The workers of the Bogatyr Plant of Moscow, for example, wrote him, "We know that your thoughts are with us, that you are concerned about and troubled by our needs and problems. . . . We send you our proletarian greetings and pledge that our calloused hands that grip the banner of Soviet power will not let go of it."

World knowledge was immeasurably enriched by Lenin's genius that encompassed the many problems posed by the revolutionary struggle of the working class. He wrote on questions of political strategy and tactics, on problems of philosophy and political economy, law and the state, history, education, aesthetics, literature, etc.

He made valuable contributions in fields other than the social sciences. In his *Materialism and Empirio-criticism*, *Philosophical Notebooks*, *The Question of Dialectics*, *Significance of Militant Materialism* and others, he developed profound generalizations on the basis of the knowledge of the natural sciences available then and solved important philosophical problems.

He took frequent occasion to emphasize that dialectical materialism, created by Marx and Engels, was the only truly scientific world outlook, the only one corresponding to all the natural and social sciences.

Lenin took dialectical materialism, the most advanced world outlook, and with it worked out the answers to the philosophical questions raised by the contemporary revolution in the natural sciences. These answers are accepted in our day by increasing number of scientists working in various fields in many countries—by Langevin, Joliot-Curie and Bernal, among others, and, of course, by the brilliant galaxy of Soviet scientists.

Lenin demonstrated that twentieth century achievements in the natural sciences added depth to our ideas about matter as an objective reality and, by deepening our knowledge, further disclosed the laws of nature.

Although enormous progress has been made in the study of physics in the decades since Lenin's death, his ideas and propositions on the philosophical foundations of this science and all the natural sciences have a most urgent relevance even in our day.

Lenin had a boldness of thought which surmounted all obstacles. He battered down old and obsolete theoretical deductions with fresh and progressive concepts that conformed to the new stage in history. He studied life unceasingly, searched for the new, the germinating, the growing elements that needed to be nurtured and strengthened in order that science, to quote his own words, "should not remain a dead letter, or a fashionable phrase . . ." but "should really become planted in flesh and blood and develop into a component element of life, fully and actually."

Characteristic of Lenin were his great erudition, his indefatigable study of original sources, his careful sifting of data, his ability to keep abreast of developments in science and technology. His approach to science was creative, searching for and supplying new data that would reveal the laws governing social development.

Of the future of science, Lenin said that only socialism would extricate it from the fetters that enslaved it to capital, make it genuinely free and open grand prospects for unhampered and rapid progress.

One of the major services Lenin rendered the country was to chart the major directions of development for Soviet science. In April 1918, when the Republic was still in its infancy, he prepared his "Outline for a Plan of Scientific and Technological Work" in which he suggested the principal trends and forms of work of the Academy of Sciences in the new conditions. The primary task he set scientists was a study of

the country's productive forces and natural wealth to speed economic reconstruction. A major element in Lenin's outline was the country's electrification.

He foresaw that socialist production, to develop on the vast scale he contemplated, would have to be equipped to use the most advanced of engineering techniques, automation. The eminent Soviet engineer, Academician G. M. Krzhizhanovsky, who worked with Lenin on the plan for electrification, recalled: "In the few minutes Vladimir Ilyich could spare for a friendly conversation with me, I knew there was no better way of diverting his attention from his heavy responsibilities than a talk about new things in science, especially about the latest achievements in engineering. The achievements that interested him most were those that could find direct application here in Russia."

And it is a fact that the solution of many an important scientific and technological problem is linked to Lenin's name—exploration of the Arctic, exploitation of the colossal deposits of iron ore in the Kursk Magnetic Anomaly, extraction of the wealth of Kara-Bugaz (a gulf in the Caspian), irrigation of the Mugan Steppes in Azerbaijan, prospecting and drilling for Ukhta oil in the northern part of the USSR, and many other undertakings.

Lenin taught that to assure the all-round development of science, researchers had to be given every encouragement and their needs provided for, so that their energies and abilities could be given fully and completely to their work. Lenin himself was personally and deeply interested in the work of Timiryazev, Pavlov, Michurin, Zhukovsky, Tsiolkovsky and other leading Russian scientists. Researchers today draw inspiration and sustenance from Lenin's scientific writings; they are powerful tools for understanding and remaking life.

### International Relations

In the sphere of international relations Lenin proved that the peaceful coexistence of states with different social systems is a necessity for the Soviet people, for the working people of all countries and for all mankind.

This Leninist principle, the biographers note, demands that states not resort to force, to war, as a way of settling disputes, that normal peaceful political and economic relations be maintained between countries with different social systems. The undeviating desire of the Soviet state for peace stems from the very nature of the socialist system that provides no ground or justification for aggression, for the conquest of foreign territories and the enslavement of peoples.

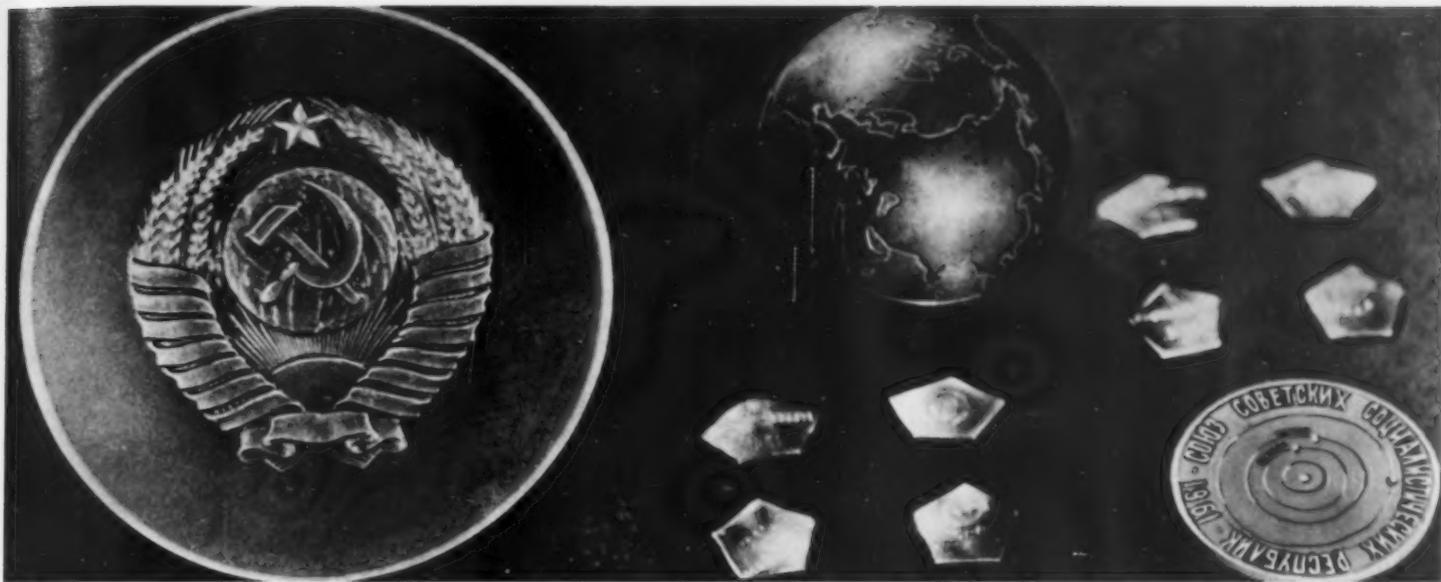
On Lenin's initiative the Soviet government, immediately after the Civil War, took energetic steps to establish trade and diplomatic relations with all the countries, the United States included. The biography quotes Lenin's answer to a question put by an American journalist regarding the basis for peace with the United States: "Let the American capitalists leave us alone. We will not touch them. We are even prepared to pay them in gold for machines, implements, etc., useful for transport and production. And not only in gold, but also in raw materials."

Lenin considered the development of trade one of the most important mutually beneficial factors making for peaceful coexistence of the two systems. "He repeatedly declared," his biographers note, "that the interests of the capitalist countries themselves dictate the establishment and development of trade relations with Soviet Russia." They are moved to this course by world economic relations, a more compelling factor than the desire, will and resolve of any government or class. In talking to one foreign correspondent, Lenin said: "I do not see any reason for a socialist state like ours not to have unlimited trade relations with capitalist countries."

Busily engaged in building communism, the Soviet people are vitally concerned that peace be maintained. Guided by Lenin's fundamental doctrine of international relations—the peaceful coexistence of states with different social systems—the Soviet government fights for peace throughout the world and for the security of nations.

"Our entire policy and propaganda," Lenin stressed, "are by no means intended to draw nations into war, but to put an end to war." He pointed to the fact that the peace policy had the support of the vast majority of the earth's population.

Turning the last page of this book about Lenin, the reader has the feeling that for a time he has lived with the greatest man of our era, the man who transformed a dream of peace and happiness for all people into a living and growing reality.



The station carries a small titanium globe inscribed with the USSR coat of arms and the words "Earth-Venus 1961." Left: Medallion enclosed in globe.

# Toward Venus

**T**HE SOVIET automatic interplanetary station, launched toward Venus on February 12, 1961, speeds on its way to a meeting with our closest celestial neighbor. Venus is still many millions of miles from earth but is approaching at great speed. The cosmic meeting, say scientists, will occur between May 15 and 31.

The vehicle for the interplanetary station was a multistage rocket with powerful engines shot to a high altitude above the earth's surface and guided by its control arrangement along a pre-computed path. When the rocket reached orbital velocity (the speed required to escape the gravitational pull of our planet), a heavy sputnik separated off from the vehicle. The sputnik carried a space rocket and the automatic interplanetary station and moved into an almost circular orbit around the earth.

At a pre-computed point in its orbit, the space rocket took off from the sputnik carrier. When this rocket had worked up to a speed 2,168

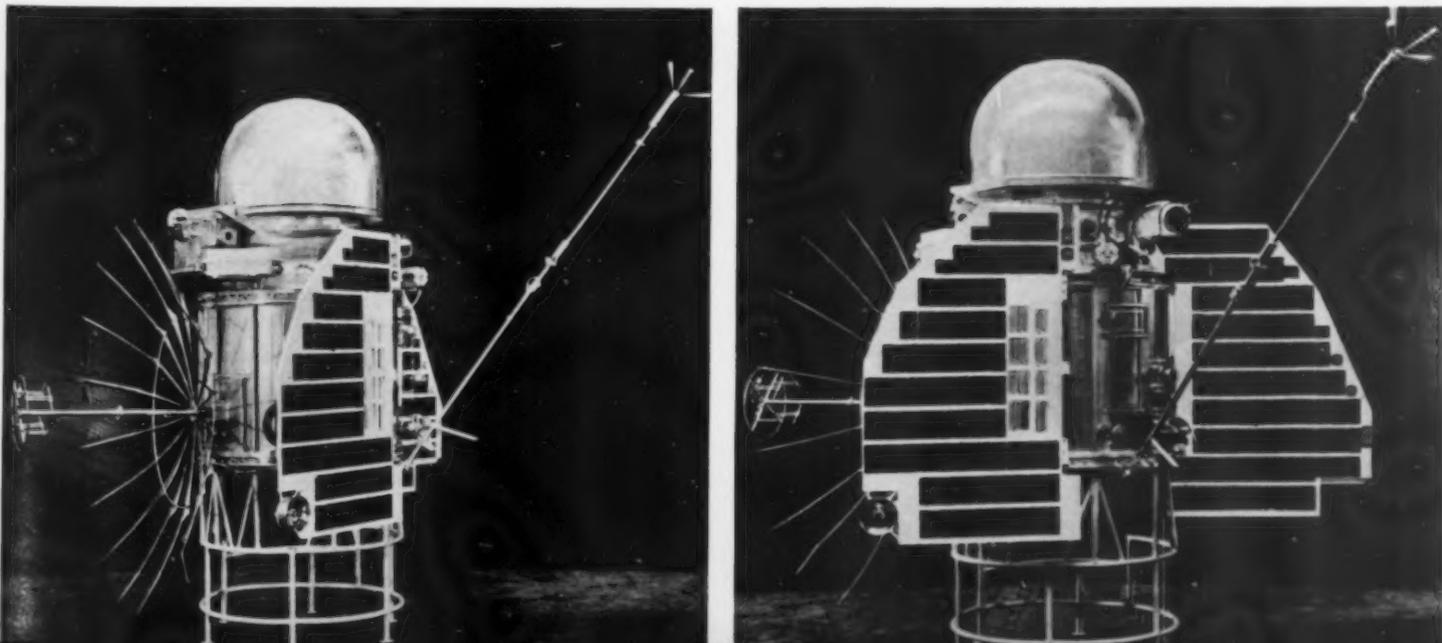
feet (661 meters) per second greater than escape velocity and reached a pre-computed point in space, its engine stopped, and the automatic interplanetary station separated off and began coasting toward Venus.

This was the first time a guided vehicle had ever been fired in an interplanetary orbit from a sputnik carrier.

The interplanetary station traveled in an orbit shaped by the combined effect of the gravitational pulls of the earth, the sun and the planets. Once the station had moved out of the gravitational field of the earth, it was influenced mostly by the sun. This is in keeping with the same laws that govern the motion of the planets of the solar system.

The further the station traveled away from the earth, the lower its speed in relation to the earth. When, on February 14, it reached the final limit of the gravitational field of our planet (estimated at 621,370 miles from the center) its speed in relation to the earth was about 2.5

The photo shows the front view and side view of the automatic interplanetary station on the assembly rack, with the rod antenna opened halfway.



miles (4 km.) per second. At the moment the station pulled out of the earth's gravitational field, its velocity in relation to the sun was 17 miles per second.

Since then the station has been traveling like the planets along an elliptical orbit with an aphelion (farthest point from the sun) of 93.7 million miles (151 million km.) and a perihelion (nearest point) of 65.8 million miles (106 million km.).

The orbits of the earth, Venus and the station are almost in the same plane. At the beginning of its movement around the sun the station lagged behind the earth. Shortly before the vernal equinox the sun, the station and the earth lay approximately on one straight line. After that the station began to overtake the earth. The distance from the earth to the station keeps growing all through the flight to Venus. It will be 43.4 million miles (70 million km.) by the moment of approach on May 19-20. The voyage of 167.7 million miles will have taken slightly more than three months.

Venus, like the earth, has its own sphere of influence with a radius of 372,822 miles (600,000 km.). Within that sphere its influence is greater than that of the sun. The station will penetrate deep into the planet's sphere of influence. The minimum distance from the station to Venus, without trajectory corrections, should be less than 62,000 miles (100,000 km.) at the moment of approach.

This will demonstrate the almost incredible precision of the plotted trajectory. In launching a cosmic rocket the smallest deviation in time, velocity or direction becomes critical. A one-minute error in time of launching, for example, increases the minimum distance from station to Venus by 62,000 miles (100,000 km.).

An automatic system was specially devised to control the interplanetary station, shape its orbit and provide for reliable two-way communication over great distances. The radio-technical complex has these functions: to measure the parameters of the movement of the station in relation to the earth; to transmit to the earth scientific data collected by the instruments carried; to transmit to the earth measurements of the pressure and temperature within the station and on its surface and data on the way the instruments function; to receive radio commands from the earth.

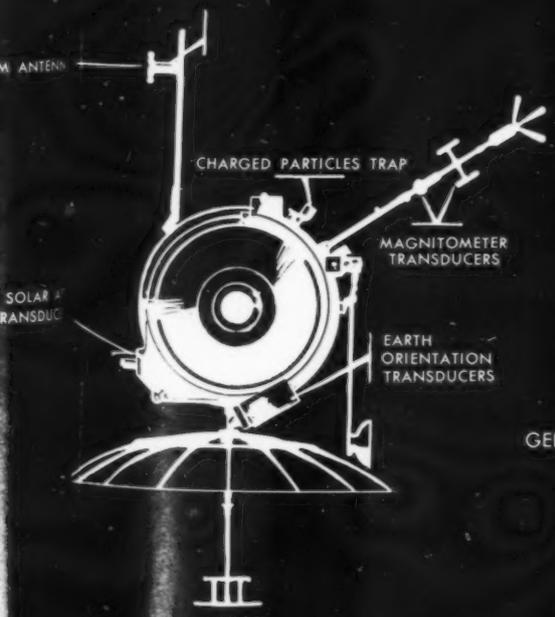
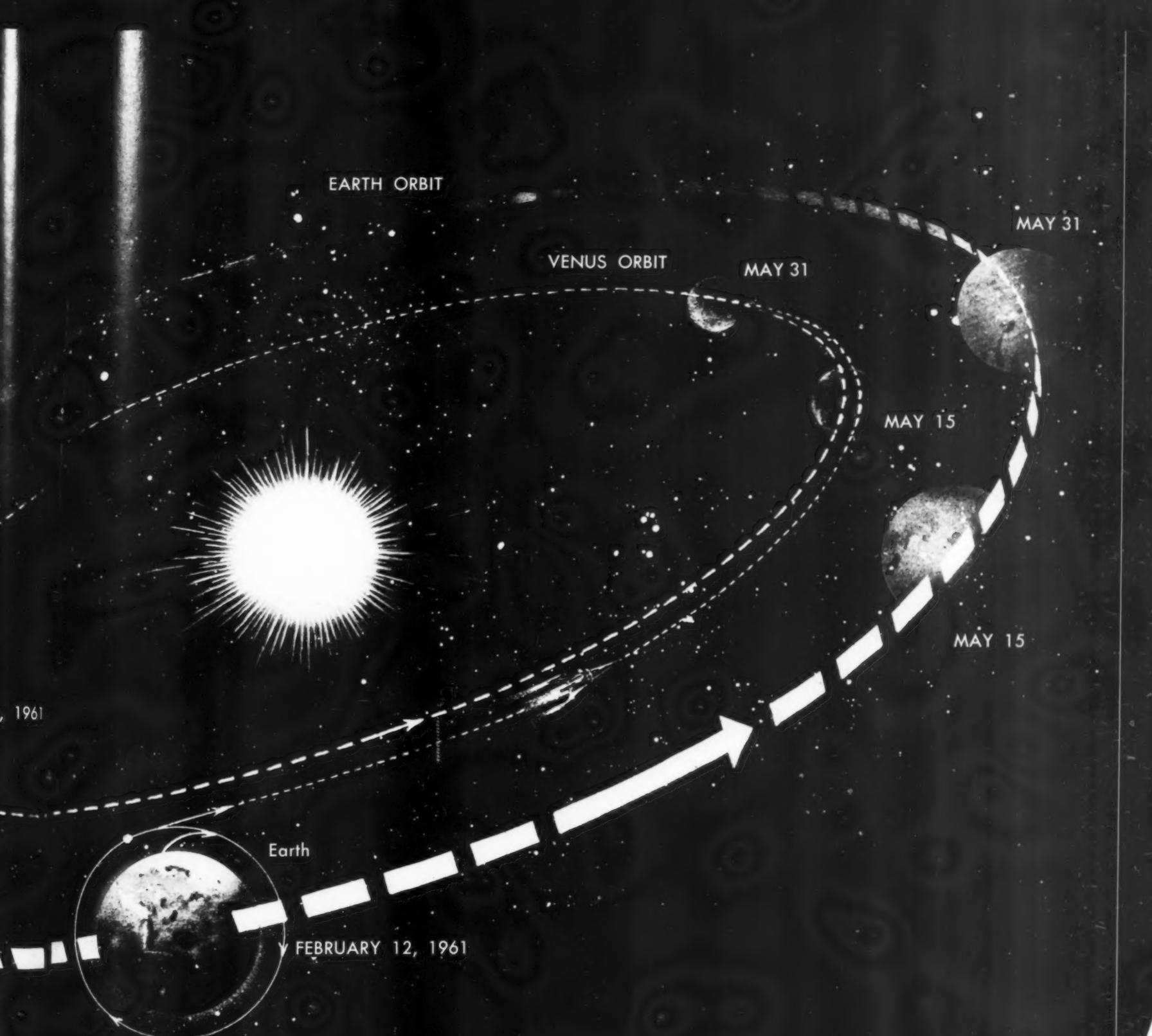
A center for long distance cosmic radio communication has been receiving telemetered information from the station and has been controlling its instrumentation throughout the flight.

Contact has been made with the interplanetary station periodically since it was launched. Both measurements of the trajectory made and radio-telemetric data obtained showed that all the instrumentation systems were working according to program and that the trajectory was close to the one plotted.

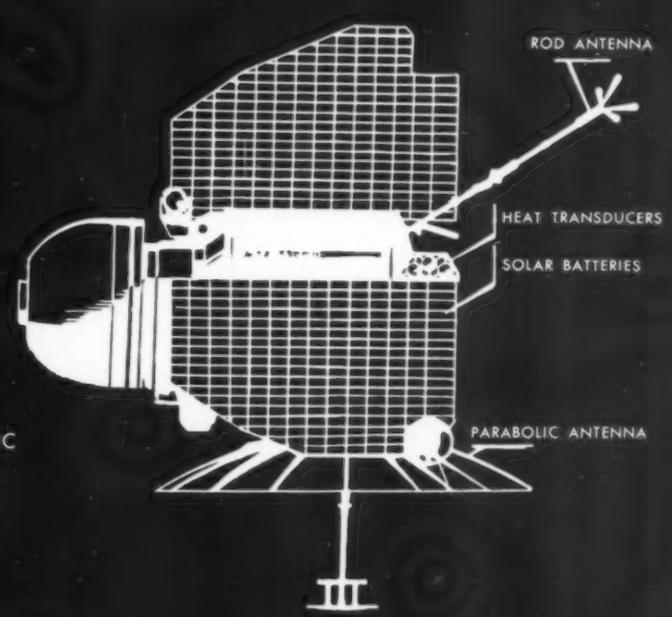
Besides the radio and orientation apparatus, the thermal control system and the power sources—both chemical and solar—the 1,419-pound (643.5 kg.) interplanetary station carries instruments to study cosmic radiation, magnetic field intensity, interplanetary matter and to record micrometeoritic impacts.

The station also carries, with appropriate symbolism, a small titanium globe of the earth with the continents outlined in gilt and the seas in blue enclosed in a shell of stainless steel. The shell is made of pentagonal elements inscribed with the coat of arms of the USSR and the words "Earth-Venus, 1961".





GENERAL VIEW OF THE AUTOMATIC INTERPLANETARY STATION DIAGRAM





## WHAT DO WE KNOW ABOUT VENUS?

By N. Barabashov

Director, Astronomical Observatory of Kharkov State University  
Member, Academy of Sciences of the Ukraine

**V**ENUS is the planet closest to the earth, but it is also the one whose secrets have been most carefully hidden away from us by a heavy veil of fog and clouds which our telescopes cannot penetrate. This year Venus is in a position most favorable for terrestrial observers. In mid-April it will pass the earth at a distance of about 26 million miles.

Viewed through a telescope, its visible surface appears to be monochromatic. But in some places and at rare intervals it is possible to make out faint spots, lighter or darker than the surrounding areas. These are cloud formations through which, unfortunately, we cannot see to the surface of the planet itself.

In 1927, when the American astronomer F. E. Ross photographed Venus through powerful telescopes, he found that only in his ultraviolet ray photographs did numerous light and dark spots appear. He concluded that the light patches were clouds similar to the earth's cirrus clouds and the dark patches were holes in the clouds through which the lower layers of the atmosphere can be seen. This layer is given a yellowish tinge by the clouds of dust floating in it. Ross surmised that the poles of Venus are situated at the points of the crescent. The shaded areas that he thought to be holes in the clouds are close to the planet's equator. These areas shift rapidly, they appear and disappear.

Apart from Pluto, Venus is the only planet of our solar system whose time of rotation around its own axis we do not know exactly. All we can make are more or less accurate assumptions.

In 1956 an American astronomer, D. Kraus of the University of Ohio, reported radio emissions from Venus on the 11-meter wave length with a period of 13 days. Making allowances for the period of rotation of the earth around its axis, he estimated the period of rotation of Venus to be 22 hours, 17 minutes. However, later observations failed to confirm such emissions.

Recently the American astronomer R. S. Richardson, by use of the spectroscope at Mount Wilson Observatory, proved, with a high degree of probability, that if Venus rotates from west to east, the period of rotation would be more than seven earth days; and if it rotates from east to west, it would be a little more than three and a half days.

The temperature of this fog-shrouded planet was thought to fall within the range of  $+60^{\circ}$  to  $+80^{\circ}$  C., but radio observations made by Soviet scientists A. D. Kuzmin and A. E. Salomonovich with the powerful radio-telescope of the Institute of Physics of the USSR Academy of Sciences yielded quite unexpected conclusions. Seventeen days after Venus entered into conjunction with the sun, when it appeared as a slender crescent, the temperature registered was  $+170^{\circ}$  C. It was also found that in those regions of Venus where the sun is in the zenith, the temperature rises as high as  $+200^{\circ}$  to  $+300^{\circ}$  C. At night, apparently, the temperature falls to zero.

It appears that heat (radiation) measurements record the temperature of the higher, cold layers of atmosphere, whereas radio-astronomical measurements register the temperature at the planet's surface. If further observations are confirmatory, we will have to conclude that Venus is a very hot planet and that water on its surface, assuming there is any, would boil away in an atmospheric pressure like the earth's. If there are bodies of water and they do not boil away, it would mean that the atmospheric pressure on Venus is very considerable.

Another significant question has to do with the inclination of the axis of rotation of Venus to the plane of its orbit. If the axis of rotation is perpendicular, it would mean that the planet has no seasons at all. There would be only the climatic zones, each of which would have one season throughout the year. Since no fixed and prominent details are discernible on the surface of Venus, it is extremely difficult to determine the inclination of its axis.

For instance, American Astronomer G. Koiper, on the basis of his studies of the streaks on the disc of Venus, concluded that the atmospheric strata with their cloud formations are disposed parallel to the equator. Pro-

ceeding from this, he determined that the inclination of the equatorial plane of Venus in relation to the plane of its orbit is  $32^{\circ}$ . Soviet astronomer V. I. Yezerzky of the Kharkov Observatory found regular differences in the distribution of brilliance among the streaks and arrived at the conclusion that they are linked with the seasonal changes. These differences are explainable only if the inclination of the equatorial plane of Venus in relation to its orbit were  $32^{\circ}$ . (The inclination of the plane of the earth's equator is  $23^{\circ} 27'$ .) Both his and Koiper's observations would seem to lead to the same conclusion—assuming they are verified—that Venus does have seasons.

Since Venus is permanently screened from us by a dense layer of clouds, we can only guess at the nature of its surface. A series of observations, particularly those made at the astronomical observatory of Kharkov State University, lead to the conclusion that the surface of Venus is comparatively dark in color and that it reflects approximately 25 per cent of the light that reaches it, while the clouds floating in its atmosphere reflect more than 50 per cent of the light.

While processing photometric photographs of Venus, the present writer noted that Venus reflects light in the same manner as do mirror-like surfaces. A similar effect was obtained in studying the polarization of light reflected by the planet. It was reasonable to assume that the surface of Venus has markedly pronounced mirror properties like those peculiar to ocean surfaces. It is also quite probable that the mirror effect is due, in part, to the ice crystals in those Venerian clouds that resemble our high-altitude cumulous clouds. Or perhaps the effect derives from both causes. On the basis of these photometric observations—this was in 1949—offered the supposition that there may be a large body of water, an ocean, on the planet's surface.

The great Russian scientist M. V. Lomonosov, as far back as 1761, found that Venus had a dense atmosphere. While watching the planet begin to cross the bright disc of the sun, he noticed that the edge of the disc became obscured "though it had been until then very clear and even throughout." And when Venus approached the opposite edge of the disc, he observed "the dimming of the edge of the sun." Around the black spot of Venus, which had already passed beyond the disc of the sun, he noted a bright ring. On the basis of this observation Lomonosov drew the conclusion that Venus was "surrounded with a marked air atmosphere of the same (if not greater) magnitude as the one which envelops the globe of the earth."

Many astronomers have studied the planet's spectrum. They have found that the oxygen in its atmosphere above cloud level does not exceed 0.001 of the quantity contained in the entire atmosphere of the earth. They discovered no water vapor in this layer. However, in 1960, the American astronomer Strong did find water vapor in the atmosphere of Venus with a telescope carried to an altitude of 15 miles.

Studies of the planet with light filters show that the planet's atmosphere is made up of two strata. The higher stratum is thin and rarefied; the depth of the lower stratum is much greater and has a yellowish tinge. In 1932 V. S. Adams and T. Dunham of the Mount Wilson Observatory discovered broad streaks of carbon dioxide in the spectrum of Venus. This indicates the presence of a considerable quantity of carbon dioxide in the planet's atmosphere above the clouds.

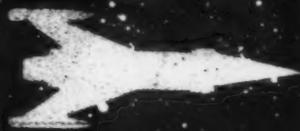
Soviet scientist N. A. Kozyrev, investigating the spectrum of the ashy color of Venus that has been observed repeatedly by many astronomers, discovered many unidentified spectral lines in it but not those of oxygen.

He determined that the luminescence of the Venerian night sky is approximately 50 times greater than that of the earth.

From the foregoing, the reader will have gathered that our information about Venus is very scanty. With the interplanetary laboratory launched by Soviet science, and others to come, we will be able to see behind the clouds that hide our sister planet and solve many of the ancient cosmic puzzles.



ROCKET TO VENUS



6483

KILOGRAMS

HEAVY SPUTNIK

1600

KILOGRAMS

COSMIC SHIP

137

KILOGRAMS

COCK ROCKET

137

KILOGRAMS

SPUTNIK III

183

KILOGRAMS

SPUTNIK



USSR

## SOVIET SCIENTISTS COMMENT



Alexander Nesmeyanov

President, USSR Academy of Sciences

**A**N undertaking that required enormous effort, great scientific knowledge and the most subtle technological skill has been crowned with success. An automatic interplanetary station fired from a mammoth satellite is speeding toward Venus carrying the emblem of the Soviet Union.

It took aviation half a century to develop into the great force that has all but eliminated distance on our planet. How long will it take for interplanetary flight to do similarly for our solar system? Who can say? So far, however, it is progressing at a breathtaking pace. Our generation will live to see many amazing things.



Sergei Vernov

Corresponding Member, USSR Academy of Sciences

**F**OR the first time in history a flight has been launched to another planet. Direct exploration has begun of celestial bodies differing radically from the earth.

Just as the first earth satellites discovered our planet's radiation belts, so flights into far-away space will yield their crop of scientific surprises.



Georgi Pokrovsky

Doctor of Science (Technology), Professor

**T**HE successful launching of the Soviet interplanetary station to Venus opens a new period in space science and rocket technique.

An important advance is the exceedingly high accuracy of automatic control. To arrive in the vicinity of Venus the rocket had to be launched with an accuracy comparable to that of a marksman firing a pistol at a target attached to a train racing by him at 60 miles an hour, and from a distance of 165 feet, striking a bull's eye the same size as the bullet.

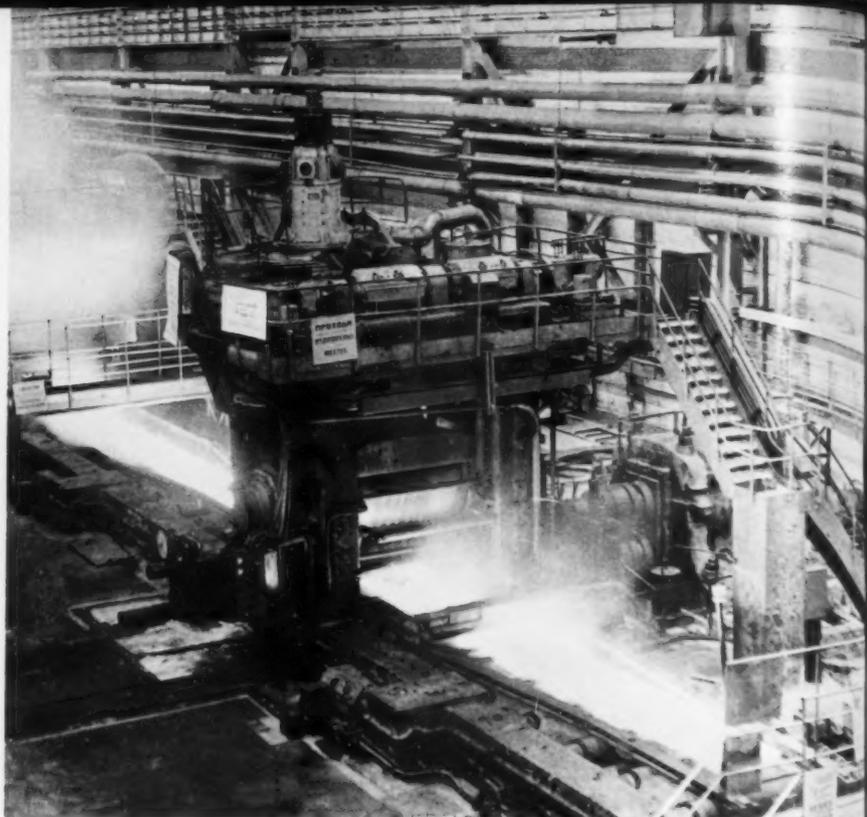


Nikolai Muskhelishvili

President, Academy of Sciences of the Georgian Republic

**W**E are gathering the wonderful fruits of collective and coordinated scientific research and its practical application—one more testament to the Soviet socialist system, with its boundless material and spiritual opportunities for creative scientific work and the realization of daring projects inspired by the ideals of peace and friendship among people.

Growth of Gross Industrial Output  
in the first two years of the seven-year plan



This continuous-strip mill at the Magnitogorsk Steel Plant began producing in 1960.

By Lev Itin  
Doctor of Science in Economics

## THE THIRD YEAR

*Two years of the seven-year plan period have passed. What were the major economic developments of 1959 and 1960? Are the high rates of industrial and farm growth and the production increases called for by the plan realistic? What evidence is there to show that living standards are rising? What does the economic picture for the immediate future look like? In this article Professor Lev Itin, noted Soviet economist, answers these and related questions.*

**P**RODUCTION QUOTAS assigned by the seven-year plan were not only fulfilled but in many key areas they were overfulfilled—this is the salient economic fact of the first two plan years.

The average annual increase in industrial output called for by the plan was about 8.6 per cent; the actual growth was better than 10 per cent. As a result, industrial output for 1959 and 1960 rose by 22.1 per cent as against the 17 per cent scheduled, and industry manufactured about 11.3 billion rubles' worth of goods over and beyond the quotas set. (Here and elsewhere the new ruble, effective as of January 1, 1961, is used.)

As in previous years, rapid progress was made in the machine-building, power, metallurgy, chemical and other basic industries. Steel production in 1960 grew by 5.3 million tons and power output by 27 billion kilowatt-hours. There was a rise in the production of aluminum, copper, lead, zinc, tin, nickel, cobalt, molybdenum, magnesium and magnesium alloys and titanium.

The consumer goods industries registered exceptional growth. For instance, 347 million more square yards of textiles and 28 million more pairs of shoes were produced in 1960 than in 1959. The output of TV and radio sets, washing machines, refrigerators and furniture also grew impressively.

Besides those factories geared directly and exclusively to consumer goods manufacture, practically all machine and shipbuilding plants in the Soviet Union, with few exceptions, turn out consumer goods in addition to their basic products.

The decisive factor in boosting output was greater labor productivity. In the past two years, even with a shorter work day, labor productivity

throughout industry generally rose by more than 13 per cent, and in construction by 19 per cent. The growth is due to the continuous improvement of production processes, the use of the most modern equipment and the newest techniques that develop out of research in physics and chemistry. In the past two years more than 4,500 new types of machines, mechanisms and apparatus were introduced and more than 4,200 automatic, semiautomatic and continuous flow lines set up.

Many of the new machines and devices were developed by shop workers. In 1960 alone more than 2,400 worker-inventors and innovators submitted upward of four million suggestions for improving production.

### Capital Construction

Enormous sums were spent on capital construction in 1959 and 1960. They were allocated out of the national budget and the funds of municipalities, industrial plants and collective farms. The national budget allocations of 49 billion rubles, more than had been spent for that purpose in all the 22 prewar years, paid for the building of more than 2,000 new plants and factories and many shops, as well as the modernization of thousands of old ones. Among the largest of the new projects already in operation are an iron and steel mill in Kuibyshev, in the Volga area, and another in Karaganda, in Kazakstan. The latter serves a large industrial region which previously had no iron and steel base of its own.

In the older metal centers of the Ukraine, the Urals, and Siberia production was also boosted by four new blast furnaces, among them the world's largest at the Krivoi Rog mill in the Ukraine. Eight new open-hearth and five electric furnaces were also built.

New rolling mills put into operation in the recent past include Europe's largest "1700" continuous sheet mill at the Zhdanov Iron and Steel Mill in southern Ukraine and the "2500" continuous strip mill at the Magnitogorsk Metallurgical Combine in the Urals. The Southern Iron Ore Concentration Mill with an annual capacity of nine million tons was commissioned in the Ukraine.



Section of the Kremenchug power project finished two years before schedule.

## OF THE SEVEN-YEAR PLAN

Large-scale power construction continued. The capacity of the projects built in the first two years of the plan exceeds that of all the electric power stations of the Soviet Union in 1945. The Stalingrad hydropower project, completed in 1960, whose 21 generators have a capacity of 2,415,000 kilowatts, is currently the world's largest. The Kremenchug hydropower station on the Dnieper, another giant project completed ahead of schedule, is also operating at full capacity.

In 1960, 2,900 miles of new gas pipeline and 860 miles of new railroad track were laid. Another 1,425 miles of the nation's railroads were electrified. New industrial chemical plants were constructed.

The building-materials industry was expanded in the past two years to speed the pace of housing construction. New large-panel plants are presently operating in Baku, Minsk, Gorsky and Novosibirsk, and large cement plants are being built.

There are new light and food industry factories. The textile industry added hundreds of thousands of spindles and many thousands of looms to its productive potential. The shoe industry increased its output capacity by 35 million pairs. In the sugar refining industry 27 new plants were built and many others expanded. Altogether, in 1959 and 1960 the sugar refining industry installed six times more new equipment than in 1958.

Similarly high rates of growth were registered in butter, cheese making and other branches of the food industry, as well as by the pulp and paper industry.

### Farm Development

These past two years the farmers had to cope with particularly bad weather. Many crucial farm areas were hit by drought, dust storms and spring frost. Nevertheless, Soviet agriculture as a whole continued its upward climb.

The total sown acreage was expanded to 501.6 million acres, 113 million more than in 1953. The area sown to corn covered more than 69 million acres, eight times the 1953 figure.

Grain output for 1960 was 146 million tons, an increase of 8 million

tons as compared with 1959. Last year the state bought more grain, sugar beet and vegetables from the collective and state farms than it had in 1959.

There was an increase in the output and sale of other farm products as well. Collective and state farms produced 61.5 million tons of milk and 848,000 tons of butter or 8.8 pounds per capita. A comparison of these figures with official United States statistics demonstrates that the competition of the two countries in agricultural production is proceeding favorably for the Soviet Union.

But farm growth is still not fast enough to meet growing consumer requirements. Measures designed to bridge the gap between supply and demand of farm products in the very near future were discussed at the January 1961 Plenary Session of the Central Committee of the Communist Party. Collective farmers, scientists and government leaders present were sharply critical of shortcomings and considered ways of using reserves so as to increase output. This enabled the Plenary Session to work out concrete proposals for boosting agricultural production which will make it possible to satisfy the requirements of the population in the near future.

### A More Prosperous People

The primary objective of socialist production is to raise living standards. This is the reason new plants are built, industries and farm regions developed, new cities founded and old ones modernized, and educational and cultural facilities augmented. The growth of the national income testifies to the rising living standard of the Soviet people. In the first year of the seven-year plan, national income grew by eight per cent, approximately 10 billion rubles. In 1960 it grew by another eight per cent, to about 144 billion rubles.

In the Soviet Union national income is used to increase the productive capacities of industry and agriculture so as to raise national accumulations to a still higher level. Ever larger portions of the national income go to the country's workers directly in wages and salaries and indirectly in the form of social services. This guarantees a systematic rise in living

*(Continued on page 25)*

# PEOPLE'S INITIATIVE

**F**ORTY YEARS ago, during the most menacing days of the Civil War, when an iron ring of foreign interventionist armies was strangling the newly founded Soviet Republic, Lenin appealed to all working people to defend the Revolution they had fought and won. "The socialist country is in danger," he proclaimed.

On May 10, 1919, a group of 205 railroad men and office workers of the Moscow-Kazan line, in response to Lenin's appeal, got together after working hours for the first communist *subbotnik*, as they called it—the word *subbotnik* is derived from the Russian for Saturday. Of their own volition, in their free time and without pay, they worked through most of that Saturday night to repair four locomotives and sixteen cars desperately needed at the front to unload dozens of cars. They worked with a will—for themselves and their countrymen. The war had brought general destitution and hunger; in Moscow people were living on rations of 3½ ounces of bread a day.

These railroad workers initiated a great national movement. Their example was followed by people everywhere. Vladimir Ilyich Lenin, the head of the Soviet government, participated in one of the *subbotniks* arranged in the capital by government employees. Lenin saw in this magnificent demonstration of mass initiative and heroism—war-weary and hungry working people giving up their rest and leisure to help all the people—the germ of the new communist attitude toward labor, and in the summer of 1919 he wrote a pamphlet on *subbotniks* which he titled *A Great Beginning*. "Communism begins," he wrote, "when rank-and-file workers, in spite of all obstacles, begin to show an unselfish concern for raising the productivity of labor, for husbanding every pood of grain, coal, iron and other products . . ."

Lenin predicted that these *subbotniks* had a future in history. We see that future today in mass labor initiative, in the various socialist competition and production innovation movements, most particularly in the Communist Work Team movement.

It is appropriately symbolic that the Communist Work Team movement was also inaugurated by young railroaders—and in the very same Moskva-Sortirovochnaya railroad yard where their forbears repaired locomotives at the original *subbotnik* four decades ago. Within a few months after the autumn of 1958 when it started, the Communist Work Team idea had spread like wildfire, and five million of the best workers in every branch of industry had pledged to live and to work in the communist way. From individual workers and teams the Communist Work Team movement has expanded to embrace whole shops and plants.

Recently the Sortirovochnaya railroad yard was awarded the title Communist Work Enterprise. What distinguishes the Moskva-Sortirovochnaya workers, who have earned the right to use this coveted title, from the general run of railroad men? These following accomplishments: They raised their labor productivity 30 per cent in the past two years, completed their 1960 work quotas ahead of schedule, and saved the country almost 2.5 million rubles. They turned in suggestions and innovations—several hundred last year alone—for improving machines and methods of work and saving time and materials. Some 1,500 of the railroaders have been taking advanced training courses at correspondence or evening colleges and specialized secondary schools.

In matters large and small, these workers have demonstrated that they are socially mature, self-disciplined, highly responsible individuals. They have, for example, dispensed with timesheets—since no one is ever late—and now work up their own payrolls.

In short, the Moskva-Sortirovochnaya workers have the communist attitude toward work and public duty, a characteristic that distinguishes the best of the Soviet people, active builders of a communist society.

## The People Manage Industry

A Soviet worker's interest in the successful operation of his factory is not limited to his own job. He is very much concerned with the progress of the plant as a whole and with every phase of its operation. It is his plant, and whether it does well or poorly is therefore a matter of personal concern.



One of millions building communism—welder Alexander Patrishchev.

A team of spinners that has broken production records at a Moscow worsted mill.



By Yuri Filonovich

The working staff helps to run the factory through production conferences held regularly at all enterprises under the leadership of their trade union organizations. These conferences, initiated in the twenties—there are 112,000 of them now in operation with seven million participants—are practical classrooms where Soviet workers learn to solve management problems. They serve an important function in mass education, a means by which workers are drawn into active participation in the management of industry.

Discussed at conferences are such matters as production plans and the organization of production, wage scales, ways of improving quality and cutting costs, output quotas. Bench workers, foremen, engineers and the director air their different views and suggest changes. Discussion is free and unhampered, and everything and everyone is open to criticism, including the director. This public airing of problems and freedom of criticism is the best guarantee against bureaucracy.

When millions of working people regard the factory or farm where they work as their own, there is no lack of interest or initiative. It would be no exaggeration to say that there is no single factory in the Soviet Union that does not have its group of innovators, worker-inventors and idea people who keep thinking up new and better ways of doing the work or devising ingenious mechanisms that will expedite production.

### Real People's Government

In the creative activity of the masses of people—whether applied to government, industry, culture or any other sphere of human endeavor—Lenin saw the guarantee for the triumph of the new social relations the Revolution had ushered in. "Only he will win and retain power," said Lenin, "who has faith in the people, who will delve deeply into the well-spring of the creative activity of the masses."

The Soviets, on which the country's political structure is built, embody this revolutionary creative activity. They came into existence in 1905. Lenin, with farsighted wisdom, recognized the great role these mass organizations were to play as organs of genuine people's power. It was with the slogan "All Power to the Soviets" that the people, led by the Communist Party, won power with the October 1917 Socialist Revolution and became masters of the country and of their own destinies, owners of the fruits of their own labor. The workers and farmers themselves began to run the state through representatives, men and women they elected to office.

It was these genuinely democratic conditions that enabled tens of millions of working people to become truly interested in the development of the state, as Lenin had foreseen. It was this that released the boundless initiative of the people and made the economic and social transformation of our country possible. Not long after the Soviet state was founded, Lenin wrote, "The further development of the Soviet organization of the state requires that each member of the Soviet obligate himself to be permanently active in administering the state, in addition to attending meetings of the Soviet, and, eventually, that the people as a whole be drawn into the work of the Soviet organization . . . and into the administration of the state."

Lenin's concept, one that was built into the very structure of Soviet political life as it developed, was that the entire population—not appointed officials nor even elected representatives alone—must participate in running the country. This idea has been constantly and fully worked out in practice at all stages of the country's development.

State power, in our country, is vested in the Soviets of Working People's Deputies. The deputies to these Soviets, from the USSR Supreme Soviet to the village Soviet, are elected democratically. They number two million, with all but a relatively few full-time officials working at their own trades and professions.

There are also about two million working men and women who do volunteer work in the various standing committees of the Soviets. Everywhere in the country and in every field of economic, social and cultural work you meet millions of people participating actively in public



*This construction team earned the title of Communist Work Team.*

organizations, in house management groups, on school and hospital committees. There is no area of economic or cultural activity which is not under public control and where the people's initiative is not evident.

### Citizen Participation

For illustration, let us look into the political structure of Severodvinsk, a small city in Archangel Region in the northern part of the country. Severodvinsk is the usual Soviet city, very much like hundreds of others. It has a City Soviet with an executive committee which consists of various municipal departments. The full-time staff is small—a few dozen people, all told, on the town payroll—but there are several thousand others who really run the affairs of the city.

The Soviet is charged with the responsibility of administering the city's affairs, but in its day-to-day work it relies on the voluntary assistance of 165 members of various standing committees and boards under the executive committee departments; 280 public inspectors for retail stores and restaurants; 300 pensioners who work in different state bodies and public organizations; 1,520 members of public order squads; 1,800 workers who have been elected to the Comrades' Courts at their places of work or in their communities; 925 members of parents' committees in schools and kindergartens, etc. This very large and very active army of volunteer citizen-administrators is obviously of enormous help to the City Soviet, contributing valuable suggestions and good advice.

The city of Sverdlovsk illustrates another aspect of citizen participation. Volunteer committees of the District Soviets have taken over some of the functions previously exercised by regular executive committee departments. They control and help the state organizations and are also responsible for specific functions. The Sverdlovsk district executive committees presently have five public trade departments, two cultural affairs departments, seven public automobile inspection agencies and five sanitary inspection boards—all volunteer. The 210 citizen-inspectors include 35 industrial workers; 27 sales people; 20 auditors and book-keepers; 28 schoolteachers, actors, writers and artists; and about 100 housewives and pensioners.

In a three-month period these volunteer public committees inspected a large number of shops, warehouses, cafeterias and clubs; interviewed more than 1,000 visitors; and took appropriate action on scores of requests made by citizens. They did this without compensation, motivated only by the desire to be of help in managing state and public affairs.

In the Ukrainian town of Dneprodzerzhinsk the executive committees of the District Soviets have been functioning for more than two



Railroadmen at the Moskva-Sortirovochnaya depot read the news about themselves. They have been honored for exceptional work.

years without any departments. Their work is now being done by the standing committees with the help of many volunteers.

This is something Lenin hoped for when he wrote, "Our aim is to have every working man and woman take on government duties, *without* pay. . . ." Now that Soviet people work a seven- and six-hour day, even more favorable conditions have been created for the realization of this aim.

#### Toward Communist Self-Government

More and more of the state's functions are being turned over to public organizations as the socialist state takes the first steps toward communist self-government. This is another expression of the development of Soviet socialist democracy toward the great goal projected by Lenin—when all Soviet citizens will have learned to govern and will, in fact, independently run all the affairs of society.

As part of this development toward self-government we have the growing tendency to curb violators of public order by educational means. As the incidence of crime gradually diminished, it became possible for public organizations to play a greater part in keeping order. It is not merely a matter of curbing infringements but of influencing offenders by moral persuasion and pressure through their fellow workers and by education not to repeat the offense. That was how the public order squads and Comrades' Courts came to be.

These Comrades' Courts were established on the people's initiative at mills and factories, in offices and on collective farms in the very early Soviet years. The judges, elected democratically, are people who work alongside the offender or live on his street; they try people charged with disturbing the peace and other anti-social behavior, etc. This, too, is Lenin's idea in practice—that in a socialist society public pressure should be the crime deterrent and that citizens themselves should mete out justice.

The fact is, and these Comrades' Courts have proved it, that education and public pressure do more than prevent crime, they help to eliminate its causes. There is plenty of evidence to show that when an offender has to answer to his neighbors or workmates at a Comrades' Court for his anti-social behavior, the results are often far more effective than if he had been haled before a regular court of law.

#### Wider Democratic Leadership

The more actively and consciously the working people participate in solving the economic, political and cultural problems of our life, the more initiative and creativity they show, the more speedily will communism be built, Lenin repeatedly emphasized. Much has already been done and much more is being done to perfect the numerous democratic institutions in our society, to involve ever greater numbers of people in democratic leadership.

Among recent measures are those extending the rights of the Union

Republics in economic and cultural development; reorganizing the management of the national economy by shifting responsibility for running enterprises from the ministries to the economic areas; granting wider powers to trade unions; and gradually transferring a number of functions from state agencies to public organizations. All these measures are a spur to the greater development of the initiative and activity of the workers, farmers and intellectuals and provide opportunity for fuller participation by the citizenry.

On all major problems of the country's development the Party and the government look to the people for advice and judgment. The Central Committee of the Communist Party of the Soviet Union and the USSR Council of Ministers, as well as the local Party and governmental bodies, meet frequently with representatives of the various trades and professions—building workers, power workers, chemists, farmers, teachers—to discuss current problems and proposed solutions. More often than not, these are rank-and-file workers and farmers, men and women with a rich background of knowledge and wisdom derived from living experience.

Proposed legislation and drafts of economic plans are always published beforehand so they can be discussed by people at meetings throughout the country. This is democratic participation in a new and very complete sense; not a referendum in which people are asked for a "yes" or a "no," but open discussion in which they present their views in detail and offer suggestions, criticisms and amendments.

Some months before the 21st Congress of the Communist Party met, the proposed target figures for the seven-year plan were published in all newspapers. The plan was discussed at more than 968,000 meetings called specifically for the purpose, attended by some 70 million people. At these meetings, 4,672,000 people spoke and offered suggestions and amendments. Many of them were incorporated into the final draft.

Most recently, a new movement has begun to take hold, initiated by people who feel that every Soviet person should not only work but live in a communist way. Besides the work he does in his own specialty, he should learn and practice what we might call a "social profession"—give talks on literature, or coach volleyball, or work with children's groups. This is the shoot of a future tree, a forerunner of the rounded human being that communism is developing, one with a variety of interests and creative opportunities, with an unselfish desire to be as useful as possible to society.

Lenin said, "As men's history-making activity grows broader and deeper, the size of the part of the population which consciously makes history is bound to increase." The history of Soviet society graphically proves the point. The social activity of the masses grows unceasingly, discovering ever new channels and embracing ever wider circles of working people in town and country. The part played by public opinion, by public influence, in virtually all spheres of productive, political and cultural activity is growing. This is a characteristic of socialist democracy—this steadily-growing role of the masses of people as conscious and purposeful builders of a communist society.

# SOVIET DIARY

## EARTH—SPACE—EARTH

**T**HE Soviet Union on March 9 orbited and recovered a cosmic ship that carried a dog. Once before, last August 19, Soviet scientists successfully brought back living creatures, including two dogs—Belka (Squirrel) and Strelka (Arrow). (See October 1960 issue of *USSR*.)

This feat represented a refinement in technique to assure protection of life and is considered by scientists throughout the world as a major step forward in putting a man into space.

The Soviet five-ton cosmic ship, the fourth of its kind to be launched since May 15, 1960, carried a dog Chernushka (Blackie) under television surveillance, as well as other biological subjects.

"The main object of this effort," an official TASS statement says, "was further improvement in the design of both the space vehicle and the equipment needed to maintain human life in flight. (The instruments on board functioned normally during the flight. After carrying out its research program, the ship landed on command in a pre-set area of the Soviet Union on the same day.) The initial inspection of the ship after landing showed

that the experimental animal is in good health."

Data were taken on Chernushka's reactions to the flight and transmitted to earth by radio. The TASS announcement said valuable data had been obtained on the efficiency of the structure of the cosmic ship and its system, as well as on the effect of flight conditions on living organisms.

Commenting on this cosmic flight, Soviet scientist Ivan Artobalevsky said: "We are sure that the first man to travel into space will be a Soviet man. But we will not launch a man into space until we are convinced that he will be safely returned to earth."

Vladimir Kokkinaki, well-known Soviet test pilot said, "This might mean that the world will soon learn about Astronaut No. 1."

Nikita S. Khrushchev, Chairman of the USSR Council of Ministers, told a group of farmers he was meeting with in the city of Akmolinsk, Kazakhstan: "We are confident the time is not far off when the first spaceship with a man aboard will be rocketed into space. . . . We are living at a good time. Both on earth and in boundless cosmic space the boldest dreams of man are becoming reality."



## 1961 COLLECTIVE AGREEMENTS SIGNED

**B**Y THIS TIME of year every factory, office and state farm has worked out a labor-management collective agreement. As a rule, each worker is provided with a printed copy so that he can check on the way the management and his trade union carry out their mutual obligations.

The 1961 collective agreement signed at the Ordzhonikidze Machine-Building Plant in Moscow is fairly typical. It has eight sections covering in detail the obligations of labor and management with regard to the fulfillment of the state plan for output, wage schedule and work quotas, improving skills and raising job qualifications, working conditions and safety, housing construction and recreational and cultural facilities.

The conclusion of every new collective agreement is preceded by a check on how the previous year's agreement has been fulfilled. Both the results of the check-up and the clauses of the new collective agreement come in for careful consideration at general meetings in which millions of trade union mem-

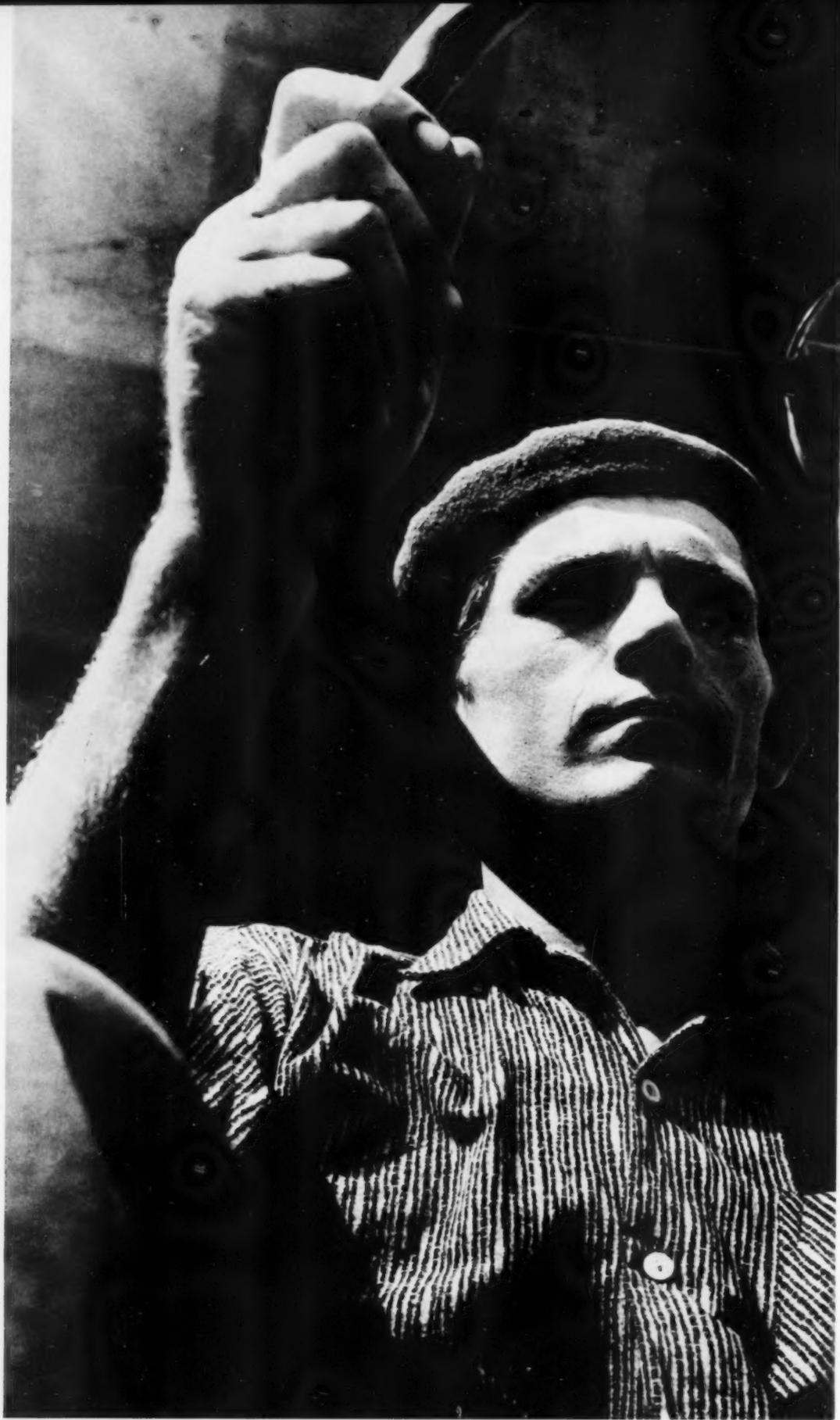
bers take part. The workers' right to check on the fulfillment of the collective agreement is guaranteed by the agreement itself, which requires a full membership check on the fulfillment of the agreement twice a year.

The reports are made by the directors of enterprises and the chairmen of trade union committees at workers' meetings and conferences which are always very lively. The workers voice their approval of the successes achieved in fulfilling the production plans and the improvement in the working conditions and welfare service, but they also are justifiably critical of executives and trade union leaders who fail to pay sufficient attention to the timely fulfillment of all the points in the collective agreement.

This discussion and criticism become the basis of the draft agreement for the year ahead. The draft is presented for discussion, and workers in every shop make their own changes. The changes are summed up by the trade union organization, after which the modified draft agreement is discussed at the

general meeting or conference of the workers at every enterprise. Approved by all the workers, or a majority, the collective agreement is then signed by the director on behalf of management, and by the chairman of the trade union committee on behalf of the workers. Once signed and registered with the Trade Union Council and the Economic Council of the region the agreement is legally binding on all parties concerned.

A novel feature in collective bargaining, introduced last year by the Trade Union Council of Latvia, is the conclusion, in addition to the collective agreements of individual enterprises, of a general agreement between the republics' Trade Union Councils and the management of the Sovnarkhozes (Economic Councils) that direct the work of the entire economic region. The objective of such agreements is to help the enterprises carry out those economic, technical and welfare measures which either go beyond the powers of each individual enterprise or pertain to the work of all local enterprises.



*Anatoli Slyusarev liked the virgin lands and settled there. He works on the Iskra State Farm.*

## ***THE VIRGIN LANDS* Today and Tomorrow**

**I**T WAS A DARING and grandiose project—to turn the boundless steppes in the eastern regions of the Soviet Union to the plow. This great expanse of fallow land in Siberia, North Kazakhstan and the Trans-Urals could grow prodigious harvests of wheat and other crops. The land had been used sparingly for grazing, hardly at all for crops.

With the increase in the demand for consumer goods attending the country's rapid economic development, expanding population and rising standard of living, these virgin and waste lands were called upon to play an important role in the plan to boost agricultural production worked out by the Communist Party and the Soviet government.

The Communist Party appealed to the country for pioneers to work these virgin lands, and hundreds of thousands of men and women, young people mostly, responded.

There were some who opposed the undertaking. They talked of desolate country, of crops that would be burnt by the frequent droughts in Kazakhstan and Siberia. "Money and energy thrown away," they grumbled. But life proved these prophets wrong. The Soviet people successfully carried through the task set by the Communist Party. Since 1954 about 100 million acres of this virgin and long-fallow land has been plowed to give the country dependable new breadbaskets. Virgin land farms now grow 40 per cent of the country's grain procurements and a considerable part of its meat.

To cultivate and settle this once desolate steppeland took resolution. This was soil, for immense stretches, that had never been touched by a plow, and these were settlers, hundreds of thousands of them, who had never known anything but city living. But the soil was plowed, the seed sowed and the crop harvested; and the young people married, built homes and began to raise families.

#### The Climate a Problem

The severe climate of the steppes of Siberia and North Kazakhstan complicates the growing problem. Spring comes late, and winter early. Cold winds begin blowing as soon as the crops ripen, and winter follows close behind. There is very little time left for harvesting.

Shall we prolong the growing season by planting earlier or shall we sow only early-

maturing varieties? Shall we speed up the harvesting machines? These are the kinds of questions farmers and soil scientists are debating. They are not so much alternatives as complementary approaches with more stress on the one or the other, depending upon the particular circumstances. Right now selectionists are working on early-maturing varieties adapted to local conditions, and they have already achieved good results. The farm machine industry is at the same time increasing its production volume of fast-moving tractors and harvesters.

There are other complex problems to be solved, and they will be in time. But the essential fact remains that the Soviet people have made these great stretches of wasteland a fruitful source of wheat and other farm products.

This new grain region in the virgin territory has changed the country's crop specialization picture. The republics of Central Asia have increased their acreage under cotton. The Kuban (Krasnodarsk Territory) and the Ukraine have increased the area allotted to sugar beet, sunflower and other industrial crops. The southern parts of the country have enlarged their orchards and vineyards. Production of coarse grains, particularly corn, has been increased in all farm areas. This very much larger fodder base has made it possible to expand livestock breeding and so boost meat, milk and butter production.

With local land under cultivation, there is no longer a need to ship large quantities of foodstuffs and raw materials to the eastern parts of the country with their fast-developing industry and growing urban populations.

State funds spent on the new lands between 1954 and 1960 were returned not only in full but with a substantial profit. The marketable grain alone more than made up for the funds invested, resulting in a *net* return of 32 billion rubles to the state.

#### New Communities

Buildings began to go up with the very first furrow that was plowed, and in a relatively short time on these forsaken steppes there appeared barns, houses, schools, clubs, clinics and all the other structures that make up a permanent community.

Almost half a million people came to the steppes of southern Kazakhstan in the first

Left: Trucks loaded with grain. This virgin and long-fallow land grows prodigious crops.

Below: Field work continues the year round. Readyng the soil for the new planting season.



years of the cultivation of the virgin lands and many of them decided to stay on. Among them were the Russian worker Ivan Mikhailovsky and his four brothers. The five of them, all married now, are working on the Khmel'nitsky State Farm. The houses they have built for themselves occupy almost an entire street. The housing area of this state farm village has grown tenfold since 1956, to 65,000 square feet. Blocks of dwellings are lined up in even rows where there were only scattered cottages a few years ago.

The Khmel'nitsky State Farm is doing a great deal to make living conditions easier and more pleasant, to free people from burdensome housekeeping chores, and to provide more facilities for leisure-time activity and recreation. The public restaurant serves well-prepared meals at moderate prices, so that many of the farm workers and their families prefer to eat out rather than do their own cooking.

Many of the young people who came to the virgin lands continued their formal schooling to learn new trades and professions. Nikolai Malkov, a radioman by profession, graduated from an evening secondary school for working youth. So did Dmitri Mikhailovsky. Fitter Vasili Bokov and tractor driver Anatoli Sevryukov are correspondence school students at the Barnaul Agricultural Institute. Every second worker on the state farm is studying at the institute or the secondary school or is taking one of the vocational training courses.

The farm workers have organized an amateur chorus and a music and dance ensemble and give frequent concerts for people in the surrounding area.

Things are settling down. There is still a good deal to do, but it is getting done. Housing is the most serious problem. Government spending for building houses and cultural and recreational facilities will increase several times over this year.

### The Tselinny Territory

The virgin lands, it is estimated, can yield at least twice as much as they now do. The Presidium of the Supreme Soviet of the Kazakh Republic recently adopted a measure that will spur the further development of virgin land resources. A new administrative region, Tselinny Territory, has been created. It lies between the Urals in the west and the Kulundinskaya steppe in the east. The territory extends for 815 miles from east to west and almost 700 miles from north to south. Its area is larger than that of Great Britain and the Federal Republic of Germany taken together.

The organization of the territory will mean a more effective use of resources. Even at present the region makes an enormous contribution to the country's grain supply. In the past seven years some 40 million acres have been plowed and hundreds of large state farms built and settled. State purchase of grain in the territory has grown almost eight times. In the seven years before the virgin lands were cultivated the state and collective farms sold seven million tons of grain to the

state; in the years following they sold almost 55 million. The output of meat and dairy products increased threefold in the same period.

This rapid development was possible because the Soviet state provided the virgin land farmers with tractors and other necessary machinery and allocated large sums for economic development and for construction of housing and cultural facilities.

The Tselinny Territory settlers look on the progress they have made thus far as the first step in a long-term conquest of the region. The second step—to be taken in the next two or three years—is a boost in the annual production of grain to 20-21 million tons in order to exceed by 3-5 million tons the grain production quota set for the end of the seven-year plan.

In 1960 the Tselinny settlers plowed and planted three million acres of new land. In 1961 they will reap the first harvest from these lands. Plans are—again in the next two or three years—to plow up at least another six million acres. The rise in the grain yield will be achieved, however, not so much by extending the area under cultivation as by more efficient farming. A scientific planting system is being worked out that takes into account the soil and climatic peculiarities not only of the region as a whole but of the individual collective and state farms. This system will be making use of the latest in agricultural techniques.

### Bigger Harvest Ahead

There were experts who predicted that the fertility of the virgin lands would tend to decrease from year to year, that these lands, after plowing, would suffer from the destructive effects of erosion. But practical farming, built on scientific exploitation of the virgin lands, proves this prediction erroneous. Six crops have already been taken in, and the

*Leninsky, a thriving farm community in the middle of what was desolate steppe a few years ago.*



prospects are for many more and even bigger harvests.

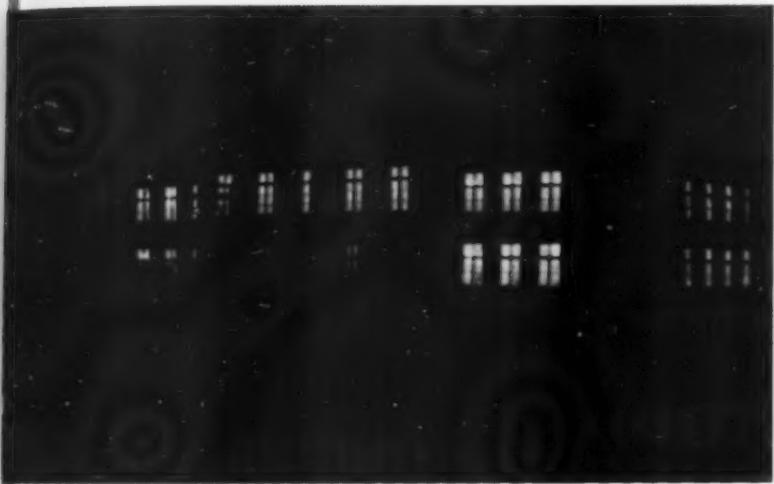
To protect the fields, trees are planted in long rows, crop rotation is practiced with the sowing of perennial grasses, plowing is done without upturning the soil so as to leave the previous year's stubble intact. These and other conservation practices not only protect the virgin lands from erosion but create conditions for continuous and improved fertility.

The territory does livestock as well as crop farming. Its meat, milk, butter and wool yield is high and growing. In 1960 meat production increased by 21 per cent, milk by 14 per cent, and eggs by 34 per cent. Figures for the sale of livestock were exceeded by a large margin. In the past seven years the territory's livestock has increased by 50 per cent; the number of pigs has quintupled, and poultry output has multiplied 3.5 times.

By 1965 the state and collective farms expect to be producing 800,000 to 900,000 tons of meat, nearly two million tons of milk, almost 900 million eggs, and 30,000 tons of wool. The production figures set by the seven-year plan will be very considerably exceeded.

Construction keeps pace with crop and livestock development. Compared with 1960 the volume of capital funds for construction in 1961 will double, and in the next several years it will triple. In terms of actual building this will mean that all present towns and villages will be pushing out beyond their present limits and that new industrial and farm communities will be appearing on the scene.

An average of more than 35 million rubles will be spent on each state farm for construction and community welfare, as against an average of 13 million rubles spent during the entire period since the start of virgin land cultivation. In the next few years 130 new state farms will be set up in the territory. These virgin lands brought to life by Soviet people have a bright future.



*A new cowbarn of reinforced concrete. The territory has tripled its meat and dairy output.*

*A secondary school in one of the farm villages. For children during the day, for adults at night.*

*This is young people's country. Tractor operator Vladimir Trushko weds dairymaid Galina Pravda.*



# A COMMUNIST

By Yuri Pavlov  
Photos by Dmitri Chernov

**N**OVOCHERKASK is a large town—or a small city, if you prefer—in southern Russia. Of its 73,000 adults, 8,000 are members of the Communist Party, a fairly representative ratio. The Party is only one of several public organizations in Novocherkask, and not the largest by a wide margin. About 30,000 of the city's adults, for example, are trade union members, and more than 25,000 of the younger people belong to the Young Communist League.

The city's Party organization does, however, enjoy more prestige and, if you will, more affection—granted this is an unusual word to use for a political party—than any other of the several mass organizations in Novocherkask. The reason for the prestige and the affection is to be found in the last half-century of the city's history.

During the first Russian revolution of 1905-1907, members of the Social Democratic Labor Party, as the Communist Party was then called, led the revolutionary movement against the czarist autocracy. The Communists were in the vanguard again when the people of the Don area fought to defend the Soviet government, and during the period after the Civil War when Novocherkask citizens worked long hours on short rations to rebuild their city. In World War II, when this part of the country was occupied by the Nazis for a time, the Communists led the resistance movement and organized partisan detachments. And in the postwar years, it has been the Communist Party again that, by word and living example, has set the pace for the city's, and the country's, drive toward an economy of abundance.

The respect the Party organization commands and the very close ties it has with the people is proved by the growing membership. In the past year alone nearly a thousand Novocherkask people joined the Party's ranks. Understandably, the larger number of new members are industrial workers, because fundamentally this is a working-class party, but the professions are also well represented. So are the generations. Professor Alexei Lekhki, who teaches at the Institute of Veterinary Surgery, joined the Party recently; he is past 65. In answer to a question on the application form, he wrote, "I am applying for membership because I want to devote all my strength and what knowledge I have to help build the world's most equitable society."

## Always Ready to Serve

There is an old two-story mansion in the town square whose doors are always wide open—the offices of the Novocherkask City Party Committee. Among those likely to be visiting the Party headquarters on a typical day are people like engineer Alexander Tsadkin and theater director Mikhail Gilman, who do not belong to the Communist Party; and Pyotr Ladan, a corresponding member of the Academy of Agriculture, and Dmitri Marynich, a worker at the Electric Locomotive Building Plant, who do.

The Party Committee is at the service of every city resident, Party member or not. Factory workers and directors, teachers and students, housewives and career women, pensioners and young people drop in at the Party Committee offices for a hundred and one reasons—an idea for beautifying the city, a complaint about the quality of goods sold in a retail store or a request that the Party use its influence to get another nursery school set up in a growing neighborhood.

## A "Little" Problem Solved

We stop in to pay our respects to Tikhon Loginov, First Secretary of the City Committee. As we enter the office, a young man with a broad smile on his face is just leaving. Secretary Loginov explains, "He had a little problem and we were able to help him out."

Later we hunt up the young man and get the details. His name is



# IST PARTY CITY COMMITTEE

(Right to left) Tikhon Loginov, First Secretary of the City Party Committee, Ivan Pozdnyakov, project chief, and Vitali Zamula, Chairman of the City Soviet, check plans for a power project.





*Members of the Bureau of the City Party Committee on a visit to the computing center of the Novocherkask Polytechnical Institute.*

Nikolai Volkov and he works as a fitter in a local factory. He took the exams for entrance to the Polytechnical Institute, one of the city's four colleges, and failed to make the grade by one point.

He was sitting on a park bench on the institute campus, Nikolai tells us, just after the list had been posted, thinking of the sleepless nights he had spent pouring over his textbooks after a hard day's work at the factory. "It was all a waste of time," he was telling himself.

A voice next to him asked, "What was all a waste of time?" He looked up and there was a man of 40 or so with a very familiar face sitting alongside him.

Nikolai felt foolish talking aloud to himself, but the familiar looking stranger was so interested and sympathetic that the whole story came out. In return for the confidence the man told Nikolai that he had graduated from the Polytechnical Institute ten years ago, that he too had studied after work and knew from firsthand experience how hard it was. After graduation he had taken an engineering job at the Donbas coal fields and then returned for graduate study. He also added, as an afterthought, that he had lectured at the institute, and if Nikolai wanted to take another crack at the entrance exam, maybe it could be arranged.

It then dawned on Nikolai that the familiar-looking stranger, a very well-known figure in Novocherkask, was the First Secretary of the City Party Committee.

Nikolai passed the exam, the second time. He had dropped in to tell that to Loginov and to thank him again.

### **Party Election Conference**

The City Committee which Loginov heads is elected yearly at a conference of delegates from the Party branches. This conference usually runs for several days, since besides electing the committee, the delegates also discuss the city's progress in housing construction, industrial expansion, urban improvement, educational and cultural development, consumer services and other such matters.

The newly elected committee is charged with carrying out the decisions made by the conference, which is the authoritative Party body in the city. Since these decisions invariably reflect the best interests of the city and are adopted only after they have been discussed—with changes, additions and objections registered—at public meetings, they always get wide civic support.

At last year's Novocherkask Party conference many of the 550 delegates took the floor on various points after they had heard the report of the outgoing committee.

Professor Alexander Ukrainsky of the local agricultural college dealt with several matters that had been raised in the committee's report—water supply, afforestation and the feasibility of the city's chemical plant's producing weed killer.

Delegate Nikolai Vakalo, a factory worker, discussing the previous year's program at the Party's lecture hall, proposed a series of forums on "All in Man Must Be Beautiful."



The Party Committee Lecture Hall is currently running a popular series of forums on the subject "All in Man Must Be Beautiful."

Foreman Anatoli Matskevich tells a secretary of the City Committee, Vladimir Osipenko, what's doing at the electric locomotive plant.



Vera Sokolenko, a member of the City Party Auditing Commission, talks to Vasili Bedin, a worker at the electric locomotive plant.



The delegates from the Synthetics Plant asked the conference to recommend that their plant be enlarged because of the increased demand for their products.

Other points raised covered such items as faster automation of the city's factories, more effective use of manpower, increased consumer goods production, and better communist education. The decisions taken by the conference on these matters and others constituted the year's program of work for the newly elected committee.

#### Committee Members

The 125-man committee was elected by secret ballot from a much larger list of candidates nominated. About half of the newly elected committeemen are factory workers; the remainder are teachers, doctors, writers, etc. Factory worker Nikolai Vakalo, Electric Locomotive Plant director Boris Kurochkin, Assistant Professor Oleg Ivanov of the Polytechnical Institute, and the city's mayor, Vitali Zamula, are representative committee members.

Only ten of the 125 are full-time Party officials; the rest work at their usual vocations and take care of their Party obligations in their spare time. Besides these ten full-time Party workers, the committee has a paid office staff of twenty.

The Party Rules require that each member pay monthly dues, ranging from one to three per cent of earnings.

Shortly after the Party Committee was elected, it held a plenary session at which it elected an executive committee, called the Bureau, made up of three secretaries and five additional members. The First Secretary is Tikhon Loginov, whom we have already met; the Second is Viktor Zakharov, an engineer; and the Third is Vladimir Osipenko, a teacher. Of the other five members of the Bureau, only one is a paid Party worker, Pyotr Molchanov, a recently demobilized serviceman. The others—Boris Kurochkin, Oleg Ivanov, Vitali Zamula, and Georgi Kalinin—work at regular jobs. Kalinin is editor of the local newspaper, *Znanya Kommuny* (*Banner of the Commune*).

#### No Special Privileges

The rank-and-file Party member and the Party leader have no special privileges but they do have a great many more responsibilities and obligations than the non-Party person. The full-time functionaries of the Novocherkask Party Committee are paid 150 rubles a month, about the wages of an average skilled worker. For some, assignment to a full-time job on the Party Committee meant considerable financial sacrifice. Secretary Tikhon Loginov, for example, used to make twice as much when he lectured at the institute and did scientific research.

The 125 members of the City Committee could not possibly cope with their manifold duties without the help of some 500 or so active rank-and-file Communist Party members. There are very few phases



*Dmitri Marinych, one of the top-notch workers of the electric locomotive plant, was recently elected to the Party City Committee.*

*Nelli Petrova, one of the thousand Novochoerkask citizens to join the Party last year, is congratulated by Secretary Vladimir Osipenko.*



of the city's life with which the committee does not concern itself. The criterion for every decision it makes is this simple one—Is it good for the people of Novochoerkask?

Nor are major decisions ever taken without active consultation with many people. On matters of moment the Party Committee schedules citywide meetings, to get as wide a spread of opinion as possible.

One such meeting last year, sponsored by the committee, saved the city 130 million rubles. The question at issue was whether a special factory needed to be built for the production of synthetic alcohol or whether the Synthetics Plant could produce it.

The Bureau of the City Committee meets weekly. Active Party members and secretaries of factory Party committees are invited to attend and, very often, non-Party people whose specialized knowledge and advice will be helpful in solving problems.

Representatives of the City Soviet and of the trade union and youth organizations were invited to a recent Bureau meeting which considered the question of job placement for demobilized servicemen. The Bureau's recommendations were subsequently adopted by the City Soviet as municipal ordinances.

This same meeting considered complaints that had been made by construction workers on the Novochoerkask hydropower project of insufficient quantity and poor quality of goods and food sold in the stores and restaurants in their vicinity. The Bureau sent an urgent

recommendation to the Ministry of Power Station Construction that it take the necessary remedial steps, and about a million additional rubles were earmarked for improvements.

#### **Political Education**

The Party Committee is responsible for the political education of the city's Communists. The Party branches conduct study circles at factories and offices which non-Party people are welcome to attend. The subjects studied include political economy, philosophy, the history of the Communist Party of the Soviet Union and the resolutions of Party congresses.

Enrolled in these study circles are some 20,000 Novochoerkask people, most of them non-Party. Recently, the City Party Committee also started a series of public lectures given by leading Party people, scientists and workers, which has been well attended.

Currently, the committee is preparing for a meeting of national significance—the 22nd Congress of the Communist Party of the Soviet Union which will open in Moscow in October. The Novochoerkask Party organization will be adequately represented; the Party Rules permit one delegate for every 2,000 members. The delegates will be speaking not only for the Communists but for all the citizens of Novochoerkask.

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## QUERIES FROM READERS

**QUESTION:** *A number of Cleveland and Milwaukee readers ask how rent is figured in the Soviet Union.*

**ANSWER:** Most apartment houses are state owned. They are under the direct control of the local Soviet of Working People's Deputies' Housing Department. Any citizen in need of living quarters has the right to an apartment in a state-built house. The rent and charges for utilities—electricity, gas, telephone, etc.—are fixed by law.

The present rent scale establishes a ceiling of 13 kopecks per square meter (10.76 square feet) of floor space. Tenants pay only for space in living room, dining room and bedroom. The space in hallway, kitchen and bathroom is not figured in rent calculations.

Here is an example. The rent for a 3-room apartment—that would be a living room, 2 bedrooms, kitchen and bath—in a new building in Moscow's Southwest District is 4 rubles 29 kopecks a month. That comes to about 4-5 per cent of the average family income. Contrast this with the 20 to 30 per cent that an average family had to pay for rent before the Revolution.

The repairs are paid for by the Soviet of Working People's Deputies out of state budget funds. Similarly, the planting of trees and shrubs around houses, playgrounds, etc., are paid for out of state funds.

The Soviet state subsidizes most housing construction. Annually, 15 or 16 new apartments are built per thousand of the population. Between 1959 and 1965, the period of the seven-year plan, the Soviet Union will have built 15 million new city apartments. The cost of construction is not figured in the rent since all such costs are covered by the state.

**QUESTION:** *Can people in the Soviet Union own their own homes?*

**ANSWER:** Yes, and many of them do. Eighteen million farm families live in homes of their own. There is comparatively little public housing in rural areas. A substantial part of the housing in small towns is also owned by private citizens. In the cities most of the housing units are state-built and owned, although even in urban areas there is a good deal of private housing.

Statistical data show that in the 14 post-war years (1946-1960) the urban population put up close to a trillion square feet of private housing, almost a third of the total space the country built in the period. During these same years 7.8 million homes were built in the countryside. These were single-family houses for the most part.

Private home building is encouraged. Citizens are granted building plots—from 3,000 to 12,000 square feet—in perpetuity and 7-10 year state loans—of from 700 to 2,000 rubles (in the new currency) at a low 2 per cent interest.

In 1959 state loans for private housing in city areas totaled 4.7 billion rubles (in the new currency) and in rural areas 4.9 billion rubles.

Municipal and village Soviets, factories and collective farms help the homebuilder to buy construction materials, and state architectural agencies supply plans for standard-type homes that can be modified to meet the owner's personal taste and preference.

The right to own a private home and other personal property is guaranteed by the Soviet Constitution and protected by law. The owner has the right to sell his house, give it to another citizen, or pass it on as a legacy.

## THE THIRD YEAR OF THE SEVEN-YEAR PLAN

*(Continued from page 11)*

standards. In 1960 the real income of wage and salaried workers was five per cent higher than in 1959.

A characteristic of the Soviet Union's economic growth is the steady increase in the funds budgeted for social welfare to pay for free education and medical services, to provide cultural and recreational facilities—schools, clubs, theaters, athletic stadiums, parks, etc. In 1960 the social fund was 24.5 billion rubles as against 23 billion for 1959.

Full employment is a permanent feature of the Soviet economy. As in previous years there were no jobless in 1959 and 1960. During the two years the number of persons gainfully employed increased by 7,200,000.

Last year the transfer to a shorter workday was completed on a national scale with no wage cuts. As a matter of fact, in most cases earnings went up. Today the average length of the workweek is 39.4 hours. The transfer to a seven- and six-hour day was the first big step toward a workday and workweek that eventually will be the world's shortest. Toward the end of the seven-year plan period the next step will be introduced—the changeover to a 30-35 hour week with two days off.

On October 1, 1960, the income tax abolition law went into operation. By the closing year of the plan, 1965, no one will any longer be required to pay an income tax.

The growing income of every Soviet family is graphically evident in the increase in retail trade turnover. The total volume of 1960 sales in state cooperative stores was 77.7 billion rubles, more than had been forecast in the plan. Retail trade turnover for the first two years had been expected to increase by 15.4 per cent; it went up 19.6 per cent.

Soviet currency is stable, and the systematic rise in productivity and

*(Continued on page 36)*





(Left to right) Turner Alexander Vakov, pol  
isher Antonina Lebedeva and milling machin  
operator Anatoli Nikonov are members of  
Communist Work Team at the Moscow Ball  
Bearing Plant. The honored title was awarded  
their team at a meeting of the staff of the plant







Team leader Nikolai Timofeyev. One of the main principles of the Communist Work Team is to live and work by the rule, "All for one and one for all."

# Five Friends

By Vladimir Ponizovsky

Photos by Yakov Yarin

THESE ARE FIVE YOUNG PEOPLE who work as a close-knit team at the First Moscow Ball-Bearing Plant. They have a very special attitude toward their jobs, their studies, and particularly toward one another—one that Soviet people associate with the widely honored designation Communist Work Team. Here are thumbnail sketches of these young workers who personify a movement that now has thousands of followers in every one of the country's industries.

*Nikolai Timofeyev* is the leader of the team, a modest, thoughtful young man of 25. He completed the trade school at the plant and is now a highly experienced lathe operator. Why was he chosen team leader? Perhaps because he is an unusually considerate person, always willing to put himself out, to help the men he works with, to share his knowledge and experience. Perhaps also because he is always on the hunt for new ways of doing things—a quality to which young people are attracted. But more about that later.

*Alexander Vakov.* He and Nikolai are

friends of long standing. Alexander is two years older and a full head taller. He is also a lathe operator. His father is a chauffeur and his mother a nurse. Alexander is married. He met his wife at a youth picnic and later discovered that she worked in the stock room of the plant. They have a very young daughter, Natasha, with hair like spun gold.

*Antonina Lebedeva* is the only girl on the team. She had a hard early life. Both her parents died when she was very young and she was brought up in a children's home. After graduating from the seven-year school, she went on to trade school. She works as a polisher.

Perhaps it's because Antonina never had a family of her own that she regards the whole staff of the plant as her family. She is trade union organizer for her section of the shop and that involves, among other things, arranging vacation accommodations at resorts and sanatoriums for the people she works with, organizing Sunday boat rides and theater parties, visiting sick workers, and a hun-

dred and one other such things that some people might find wearisome but that Antonina is pleased to do.

*Anatoli Nikonov* is a person of few words. One glance would tell you he is an athlete. Anatoli goes in for soccer and hockey, track-and-field sports and skiing. He frequently defends the honor of his plant's athletic club in numerous sports competitions. His father, a foreman in the forge shop, brought him to the ball-bearing plant when he was ready for a job. "Just look around and pick out the trade you want to specialize in," he told his son as he led him from one machine to another. Anatoli was fascinated by the powerful machines that bit into the metal as though the cutters were going through butter, and so he decided to become a milling machine operator.

*Georgi Khorikov* is the youngest of the five, having just reached his twentieth birthday. He has two older sisters, both college graduates. Stella is a machine-building engineer, and Emma teaches physics. When Georgi



Georgi Khorikov was the fifth member of the team until he passed the entrance exam for one of the finest engineering schools in Moscow.

The team members work, study and spend much of their free time together. At an inter-shop soccer match in the plant stadium.

graduated from the 10-year secondary school, his father, who works in the billet shop, advised him to take a job at the plant for a while. He thought the practical work experience would be valuable. But Georgi wanted to get on with his education and took the college entrance exams. It was a terrible blow when he didn't make the grade, but he was still determined to go to college. Meanwhile he took a job at the bearing plant as an apprentice to Nikolai Timofeyev.

As for this special attitude we spoke of—it started with a news item. One day after the shift had ended, Nikolai Timofeyev got the team together and with a rather serious air, as though he'd given the matter much thought, read an account of some young workers in the Moscow Sortirovochnaya railroad yard who had organized the first Communist Work Team in the country. They had pledged to live and work in a communist way, that is, to do a more creative job at the yard, to study diligently to raise their qualifications, and to help one another at work and at study.

The initiative shown by the young workers appealed to the five friends on Nikolai Timofeyev's team. They were particularly impressed by the fact that the first Communist Work Team had originated in the very same

place where forty years before, at the birth of the Soviet state, the first communist *subbotnik* was held. (*Subbotnik*—from the Russian word *subбота*, which means Saturday—is collective, voluntary and gratuitous overtime which originally took place on Saturdays.)

When he finished reading the article, Nikolai Timofeyev said, "What do you say to our doing the same thing?"

"When do we start?" was the unanimous answer. But the team leader was in no hurry. "Let's see what's involved. If we decide to do what the people in the railroad yard did, we're going to have to work in an entirely new and different way. We're going to have to set an example for others wherever we are."

#### Working in a New Way

You can turn a bushing, or cut gears exactly to specifications—that's one thing. But you can go a step farther—study the specifications, see how things work out in actual practice and then be in a position to tell the engineer himself how to change the process and what machine tool to use to cut down time and costs and produce a better part.

An operator can, of course, think only of himself and the job he's doing and say, when the machine run by the man next to him gets jammed, "Well, that's his problem." Not for Nikolai Timofeyev's team, though. There mutual assistance is a law not to be broken. These friends are always ready to help one another. More than that, each member of the team has begun to learn two or three related skills so he can fill in where he is most needed at the moment, or relieve another man if necessary.

The team has been doing some interesting things with speed.

Let's say the calculated speed for machining parts on a given machine tool is 150 to 180 feet a minute—an average speed for an average operator. We double that. The element of risk enters, of course, and all sorts of possible hazards—the cutters can be spoiled, or the part, or even the tool itself. But put a much better than average operator at the controls, one who knows the machine's potential, one with a certain amount of daring—calculated and studied daring, that is—and the result is a new production record.

It was in this spirit that Timofeyev's team challenged average speeds. They had trouble at first, that was inevitable—chipped cutters



and spoiled billets. Then, after hours of hard textbook study of the mathematics involved, they figured that the sharpening angles of the cutters had to be changed.

Little by little their work and study began to merge, and they began to get higher speeds—210, 240, 300 and, finally, 360 feet per minute. What that meant was that their productivity had doubled, with a corresponding increase in the number of parts they turned out and, of course, a corresponding rise in their earnings.

It didn't take long for these new ways of work and study to become almost habitual. Three times a week, after their shift ends, the five friends hurry to classes, Nikolai and Alexander to the mechanical engineering secondary school, and Anatoli and Antonina to the school for young workers. Georgi Khorikov is back at his books, too, preparing for the college entrance exams.

Even with this busy schedule the friends find time to root for their shop's soccer team at intramural matches in the plant stadium, especially since Anatoli is one of the players; to see new films and shows; and to spend many a Saturday evening at the dances given in the plant's Palace of Culture. Team work, carried over from work to school and leisure-

time activity, has made their lives much richer.

Last spring Nikolai Timofeyev's team was designated a Communist Work Team at a formal meeting attended by many thousands of the plant's workers.

#### Same Team—Different People

Now we push the calendar ahead to the present—and the future. Alexander Vakov graduated from the specialized secondary school and was promoted to a foreman's job.

Georgi Khorikov is on his way to an engineering degree. His "luck" was better than it was two years ago; he passed his entrance exams for the Bauman Higher Technical School, one of the oldest and finest engineering schools in the country. He visits the plant from time to time to say hello.

Nikolai Timofeyev, Anatoli Nikonov and Antonina Lebedeva are still on the team. Not for long, however. Nikolai, who incidentally became a father in the interim, is now in his last year at the evening specialized secondary school and will be promoted to foreman when he's through. Anatoli is presently completing a general secondary school and is hatching plans he isn't ready to talk about as yet. Antonina Lebedeva isn't at all hesitant about

talking about hers. "When I finish school," she says, "I'm going on to college. I want to become an engineer."

New young people have come to take the place of those who have left Nikolai Timofeyev's team. One of them, Vladimir Myshonkov, came to the plant from high school. He's 17, a very bright lad, and is apprenticed to Timofeyev, who is teaching him to operate a lathe. Vladimir, like his other teammates, is studying nights at the plant's school.

The other newcomer to the team, Alexei Kolekeyevsky, was recently demobilized from the army. He was one of those returned to civilian life by the Supreme Soviet law cutting the Armed Forces by another 1,200,000 men. He worked at the plant as a lathe operator before going into the army, and is back at the same job. His evenings are spent at school and in home study. In his free time he works with a committee responsible for arranging parties, concerts, museum trips and other cultural and recreational activities for the young people at the plant.

The personnel of the team may change but not its essential character. It remains a Communist Work Team with a mutual responsibility, self-imposed, for the work, education and well-being of all its members.

**I**N CENTRAL ASIA, where for centuries before the Soviet period women were to all effects and purposes chattel slaves, there is a saying, "It's easier to build ten big factories than to break down one small prejudice."

Tursunoi Akhunova, a young Uzbek woman, has done both, in a manner of speaking. She was the first woman in her republic

down behind the wheel of a cotton-picking machine. The comment, understandably, came from some of the old folks who had somehow never grown up to the facts of today's life and were still clinging to their antiquated notions of woman's place.

Tursunoi went right ahead, comments notwithstanding. What bothered her more than the talk was the fact that for a long time

pickers were turned out in quantity. In the meantime, working with one or another of the 16 old machines on the farm, she kept boosting her quota. Everyone was pleased that Tursunoi's name figured in conferences of leading Uzbek farm workers, particularly the women. They saw in her a confirmation of their own latent powers and came for advice and approval. She helped three of the Uzbek girls to become machine operators, and before long the number of Tursunoi's pupils increased.

In the early spring of 1959 Tursunoi carefully began to prepare for harvesting. She checked her new machine, which had begun to be produced in quantity by then, and figured out a plan of work. That season she gathered 210 tons. Uzbekistan is world famous for its cotton experts, but there were very few pickers who matched her record.

When she reported the total at the December 1959 Central Committee meeting and it was explained that 210 tons was considered a whole season's quota for a hundred hand pickers, Nikita Khrushchev remarked admiringly, "One to replace a hundred workers; well done!"

Tursunoi thereupon pledged to raise her quota to 250 tons. But she asked machine designers to help her meet this very ambitious goal by ironing out certain defects in the HVS-12. She explained that cotton growers in her region had asked her to tell the Central Committee that they liked the machine's performance but that they thought the engine could have more power and the machine made lighter for greater maneuverability.

Tursunoi's husband and baby daughter accompanied her to Moscow. Asked whether she intended to stop working to look after the child, she answered with a simple "no." The decision was not a difficult one. The trained teachers at the collective farm's nursery school take care of the child during working hours. Tursunoi is very much the devoted mother, but she would find her life incomplete without the challenge of the work she does so well.

In January Tursunoi appeared before the Central Committee again to announce that she had fulfilled—and more than fulfilled—her pledge. During the previous season she had picked 322 tons and had, besides, taught her sister and several other Uzbek girls how to run a mechanical picker.

There was no mistaking the look of pleasure and excitement that suffused the face of the young woman on the rostrum as she acknowledged the applause her report had evoked. And there was no mistaking the gratitude for a job well done that the applause conveyed. For, little though Tursunoi is, the work she is doing is regarded by everyone who attended the Plenary Session, by everyone in the country, as the foundation of society—a matter of state importance.

## TURSUNOI AKHUNOVA

### Breaks Records and Prejudices



ever to operate a mechanical cotton picker, and with the machine she picks as much cotton as a hundred people working by hand.

At the Plenary Session of the Central Committee of the Communist Party of the Soviet Union held in the Kremlin Palace this January to discuss agriculture, government leaders, Party officials, scientists and farmers applauded her achievement.

It was some years ago that farm machines began to stream into the Uzbek collective and state farms to replace manual labor. At the Kirov Collective Farm, where Tursunoi worked, they soon became commonplace. She was 17 at the time and had finished a farm mechanization school.

It occasioned some comment when she sat

she couldn't catch up with the quota expected of cotton-machine operators—sixty tons a season. When she did begin to catch up, she kept on going until she exceeded the quota by twenty tons. But that was only the beginning.

When she learned that Soviet designers had produced a better picker, the HVS-12, she pleaded at a conference of machine operators in Tashkent, the Uzbek capital, that the new machine be tried out on the fields of her collective farm. She thought she could pick 100-150 tons with one of the experimental models. That would virtually mean a technical revolution in the cotton fields, and Tursunoi wanted to be in on that revolution.

After the test, she had to wait until the new



By Leonid Sheinman, Engineer  
Photos by Nikolai Nemnonov

Last summer a small boat carrying nine people embarked from the village of Romanovka on the upper reaches of the East Siberian Vitim River. This was one of many expeditions sent by the Moscow Institute of Hydropower Projects to survey water-power resources. Engineer Leonid Sheinman, who led the group, gives this account of the trip down the wild Vitim.

prelude to **HARNESSING**  
**A SIBERIAN RIVER**

After a day spent negotiating the shoals and rapids of the wild Vitim River in eastern Siberia, this felt like a feather bed.



**T**HE THIRTY HORSEPOWER at our stern wasn't bad at all, especially with the seven million more we were getting from the racing river. We were doing all right. With seven million and the thirty horsepower propelling our small craft, we sailed downstream day after day and mile after mile at a fast clip until we spotted the lights of Bodaibo on the horizon.

We had christened our boat *Energetik* (Power Engineer), a most suitable name for a vessel manned by a small companionable crew eager to explore the secrets of the Vitim for power development in the very heart of Siberia. We negotiated some 300 shoals and two formidable rapids.

Our task was to survey and reconnoiter the river, make a detailed investigation of the sites chosen for dams of future reservoirs, draw sketches and check the best shore locations, in terms of engineering economies, to be surveyed more closely by parties to come after us. This was data we were gathering for a comprehensive plan to harness the Vitim's power resources. A whole cascade of huge power stations is to be built on the river in the near future.

Our *Energetik* had been built to order in Romanovka. The shell, made of extra strong five-inch pine planks attached to the frame with wooden pins, looked like an ordinary flatiron, not very graceful but seaworthy enough to stand up to any test the river might present. The skeptics were silenced when they saw with what ease our clumsy flatiron cleared the numerous underwater reefs.

That was most important, since we had some 750 miles to go and some 30 sites to survey for future power stations, besides making a thorough study of the geological structure of the shore. Under these northern summer conditions every minute was precious; we didn't have too many before the mosquitoes and midges hatched and attacked us in force. When the bloodthirsty little monsters did appear later, for some reason or other they concentrated on our hydrotechnologist and "doctor," Rem Bobrov—in quotes because he had been an assistant to a doctor during the war and had a lot of medical experience. We had very little use for the two huge chests of medical supplies he had brought along; everybody kept banging into them when all hands were called on deck.

The call was sounded often and signaled an approaching obstacle, a rapid or a stony shoal. Everybody but the cook, who went to the rescue of the pots and pans, rushed to the upper deck when it sounded. The motors were quickly hauled aboard and, following the orders of our

pilot, with two immense oars installed fore and aft, we wormed our way through the reefs.

Day after day, the turbulent waters carried our boat downstream. There were times when the swift current gave us trouble. Once the Vitim cast our boat onto the rocks, and we worked for two days with block and tackle to get under way. All our efforts were in vain. On the third day, when we were running out of cigarettes and were several travel days from the nearest supply base, we began to really get bothered. Finally, a passing motorboat pulled us clear with a tow line.

The few hunters and fishermen who live in the tiny villages on the banks of the Vitim always gave us a hearty welcome. Around a campfire they would tell us of life in the taiga, of the hunting they did and of the fabulous wealth of the forest. And we would tell them that soon these primeval spots would be crossed by railroads, the beautiful river would be dammed and its energy leashed by power stations.

The geologists in our group found that although the geologic structure of the Vitim was most complicated, the construction of 300-400 foot dams out of rock-fill was altogether feasible.

Once we stopped at a site chosen for a future power station and went ashore. The topographers took their theodolite to measure the width of the river; the geologists took their tools and headed for the mountains. Suddenly on the other side of the river we spotted a bear. The next day we met this lord of the local forest again, this time at uncomfortably close quarters in a thicket where he was enjoying some red bilberries left over from last year.

As we worked our way gradually downstream, we added to our collection of rock samples and made topographic maps and sketches.

To the rhythmic hum of the motors and the song of the motor mechanic the mighty river carried our tiny vessel to Bodaibo, our destination. We reached it exactly two months after our departure from Romanovka, but it hardly seemed that long. All of us—four boys from Irkutsk and the rest from Moscow—felt as though we had left the village only the day before, the time had been so taken up with our work. Our job was done—the first step toward harnessing the might of this wild river.

Surveyors are already working at the power sites we chose. The silence of the taiga is now broken by the clatter of power drills and compressors. And the hydrotechnologists who were in our expeditionary group are already at drafting boards outlining the shapes of future projects.



*Our crew of geologists and engineers was surveying the river and shore line for future dams and reservoirs.*



*We were gathering data for a whole cascade of power stations to be built on the river in the near future.*



*Our Energetik wasn't too pretty a boat but it cleared the underwater reefs. This one didn't quite make it.*

*This was primeval and majestic taiga country we traveled through. Some of it we had to look at through mosquito nets.*





Orest Vereisky

# AMERICANS SKETCHED BY SOVIET ARTIST

By Orest Vereisky

**S**EVENTY DAYS is hardly enough time to get acquainted with as big a country as the United States. To us the time seemed even shorter because of the many Americans who made our stay so pleasant and productive. And should any of these friends we made happen to read this, we want to thank them once again for their generous hospitality.

My friend and fellow artist Andrei Mylnikov and I visited the United States last summer under the cultural exchange agreement. We met artists, teachers and critics of various trends and schools, tastes and opinions. Each of the meetings was interesting and instructive in its own way.

We saw so many museum and private collections and met so many artists that we had no time for anything else. So that when people asked us whether we had gotten to know America, we were tempted to reply, and frequently did, that the United States seemed to us to be one great country of painters and art critics. Everybody we met seemed to have something to do with the fine arts. And, as a matter of fact, it was almost literally so. That was the price we had to pay for so packed and specialized a program. There was so much we had to cram into the 70-day period we were limited to.

We used every free minute to make sketches and studies. We were interested in everything—cities, roads, natural scenes, events and, above all, of course, people.

Here are some of my American sketches. I made 70 in the 70 days.

Two American artists will be paying a return visit to the Soviet Union this spring. I have no doubt that their reception will be most cordial, their tour most interesting, and that they will take back home with them as many names and addresses of new Russian friends as we did of Americans. It is from these meetings that understanding and friendship between our two countries grow.



At the exhibition of Vereisky's drawings





Workers



Tombstone, Arizona

(Richard A. Long)



Kansas City



In the airport



Washington Square in New York

American Style  
The Life



New York

## THE THIRD YEAR OF THE SEVEN-YEAR PLAN

(Continued from page 25)

in national income therefore made it possible to increase the gold content of the ruble on January 1, 1961. Ten old rubles were redeemed for one new one, and price scales were altered accordingly.

### Housing Construction

The scale on which housing has been built in these past two years is unprecedented. During that time 4.6 million new apartments with more than 1.8 billion square feet of living area were built in cities and industrial communities. This is 12.5 per cent more than was called for by the plan; 2,237,000 apartments were built in 1959 and 2,400,000 in 1960. The 1960 figure works out to about 16 apartments built per 1,000



citizens. By way of comparison we might note that in 1958 Britain and Italy built six apartments per 1,000 citizens, France 6.5 apartments, and the Federal Republic of Germany 9.4.

Besides apartment housing in the cities, about 1.5 million cottages were built in rural areas by collective farmers and other rural inhabitants.

This very rapid building pace is to be accelerated. The Soviet Union has set itself the task of completely ending the housing shortage once and forever. It proposes, in the relatively near future, to provide every family with a modern dwelling.

During the first two years of the plan the construction of educational, cultural, scientific and medical facilities was also speeded up very considerably. In 1960 another ruble was added to every four spent in 1959 for that purpose. It provided funds for building 40 per cent more general schools, 25 per cent more hospitals and 15 per cent more kindergartens than in the previous year, besides new boarding schools, sanatoriums, resorts, maternity centers, movie houses and theaters.

(Continued on page 41)



# STALING









# AD POWER COMPLEX

By Yuri Graftsky

Photos by Alexander Mokletsov

**S**TALINGRAD is a city with a singular and striking biography, a history-making city.

The twenties. . . . The country is torn by civil war and invaded by foreign armies. From Tsaritsin, as Stalingrad was called then, grain for bread moves from the South to Central Russia. If the city falls to the enemy, the blow would be grievous, perhaps total—Moscow, Tula, Ivanovo and other cities would starve. Tsaritsin heroically holds, and trainloads of grain keep traveling north.

The thirties. . . . The country is embarked on a far-reaching program of industrialization. Peasants in large numbers merge their small holdings to form collective farms. The success of collectivization depends in no small measure on how quickly the Stalingrad tractor plant gets into production. The first tractors begin rolling off the conveyors in 1930 and keep rolling thereafter in mounting volume.

The forties. . . . World War II. Hitler throws everything he has at the city to break





*The central control desk. The Stalingrad station is already supplying power for the city's tractor and aluminum plants.*

*Iosif Strizhenok supervised the electricians who assembled the power distribution installations for the big project.*

through to the Volga. The world holds its breath as the guns thunder at Stalingrad—the war hinges on the battle. Victory comes high; the city is reduced to ruins, but the Nazis do not pass, and Stalingrad stands as the everlasting symbol for heroism.

The fifties. . . The scars of war are healed, Stalingrad has been rebuilt. Great new construction projects are begun and completed in the decade. One is a canal linking the Volga and the Don rivers that gives Central Russia a waterway to the Black Sea.

The early sixties. . . The country is working on the seven-year plan and Stalingrad once again makes history—industrial history this time. Eighteen miles from the city the turbines of the biggest hydroelectric station in the world begin rotating.

This huge power project, the seventh of nine planned for the Volga-Kama cascade, is the subject of our article.

### 21 Generators and a 22nd to Come

Near the Stalingrad dam the Volga is wide and turbulent; its gray-green water slaps violently against the immense wall of concrete and then drops in a spectacular 110-foot waterfall to the vanes of the turbines. Reflected in the river are the spillway trusses—gray-green also and monstrous, like giants knee-deep in water—and the building that houses the generators.

The Kuibyshev station on the Volga, with a capacity of 2,300,000 kilowatts, was the world's most powerful until quite recently when the Stalingrad project, with the assembly of its twenty-first aggregate, achieved a capacity of 2,415,000 kilowatts.

Both stations are of a similar type, but the Stalingrad project incorporates the more advanced hydropower construction techniques. Although more powerful, it cost less to build. About six million cubic yards less earth had to be moved than for the Kuibyshev project; two million cubic yards less concrete and reinforced concrete laid; some 200,000 tons less reinforcement welded; and 20,000 tons

less metal construction assembled. There were also fewer auxiliary and temporary structures put up during construction. All this cut building costs by about 26 per cent as compared with the Kuibyshev plant. The Stalingrad station looks more modern and its operational technology is more efficient.

There is a 130-foot pit, deep and dark as a canyon, waiting for the twenty-second turbine that will be installed when it is built. This will be a turbine of a new design, lighter and more economical, similar to those of the Krasnoyarsk five million-kilowatt project, now being built on the Yenisei River in Siberia. When this new type of turbine is tested on the Volga, it will be subjected to conditions created to duplicate those on the Yenisei.

With the twenty-second turbine, the capacity of Stalingrad will rise to 2,530,000 kilowatts. The station will then be generating from 11 to 14 billion kilowatt-hours of electricity a year.

### The Men and Machines

It took some 30,000 people and 19,000 machines to build the Stalingrad station. The electric power used in construction worked out to 8,000 kilowatt-hours per worker per year. Machines were everywhere. A hundred excavators, 200 tractors, 300 bulldozers and 2,000 trucks were used to move dirt. But this mechanized armada did only a quarter of the earthwork. The rest was done with suction dredges that piped the dirt to wherever it was needed.

Unsinkable ceramzit, a new building material, was first used in the Soviet Union on the Stalingrad project. A factory built especially for the purpose turned out 4.2 million cubic feet of ceramzit a year. Other structures set up on the site included a precast reinforced concrete plant, reinforcement and structural steel shops and repair shops.

The great bulk of the work was done by machine—all the earthwork, all the concrete and reinforced concrete work, the drainage and filter installation, as well as the assem-

bly of the steel structures and equipment.

The men and women who built this mammoth power plant were of two generations—and not only chronologically. There were the old-timers, those with years of construction experience behind them, and the young people on their first job.

Welder Grigori Shokin might have sat for a composite picture of the old-timers. His broad face has been burned by the southern sun and beaten by the fierce Volga winds. Shokin worked on the Volga-Don Canal and the Tsimlyanskaya hydropower project. At Stalingrad he welded the first reinforcement in the dam and was also first to reach the planned elevation to which the water now rises.

The dam, knit together of concrete and steel, goes down 130 feet. Shokin and his mates worked on the first phase of the project; they built the pit and did the basic concrete work.

Shokin is an amateur painter. His favorite natural setting is the Volga; his favorite man-made setting, the construction site. His sketches and paintings of people and events associated with the project are on display at the Builder's Palace of Culture where he took art classes. Now he studies by correspondence at the Folk Arts House in Moscow where his paintings have been shown.

Konstantin Yablochkin worked on the second phase of the construction job, the assembly of the 21 turbines. He is a soft-spoken man who chooses his words carefully. With his rather finely drawn features and controlled gestures, he seems more the scholar than the construction worker.

Yablochkin is a man with a keen and practiced eye and hand and a vast amount of experience acquired on other projects—the Mingechar Hydroelectric Station in Georgia, the Volga-Don Canal and the Kuibyshev station. Thanks to him and other skilled builders, Stalingrad established new records for turbine assembly.

Iosif Strizhenok and his team did the electrical installation work. Strizhenok is a me-

already  
n plants.



*Svengali Badalyan, 30-year-old Armenian who helped build the station, is now the engineer in charge of the control desk.*



*Konstantin Yablochkin and his team assembled the turbines. He is going to do the same job for the Bratsk project in Siberia.*



*The model town of Volzhsky was built a few miles from the Stalingrad project. This was barren steppe not too long ago. The town was planned for the convenience and comfort of its inhabitants.*



*One of the new plants going up near the station. This is a future industrial chemical factory that will be manufacturing dozens of different items, from automobile tires to synthetic fabrics.*

thodical, unhurried man, meticulous about details. Every job he does is done thoroughly. That is true for his work at Stalingrad as well as for the electrical assemblies he installed at the Narva hydroelectric plant in the Baltic, at the Kama hydropower station and at the Iriklienskaya project in the southern Urals.

#### **Training on the Site**

Thousands of young people came to Stalingrad with no skills but the earnest desire to work on this vital national undertaking. As soon as they arrived, they were assigned to training classes and were paid a maintenance allowance while learning a trade.

Some 25,000 young people went to school for advanced instruction to improve the skills they had or to learn a second or third trade. Many combined work with studies at the technical schools in the nearby town of Volzhsky. Others went even further, enrolling for college training at the Stalingrad branch of the Institute of Municipal Economy set up on the site.

The builders have now been replaced by the technicians and engineers who run the machines that generate the power. One of them is 30-year-old Svengali Badalyan who came to work at the Stalingrad station after graduating from the Yerevan Polytechnical Institute. The pit for the power plant was being dug at the time, and the young Armenian was put in

charge of an important section that provided the power for all the machinery used in the pit.

In 1958 turbine assembly work began, and the question of training people to operate the station's complex equipment came up. It was decided that a group of engineers be sent to the Kuibyshev station to learn how to handle a control panel and electronic and television installations. Badalyan was one of the men chosen, and on his return he was appointed shift engineer of the main control desk, the job he holds today.

The promotion happily coincided with another important event—his marriage. Very recently the couple announced the arrival of twins—a boy and a girl.

#### **New Towns and Industrial Centers**

Stalingrad now sends millions of kilowatt-hours of electricity through the country's power grid. From the station on the Volga silvery towers carry the 500-kilovolt transmission lines across 600 and more miles to Moscow. A second line of the same kind is being built.

A third high-tension line, on which construction has also begun, will pass through Rostov to the Donbas coal basin in the Ukraine. This will be an 800-kilovolt line, the most powerful in the country. Unlike all other

power systems it will transmit direct instead of alternating current and thereby reduce losses by a considerable margin.

The Stalingrad station is already supplying power to the city's tractor plant and the recently built aluminum works. It will be the energy source for other plants that are growing up around it. On the left bank of the river, in the neighborhood of the town of Volzhsky, 13 factories are now being built by the men who worked on the power station.

A big integrated chemical plant that will be producing dozens of items, from tires to synthetic fabrics, is going up rapidly. So are an abrasives plant, which will be the largest in the country, a bearing plant, a furniture factory, a cannery and a radio parts factory. None of this construction is haphazard; it is all provided for in the same seven-year plan that projected the power station.

The Stalingrad project will have an immeasurably beneficial effect on farm development in the southern part of the Russian Federation. It will help irrigate almost four million acres of sown land and will bring water to 15 more million acres of arid but potentially fertile land in the lower reaches of the Volga and the Caspian lowlands. All this will accelerate the job of creating an abundance of farm produce in the Soviet Union.

If you ask to see the spot where construction on the Stalingrad project actually began,



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This bearings factory with its machine tools already installed is about to start operating. It is one of thirteen plants under construction on the river bank.

Built by the men who worked on the power station, the abrasives plant will be the biggest one in the country. Nearby a furniture factory and a cannery are going up.



you are likely to be taken to the town of Volzhsky, four miles from the dam. That is literally where building did begin, even before work on the station was seriously under way.

It was all barren steppe then, and architects started from scratch with no existing structures to build around. The houses in town are mostly two- and three-stories high. Several broad avenues fan out from the main square where the office of the power plant is located. The town is a convenient, comfortable and pleasant place to live in, designed as a complete architectural unit. The architects who laid it out have been nominated for the Lenin Prize, the country's top award for outstanding achievement.

Volzhsky is growing rapidly. Every year about 1,500 families move into new apartments. The town presently has some 10,000 apartments, with more on the way. There are several motion picture houses and a Palace of Culture besides schools, nurseries, hospitals and other public service facilities.

With the Stalingrad station built and operating, construction men like Konstantin Yablochkin, Grigori Shokin and Iosif Strizhenok are beginning to think of moving on to new places—to Bratsk in Siberia, perhaps, where turbines are being assembled, or to any one of the dozens of other spots where mountains of earth are being moved to make room for new dams and power stations.

## THE THIRD YEAR OF THE SEVEN-YEAR PLAN

### Growth in Housing Construction

#### APARTMENTS (in thousands)



(Continued from page 36)

A good deal was done during 1959 and 1960 to reorganize the school system along the lines indicated by the law On Strengthening the Ties of School with Life and Further Developing the System of Public Education in the USSR. The effect upon education and science has already proved most beneficial.

One out of every four persons—approximately 50 million—is studying in one or another kind of class or school, and the number keeps growing. Last year the country's student body was increased by two-odd million. There was an especially marked rise in the number of pupils in both general and evening schools for young workers and farmers, as well as in schools for adults. This academic year there are 36 million pupils enrolled in these schools, three million more than last year.

In the past two years about 2.5 million people completed secondary school. In 1960 more than 300,000 people who studied after work received secondary school diplomas. More intensive polytechnical training is now given in the schools. At the start of the current academic year there were 15,000 secondary schools where 800,000 senior students were given technical instruction. Last year 172,000 secondary school students graduated with both academic diplomas and trade qualification certificates.

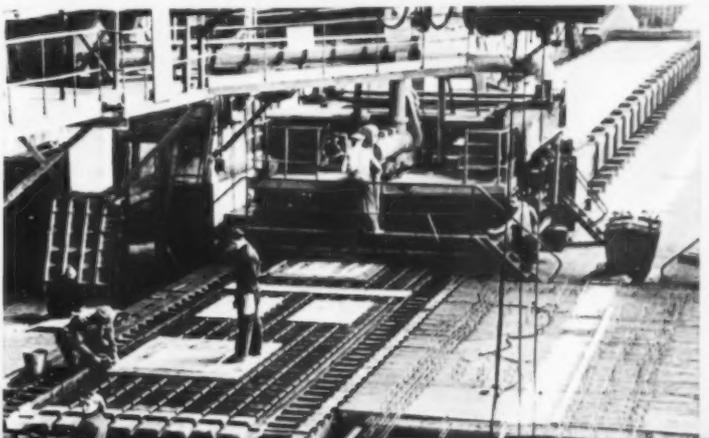
Secondary and college studies were related more closely to life, to the needs of science and industry. Of those admitted to college last year, almost 150,000, or 57 per cent, entered with two years of work experience. The comparable figure in 1959 was 49 per cent.

In 1960, 2,400,000 students were enrolled at the higher schools and 2,050,000 at the specialized secondary schools. In the first two years of the seven-year plan these schools trained and graduated about 1,700,000 specialists. During the same period the country's scientific personnel grew by 66,000, bringing the number of scientific workers now employed in research institutes and laboratories to a total of 350,000.

The progress made in these past two years is proof that the 1959-1965 plan for economic and cultural development will be more than fulfilled.

(Continued on page 63)

Continuous vibro-rolling mill at a prefabricated housing plant in Moscow.





*Facilities for X-ray, cardiography, ophthalmology, surgery, dentistry and physio- and electrotherapy.*





# VILLAGE HOSPITAL

By Mikhail Sukhanov



*A completely equipped and self-sufficient village hospital.*

**T**HE BRICK buildings of this rural hospital just outside the collective farm village are set amidst fruit trees in what used to be an orchard. The gravel paths winding around the flower beds lead to the surgery, maternity, dental, out-patient and various other wards of a modern and comprehensive medical set-up.

It has the character of a pleasant country estate rather than a hospital. The flowers and the snow-white curtains on the windows are there by design, one of the physicians, neuropathologist Galina Gavrilyuk, tells me as I look around. They give the hospital a homelike appearance and help to create an atmosphere conducive to rapid recovery.

I stop in to talk to Dr. Vladimir Grubnik, head physician. He is examining Xenia Kotsyuk, a 70-year-old farm woman on whom he did some delicate heart surgery a few months ago.

"How do you feel?" he asks her. "Has your heart been behaving itself?"

"I feel as though you have given me a new heart, Doctor," she answers. Her shining eyes and the healthy color in her face tell him the same thing. But doctors are a skeptical lot; they never rely on a patient's looks, especially in heart disease.

When she left, he gave me the background. She had suffered from stenocardia for some time and had been treated with the usual medicines until she had an attack that was almost fatal. When Dr. Grubnik was called to her home, he insisted upon an immediate operation. After securing the consent of the patient and her relatives, he had her brought to the hospital and made ready for immediate surgery.

This was not the first cardiac surgery that the doctor had done, nor the most difficult. He has performed operations on the heart vessels and on the heart itself. Dr. Grubnik put in five years of study for his degree at the Odessa Medical Institute—he graduated in 1947—and had two more years of special courses in surgery. Then, with fourteen years of practice behind him, he took a course in heart surgery at the Moscow Advanced Medical Training Institute given for rural physicians. This was a few months before he operated on Xenia Kotsyuk.

I asked, "What would have happened if you hadn't had your heart surgery course in Moscow?"

He smiled, "I'd have called an ambulance plane and taken her to Odessa. These are not prerevolutionary times, you know. They tell me that this big village had only one doctor then, and the only thing resembling a hospital was his poorly equipped treatment room. The same thing was true for the whole district."

Nowadays the village rarely calls for ambulance planes to carry its patients to an Odessa hospital. It has facilities for X-ray, cardiography, ophthalmology, dentistry, physiotherapy, electrotherapy and hydro-



*The hospital has a staff of 60, all the specialties represented, on 24-hour call for routine and emergency service.*



Hospital Chief Grubnik operated on this patient's heart.



Morning rounds. The staff handles everything from a cold to cancer.

Dr. Grubnik tells his staff, "Our big job is disease prevention." The hospital makes sure that everybody in the village gets a periodic check-up.



therapy, and the full complement of specialists—a staff of 60 internists, surgeons, neurologists, pediatricians, obstetricians and dentists in addition to doctor's assistants and nurses. The staff is on 24-hour call for emergencies and home visits.

The hospital was built in 1953 at a cost of 250,000 rubles (in the new currency). Another building is now being added. The state foots the entire bill for building and maintenance. Last year the subsidy was 107,000 rubles. This year it will be 15,000 rubles more for improvement and expansion. All services are free.

The hospital treats several hundred villagers a year. It handles all sorts of cases—appendicitis, pneumonia, cancer, myocardial infarction and even heart wounds. Here are three of the more recent cases. Fifty-year-old Anna Krupinina had part of her lung removed. She came through the operation fairly well and is now convalescing. Pyotr Berber, principal of the village school, is forty and also doing well after a series of new treatments for his myocardial infarction.

Vasili Shevchenko was a difficult case. He is past 70, the village priest, and doesn't like doctors. Before he let them get near him, he was in such a bad state with a serious cardiovascular ailment that his relatives had given up hope. But the hospital managed to get the old man back on his feet.

#### "We Want to Prevent Disease"

Dr. Grubnik says, "It is good to cure a patient, of course, but even better to see that he doesn't get sick. We consider prevention our main job."

The hospital insists that all village people come in regularly for medical examination. This way doctors can catch an ailment in its early stage. Recently several appendicitis cases were diagnosed and treated. Chronic ailments like ulcers and rheumatism, once detected, are treated regularly.

The doctors give health talks at the village club and use the radio relay station and the local press for the same purpose. Last year, because of the general interest, the hospital opened a People's Health University, offering a course of lectures for laymen in modern medicine given at the village club's large auditorium. Lectures are given by members of the staff—Dr. Grubnik; Dr. Galina Denisenko, an internist; Dr. Clara Platonova, who specializes in lung ailments; and others.

Topics covered range from the latest advances in treating diseases of the peripheral nervous system to the danger of cancer from smoking. Films are used for illustration. The lecture series is quite comprehensive and is planned for a two-year period. Attendance runs as high as 400.

The village hospital has also organized a medical society directed by Dr. Denisenko. It is open to doctors of the neighboring villages and meets monthly. A recent meeting discussed the role of cybernetics in diagnosing complaints and new methods of treating hypertension. Their experience and the discussion are published in the medical magazines of Odessa, Kiev and Moscow. Dr. Grubnik is preparing a thesis on farm injuries and the means for their prevention for his Master's degree.

These rural doctors, like others throughout the country, have done yeoman work in reducing the incidence of gastrointestinal disorders, children's ailments and infectious diseases. They have completely wiped out two ancient killers—malaria and typhus. Their work has been helped, of course, by the vastly improved conditions of rural life in Soviet times.



## FABRICS WITH A FLAIR



**F**OR A MONTH the Central Exhibition Hall in Moscow was aglow with rich and lustrous fabrics. Two hundred and fifty mills from the Russian Federation, the Ukraine, Byelorussia, Moldavia, Transcaucasia, Central Asia and the Baltic Republics displayed more than 30,000 samples at the USSR Textile Exhibition.

One of the many eye-catching exhibits was a display of fabrics woven at the Krasnaya Rosa Silk Mill in Moscow in 1959 and 1960, the first two years of the seven-year plan. Olga Stuzhina, the mill's assistant chief engineer,



was on hand to answer questions. There were many, with a fair share coming from foreign visitors.

"Soviet women," explained Olga Stuzhina, "are no different from women in other countries when it comes to clothes. They want to dress attractively, tastefully and, at the same time, inexpensively. They want to be able to pick and choose. We're very conscious of this fact at the mill. Stores and garment factories keep insisting that we put out more and more fabrics in greater variety."

The mill, of course, aims to please that very demanding buyer—the Soviet woman. In 1960 alone it increased its production of silk fabrics by a million yards and began manufacturing double the previous volume of synthetic fabrics.

Designers worked on new fabrics for children's frocks, women's blouses, suits and evening gowns, and artists created a dozen or more colors for each of the better than one hundred new designs.

The Soviet Union is so large a country and is inhabited by so many people of different national backgrounds that tastes are just about as varied as the climate and customs of the different areas to which the mills' goods are shipped—Central Russia, the Ukraine, Byelorussia, Uzbekistan, Armenia and Georgia.

The designers and artists frequently travel to these parts of the country to study native art and dress. Around the traditional designs and colors they create original fabrics with a modern flair.



*The USSR Textile Exhibition in Moscow served as an eloquent report of Soviet people on the achievements of the first two years of the seven-year plan.*



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*A Moscow people's court in session. Judge Yulia Medvedeva, elected for a five-year term, presides. Assisting are assessors Alexander Lontsov (left) and Alexander Loginov, factory workers.*



By Vladimir Boldyrev

Minister of Justice of the Russian Federation

*Yulia Medvedeva addressing an election rally of meat-packing plant workers during the campaign.*



## THE PEOPLE CHOOSE THEIR JUDGES

**T**HE ACTIVITY of all Soviet state bodies is based on the principles of genuine democracy. This applies with equal force to the courts. When the people took power into their own hands with the Socialist Revolution of 1917, along with the new state agencies they set up a new court, a genuinely democratic court, whose duty it is to protect their rights and privileges. The functions of this court are defined by laws that voice the public will.

"Citizens, one and all, should take part in administering justice," Lenin said at the time; and this great precept, that justice must be founded on democracy, was put into practice. Hundreds of thousands of Soviet citizens—workers, farmers and professionals—serve in the courts as judges or people's assessors.

Judges and people's assessors have equal authority. Both are elected by the people. Such elections were held recently throughout the country, and practically all citizens who had reached the legal voting age of 18 cast their ballots.

The interest and participation in the election campaign was high, demonstrated by the practically one hundred per cent turnout. In the Russian Federative Republic 99.9 per cent of the electorate went to the polls. Much the same was true in the other 14 Union Republics. In the Russian Federation some 4,500 people's judges were elected, more than a third of them women. All received an absolute majority vote.

The thousands of volunteers who were active in the campaign give further evidence of the generally high level of civic consciousness and participation. These volunteers acquainted the voters with the personal and work background of the candidates and their record of public activity, arranged meetings of candidates with voters, canvassed and distributed campaign literature.

Much is required of the people's judges. They must be people of integrity, worthy of trust. Besides a knowledge of law, they must have a knowledge of life and high ethical

standards, so that they have not merely the formal but the moral right to judge and educate others.

Alexei Dmitriyev, elected to the bench by the citizens of Stalinogorsk, is a representative people's judge. He is a former Soviet Army officer. After being demobilized he went to work as an assistant foreman in a mine. He is a man whose mature experience and outstanding qualities as co-worker, neighbor and friend have won him the respect of voters. Before he was elected people's judge, he had been active in the work of the informal Comrades' Court where he demonstrated his sympathy for people and his understanding of the law.

Valentina Belova, elected people's judge by the voters in the Nevsky District of Leningrad, has a different background. She graduated from the Law School of Leningrad University and served for a considerable time thereafter as people's assessor, acquiring thorough knowledge of legal procedure.

Many of the people's judges were returned to office at the last election, proof that their constituents found them worthy of their trust and confidence. As officers of a Soviet court they had watched over the interests of both the individual and the community.

### People's Courts

There are two types of courts in the Soviet Union. The courts of the USSR which have jurisdiction nationally are the Supreme Court of the USSR and the military tribunals. The courts of the Union Republics, whose authority is limited to the republic, are the Supreme Courts of the 15 Union Republics, the Supreme Courts of the Autonomous Republics, the regional courts, the territorial courts, the courts of the autonomous regions and the national areas, and the people's courts.

The people's court is the first and at the same time the main link in the Soviet judicial system. It functions in every one of the country's administrative districts and tries all cases—criminal and civil—except for a few categories that are assigned by law to the higher courts.

The people's courts hear all cases publicly except those involving state or military secrets or those concerned with intimate details of the life of the parties to the suit. But even in these cases the verdict or judgment is pronounced in public.

People's courts often hold sessions outside the courtroom—at the factory, office or collective farm where the defendant is employed so that his co-workers can attend the trial. This is done to enhance the court's educational role.

Criminal cases tried by the people's courts include attacks on the life, health and dignity of persons, namely, murder, bodily injury, insult, libel, rowdiness, and so on.

Civil cases heard cover suits between individuals involving property, those between individuals and organizations, inheritance cases, etc. (Suits between enterprises are tried in other courts.)

The people's court is also authorized to hear complaints against municipal bodies that refuse to enter or incorrectly enter citizens' names on the voters list prepared for every election, as well as complaints against process servers and notaries.

Since these are primary courts, they do not, of course, hear appeals from other courts. An appeal of the decision of a people's court must be filed within ten days of the sentence or judgment to the next higher court, the regional or territorial court.

### Penalties

The penalty is very carefully weighed. The criminal codes of the Union Republics fix the minimum and the maximum penalty for each offense; but within the limits specified by law the people's court can exercise discretion, depending on whether there are mitigating or aggravating circumstances. The court, however, has no authority to impose a penalty heavier than the one specified by the code.

No matter how broad the jurisdiction of the law may be, it obviously cannot provide for all contingencies. For this reason the Soviet criminal code permits the people's court to impose a penalty lower than the minimum fixed by law, or even to impose a mild penalty

other than the one specified. As a matter of fact, the people's courts have, of late, and with increasing frequency, been imposing lighter sentences. That is to be explained by the growing social consciousness of the members of Soviet society. It bears witness to the fact that the principles by which they live have struck deep roots.

Not infrequently a people's court will find that a defendant does not constitute such a danger to society that he must be deprived of his liberty, isolated from society. In such a case the court will suspend sentence and place the offender on probation for a specified period. The law says that if he commits no other crime during the probationary period, the suspended sentence will not be enforced. The people's courts have been suspending sentences more and more often lately.

### Judge and Assessor

Cases are tried before a judge and two people's assessors, with the usual procurator or prosecuting attorney, defense counsel, witnesses, experts where necessary, and a court secretary who records the proceedings.

The people's assessors, the law specifies, have equal authority with the presiding judge, unlike the situation in other countries. With the judge they examine all the materials in a case, question the defendant and witnesses, and pass sentence.

The people's assessors are chosen from among the workers, farmers and professional people of the district where the court functions. They are elected for a term of two years and serve ten days a year. For the time they spend in court they receive their regular pay from their place of work.

The people's assessors are elected at meetings held for the purpose at factories, offices and collective farms during the period when the elections for judges are carried on. These meetings are held at places of work, and the assessors elected are those most respected by their co-workers, people with the common sense and experience to get to the bottom of a complicated case. At some 200,000 such meetings in the Russian Federation, attended

*Newly elected Judge Medvedeva is congratulated by friends from the factory where she used to work.*

*Almost a hundred per cent of the voters turn out to cast a ballot for the judge of their choice.*



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by more than 48 million citizens, 300,000 assessors were elected. Hundreds of thousands were elected in the same way in the other Union Republics.

In the people's courts, and in the higher courts as well, a sentence or judgment requires a majority vote of the bench. Should the two assessors disagree with the presiding judge, their opinion prevails, and the law requires that he sign the verdict and pronounce it the decision of the entire court. The assessors acquire their knowledge of the law from the people's judges, who have the responsibility of giving the assessors a special course in the principles of law.

A defendant, if he has reason to believe that one or more members of the bench are prejudiced in the case to be tried, may challenge the judge or assessors.

Pursuant to the revised law on the judiciary enacted toward the close of last year, people's judges are elected by the citizens of a district for a five-year term. Candidates are nominated by public organizations and by general meetings of factory and office workers, farmers and servicemen. All citizens have the right to nominate and to electioneer for the candidate of their choice. Suffrage is universal, equal and direct, and balloting is secret. Every citizen who has reached the age of 25 is eligible for election as people's judge and people's assessor.

The basic principles underlying the administration of justice in the Soviet Union, the structure of the court, election of judges, and the trial procedure are contained in the Constitution of the USSR, adopted in 1936. The fundamental law of the land also guarantees the accused or the litigant the right to use his own language in court and to the services of an interpreter furnished without charge by the court. This democratic principle is very important for our country which has scores of nations and nationalities speaking different languages.

### The Spirit of the Law

All Soviet citizens are equal before the law, and the court applies the law equally in each

case, irrespective of social or property status, vocation, nationality, race, or religion.

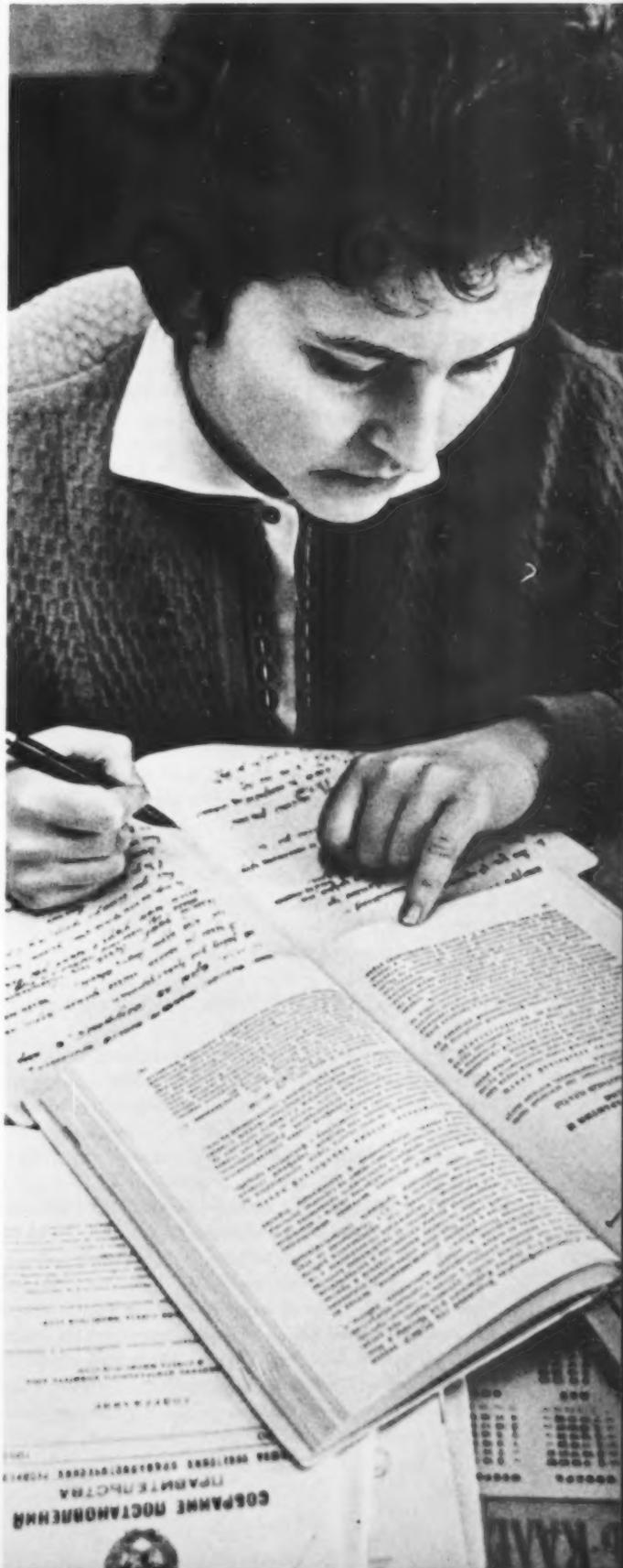
In trying cases the court is guided by the criminal or civil and procedural laws of the USSR and the particular Union Republic. Our courts strictly adhere to the letter and spirit of the law, which in socialist countries express the will of the people. Motivations of "expediency," "local conditions" and the like that may lead to an arbitrary interpretation of the exact wording of the law are not permitted. Such a verdict would definitely be set aside by the higher court.

Judges and people's assessors are subject only to the law and to no other influence or pressure whatsoever. Every case must be decided solely on the basis of the evidence and with due regard to the law involved. Verdicts and judgments are pronounced in the name of the state, and they are as binding as the law itself.

To guarantee the complete independence of the judiciary, the Constitution specifies that people's judges cannot be removed from office and people's assessors cannot be discharged from their duties except when they are recalled by their electors or convicted by the courts of a legal offense. Actually, the dismissal of a judge or people's assessor is very rare.

The Constitution provides for the right of the accused to legal counsel. Should the accused have no money to engage counsel, the court will, at his request, invite a lawyer to serve as defense attorney, and the state will pay for his services. In a people's court case that has been tried with a prosecuting attorney (procurator) and no defense counsel, the verdict will be set aside by the higher court unless the record shows that the accused has specified that he did not wish to be represented by counsel.

The independence of the people's court, the election of judges and people's assessors, the strict adherence to the principles of public trial coupled with the strict observance of the law—these fundamental principles have made the Soviet courts truly democratic, genuine people's courts that guard the interests of society, respect the rights of the individual and secure the country's law and order.



Judge Medvedeva is required to instruct the assessors who sit with her on the law in each case.



An election poster with the biography of each candidate nominated in her judicial district.

# Ivan Pavlov and American Scientists

By Vasili Merkulov  
Scientific Director, Pavlov Museum

**B**OTH scientist and layman, almost anywhere in the world, react to the name of Ivan Pavlov with the phrase "conditioned reflex." This great physiologist who won the Nobel Prize in 1904 contributed an enormous body of pioneering work to science with his investigations into the higher nervous activity of organisms.

Relatively few people, however, are acquainted with another area of work of this "Russian genius"—as he was called by the eminent American physiologist Walter B. Cannon 25 years ago—his role in acquainting scientists abroad with Soviet research and in developing scientific exchange. Through papers read at international conferences, personal meetings and a voluminous correspondence, he kept in touch with scores of leading foreign scientists, a good many of them American.

Among the several hundred scientists who studied and worked under Pavlov were a considerable number of researchers from other countries. As far back as 1907 two American physiologists, J. H. Kellogg of Michigan and F. Benedict of Boston, came to Russia to familiarize themselves with the work he was doing. Professor Kellogg later asked Pavlov to send him a photo and acknowledged its receipt in this vein:

"I have just received your most kind and delightful letter together with the excellent photograph of the most distinguished of living physiologists. I am going to have the picture enlarged to life size and hung up in my office." He wanted everyone, said Professor Kellogg, to see and pay honor to the greatest physiologist of the century. "If you could possibly understand how many friends you have in America, I am sure you would be willing to come over to this side of the Atlantic and give them a chance to look at you."

In 1916 a warm exchange began between the Russian physiologist and Dr. Walter B. Cannon that lasted for many years. The two men had much in common—both were uncompromising searchers after truth, both had an abiding faith that man's future lay in scientific progress, both worked for international understanding.

In his autobiography *The Way of an Investigator* Cannon noted that Pavlov was one of his friends and that he had many friends and acquaintances among scientists in Moscow and Leningrad. He wrote that when the Second World War broke out and the Soviet Union and the United States fought together against Hitler's mad dream to enslave the nations and destroy all human values, it became clear that the end of this struggle would leave the welfare of the world in the hands of the two mighty nations. It therefore seemed vital to him that there be understanding and good will between the two.

## Pavlov Visits the United States

Pavlov's monumental work on conditioned reflexes was published in the United States after the First World War. Subsequently he received many invitations to cross the ocean to lecture. In the summer of 1923 he made the trip to the United States accompanied by his son Vladimir and spent a month visiting the research laboratories of American colleagues.

At the University of Chicago he read papers on conditioned reflexes and on inhibition, sleep and hypnosis. In New York he was taken on a tour of the Rockefeller Institute by a former pupil, Dr. F. Levin, who had been working there since 1907. And at Battle Creek, Michigan, Professor Kellogg proudly showed him round the Pavlov Institute, the newly founded physiological research center named in his honor.

The psychologist R. G. Yerkes, who corresponded with Pavlov and exchanged literature with him, said that when he met the venerable academician he was very surprised and happy to see his amazing energy, enthusiasm and vivacity. He was unprepared for his remark-

able personal qualities. To meet Professor Pavlov, even at the age of three score and fifteen, was stimulating and invigorating—like facing a fresh breeze from the sea. He was interested in everything, alert, generous in his praise but also in his constructive criticism, sympathetic—a citizen of the world because he was a disinterested and devoted searcher for the truth.

"What a pleasure it was to learn from his own lips about the progress of his investigations, his plans, expectations and hopes. The years fell away as he talked, and his being radiated optimism and strength. His presence brought vividly to mind the far-reaching importance of the Pavlov conditioned reflex method of studying the functions of the nervous system, and the remarkable influence of the gifted physiologist on our American work . . ."

## Physiological Congresses

In August 1926 Pavlov and a group of his co-workers went to the 13th Physiological Congress in Boston. He received a standing ovation from the 1,700 scientists present and the papers he and his co-workers read elicited extraordinary interest and discussion.

Pavlov wrote home to Maria Petrova, one of his students, "I live in Boston at the home of a local physiologist literally as though I were in my own house, without the slightest discomfort. At the congress itself, it is not the papers—they can all be read in published summaries—but the talks and the getting acquainted that is interesting. Personally, I was surprised by the reception. Evidently I have very many friends and admirers. The fact that I was the oldest of the physiologists probably had something to do with it."

At the 1932 Physiological Congress in Rome Pavlov's suggestion that the next congress be held in Leningrad and Moscow was accepted. As chairman of the congress, Pavlov invited Cannon to deliver an address at the opening session. The American wrote that he was honored to accept. He considered that it was an honor being paid, not to him personally but to American physiology for the contributions it had made. In his address Cannon surveyed the enormous scope of Pavlov's lifetime of research as it had influenced physiological and psychological progress.

In his address, Pavlov spoke of the imminence of the Second World War. Those who had the good fortune to attend the congress will never forget his stirring words on the obligation of scientists to work together for the peace and the welfare of mankind. "I can understand," he said, "the grandeur of the war of liberation, but there is no denying that war is a brutal method of settling difficulties, a method unworthy of man's mind with its incalculable resources."

The American delegates at the congress, visiting Soviet laboratories and clinics, were astonished at the level of physiological research in the USSR. Many returned to the United States with a new approach to their investigations stimulated by the new methods they had observed and the new ideas they had discussed.

The contacts of men of science from different countries are mutually beneficial, and Pavlov was one of the first in the Soviet Union to realize in practice the idea of the creative collaboration of the scientists of our two countries.

The splendid tradition of the great Soviet physiologist to broaden scientific ties with foreign colleagues to the utmost, to work in creative contact with them, can be continued successfully in our day, too, when Soviet and American scientists have all the possibilities for closer cooperation. This is a good method of promoting friendly relations between our countries.

# NIKOLAI POGODIN

Soviet Playwright



By Victor Ivanov

THE PLAYS of Nikolai Pogodin grew out of the late twenties, the period of the first of the five-year plans to industrialize the country, when the Soviet people were beginning to construct their mammoth plants. Pogodin brought to the stage the heroes of those days—workers and engineers—people with a new outlook on life and a new courage who were transforming Russia. These were heroes that Soviet audiences immediately embraced as their own.

Pogodin's themes and characters were drawn from life itself. His own early years were not easy. He was born in 1900 in the Tambov Gubernia. He graduated at the top of his class, but the family could not afford to let him go on with his schooling and he became a sales clerk for a succession of employers.

"At the beginning of 1920," Pogodin himself recalls, "the course of my future life was determined. I brought something I had written—I don't remember what—to *Trudovaya Zhizn*, a Rostov newspaper, and began getting reporting assignments. Early in 1922 *Pravda* published my first story."

He worked as special correspondent for *Pravda* for eight years and traveled the length and breadth of the country, learning to see into people and events and to personalize them for the reader. His dramatic talent first became apparent in the extraordinarily vivid dialogue he worked into his feature stories.

In 1929 he wrote his first play *Tempo*, based on a newspaper article he had done. It was completed in seven days. The setting is the construction site of one of the industrial giants of the five-year plan, and "tempo," a word current at the time, denotes the campaign to get the plant built ahead of schedule. In the play characters like Yermolai Laptev, Mikhalka and Anisim Zotov, yesterday's highly individualistic peasants, come to the project for a season's work and are so caught up in the general enthusiasm for "tempo" that they themselves initiate a drive to speed up construction.

Pogodin's situations are so true and his characters, aware of their social responsibility and of their dignity as masters of the country, are so lifelike that they give full dramatic expression to the central theme of Soviet literature—human nature changed through socialist labor.

In the plays that followed—*Poem of an Ax, My Friend* and *After the Ball*—Pogodin added a new dimension to the theater of his day. No dramatist before him had been able to portray with such power and eloquence the monumentally creative enthusiasm of the masses engaged in building a new world.

Pogodin made a major contribution to Soviet drama with three plays he wrote on the Socialist Revolution and its great leader Lenin. The first, *The Man with a Gun*, which traced the path followed by the

Russian peasantry toward the Revolution, opened on the twentieth anniversary of that historic event. We first meet the play's hero, Ivan Shadrin, in the trenches of the First World War. A peasant in soldier's uniform, he is weary of the fighting. What he longs for is to get back home, to his farm and his chores. He gets a long-awaited furlough and hurries home, his mind very far from thoughts of revolution.

By chance he finds himself in St. Petersburg. There he meets Chibisov, a worker, who draws him into the very center of the revolutionary ferment that grips the capital and the whole of Russia. Lenin's decrees on peace and land help Shadrin to grasp the fact that this new power is the people's power, founded to defend the people's interests. He unexpectedly meets Lenin, who is eager to know what a peasant returning home from the war is thinking and feeling. As he talks with Lenin, Shadrin begins to see that his own destiny is linked to the revolution. The play is one of the classics of Soviet dramaturgy. Over the years it has been produced by scores of theaters. A film version of *The Man with a Gun* was also very popular.

In *Kremlin Chimes*, which followed on the success of *The Man with a Gun*, Pogodin again brought Lenin to the stage, this time in a portrait which developed the many facets of his genius and character only vaguely suggested in the first play. Confining himself to a few days in Lenin's life in 1920 and to only a few of his countless meetings with all sorts of people, Pogodin was nevertheless able to show how broad Lenin's interests were and how deeply concerned he was with the multitude of details—large and small—that came with the Revolution.

In 1958 Pogodin completed the *Third Pathétique*. The action takes place in the last two years of Lenin's life, 1923 and 1924, when he was very seriously ill, a fact known only to himself and to his family and close friends. The doctors plead that he take better care of himself, that he take time to rest from affairs of state. But urgent state problems constantly press for decisions that cannot wait, and he works with his usual unsparing concentration, while trying at the same time to fight off his illness. In the *Third Pathétique* Pogodin presents a picture of Lenin the Bolshevik in whom a profound love for people, is combined with a highly principled and exacting attitude toward them.

Pogodin never aimed at merely faithfully reproducing the facts of history; he searched out those elements that had meaning for our day and our generation. This is Lenin's humanism, Lenin's unceasing struggle to realize the great aims of the Communist Party.

Pogodin is a most gifted and prolific playwright. He wrote more than thirty full-length plays, ten short plays, and scores of articles on dramaturgy theory in his three decades of productive work. His dramas with their variety of characters and range of themes form a portrait of an epic age.

Abridged excerpt from a play by Nikolai Pogodin

# THE THIRD PART



## ACT I SCENE III

*The roaring fire of an open-hearth furnace can be seen in the background. In the foreground is a clear space sparingly decorated for the occasion. This is the Red Corner<sup>1</sup> of the factory. Everything looks old. Beside posters and slogans of the twenties hangs a large canvas of a worker.*

### THE CHARACTERS

VLADIMIR ILYICH LENIN  
MARIA ILYINICHNA ULYANOVA, *his sister*  
KUZMICH, *a worker*  
PRONYA, *a worker*  
FYODOR DYATLOV, *a member of the Cheka<sup>2</sup>; formerly a worker*  
IPPOLIT SESTRORETSKY, *an engineer; a Communist*  
DERMIDONT SUKHOZHILOV, *foreman*

*Kuzmich and Pronya are unrolling a strip of thick red carpet.*

KUZMICH (*worried and angry*): Pull it, Pronya. We were told they'd be here by eleven, but it'll be twelve before I finish—the way you're helping me.

PRONYA (*mildly*): It's a mighty thing, this carpet. A marvel. Why, in the old days you'd have to be a bishop or even the czar himself to have such a rich thing rolled out before you.

KUZMICH (*nervous, pleading*): Oh, get a move on, Pronya. Here I am sweating and you're prattling on about czars and bishops. Have you ever seen any?

PRONYA (*gaily*): I should say so. I was a pious little boy. Well brought up. Sang in the choir: "Give, O Lord, we beseech thee."

KUZMICH: I asked you whether you saw the czar.

PRONYA: That I never happened to do. A pity. Now I'll never see a czar in my life. Look, Kuzmich, it's smooth and even now. Can't be better.

KUZMICH: We're lucky. We've got it straight and still have time to

spare. (*Looks around*) This was a good idea of Dermidont Sukhozhi-  
lov's. He knows. . . .

PRONYA: What does he know? Not a thing. The old fool.

KUZMICH: You call him a fool after he's thought of a thing like this! Why, it's fools like him that have put our Russian factories on their feet. The skilled workers, I mean.

PRONYA (*agitated*): Shut up, Kuzmich. He's arrived, I swear. Look, with a beard. A cap. Lenin. I can see him. He's coming this way.

KUZMICH (*distressed to the point of tears*): And no one to meet him. And we've cleared the way for him and made everything so bright and cheerful. All that excitement for nothing!

*Enter Dyatlov*

DYATLOV (*surprised and angry*): Whose idea was this? Who made you do this? Whose crazy notion is this? Did you lay this carpet?

*Kuzmich and Pronya are confused*

PRONYA: We did.

DYATLOV: Who did you put it down for?

PRONYA: We don't know. We're just laborers.

DYATLOV: Where's Ippolit?

PRONYA: Which Ippolit?

DYATLOV: Engineer Sestroretsky. Find him.

PRONYA (*delighted*): Sestroretsky. Oh, we know him. He's at the entrance. One minute. (*Runs off*)

DYATLOV: What are you waiting for? Take it away.

KUZMICH (*craftily*): Eh, no-o-o. I couldn't manage it on my own.

DYATLOV: What about me? I'll help. Get a move on.

KUZMICH: I wouldn't advise you to. . . .

DYATLOV: Why not?

KUZMICH: I'm afraid he'll notice it anyhow. To spread a carpet is to be made a fool of once. But to remove it in his presence, that's to be twice a fool. All right, as you wish.

*Enter Ippolit*

DYATLOV: Ippolit, d'you realize what nonsense is going on here?

# THIRD PATHETIQUE



A production of Nikolai Pogodin's *The Third Pathetique* staged by the Moscow Art Theater. Boris Smirnov plays Lenin.

IPPOLIT (*somewhat absentmindedly*): Stupid, but . . .

DYATLOV (*angrily to Pronya*): Tell me, you bright fellow, who gave you this carpet?

PRONYA (*to Kuzmich*): Where did we get it from? I think it must have been from Sukhozhilov. Yes, of course, it was from Sukhozhilov.

DYATLOV: And who is Sukhozhilov?

IPPOLIT: My best foreman. (*Calls*) Dermidont!

*Enter Dermidont Sukhozhilov*

DYATLOV: Did you spread out this carpet?

SUKHOZHILOV (*sensing the situation*): It wasn't me. . . .

IPPOLIT: It wasn't he.

SUKHOZHILOV: There was talk in the shop that we ought . . . as a sign of affection and respect. But, actually, no one gave the instructions.

DYATLOV (*vexed*): Where the hell did the damned carpet come from?

SUKHOZHILOV: It was left over from the old regime.

DYATLOV: You've been left over from the old regime yourself. That's as clear as day to me.

PRONYA (*to Kuzmich*): He's sharp as a razor.

KUZMICH: He's a Cheka man. That's obvious.

DYATLOV (*continuing*): I know your type. I've been fetching drinks for people like you since I was so high (*indicates*).

SUKHOZHILOV: You didn't run for me. Don't lump us all together.

IPPOLIT: It's nonsense but. . . .

DYATLOV: All this chatter. We could have rolled it up long ago. Come on, let's get on with it.

*From the distance come sounds of cheering. Kuzmich and Pronya run off, followed by Sukhozhilov who removes his cap.*

DYATLOV (*confused*): He's coming.

IPPOLIT: Who is that with him?

DYATLOV: Maria Ilyinichna Ulyanova, his younger sister, the executive secretary of *Pravda*.

IPPOLIT: Oh, that's how it is. *Pravda* had an enthusiastic article about our mill. Did you read it?

DYATLOV (*not listening*): There he is. Walking on the carpet.

*Enter Lenin, Maria Ilyinichna and a crowd of workers*

LENIN (*laughing so hard that he can hardly speak*): D'you see this, Masha? Do you think the czar's policemen who took you to prison thought you'd be treated with all this pomp one day . . . with the carpet spread out.

MARIA ILYINICHNA (*also laughing*): But this is too absurd, Volodya.

LENIN: Of course it's absurd. Terribly absurd and ultra-silly. All the same, it's our way of doing things, Mother Russia! (*Surprised and pleased*) You, Dyatlov? Good morning, old man. What have you been doing with yourself? Why haven't you been to see us? Surely, this isn't your idea? Look out, you'll be in hot water. Maria Ilyinichna will write about you in *Pravda* with a fable by Demyan Bedny<sup>3</sup> and make a laughing stock of you on an all-Russian scale.

DYATLOV: Vladimir Ilyich, how can you think that I . . . I'm trying myself to find the one who was responsible for it.

LENIN: Responsible? Why, look at them; they're all responsible. I doubt if anyone objected, which means they're all responsible. But it would be interesting to know whose idea it was (*lightly*). Who was it?

*Silence*

Anyway, it's not worthwhile trying to find out. The carpet ought to be given to a children's home. The children will love rolling on it.

SUKHOZHILOV (*frankly*): I put out the carpet.

LENIN: Excuse me, that is what I thought.

MARIA ILYINICHNA (*to Sukhozhilov*): But why did you do it?

SUKHOZHILOV: Vladimir Ilyich is not an ordinary mortal. He's the leader of the whole toiling world. Who is higher than he? No one.

LENIN: Who is higher than me? Kalinin.<sup>4</sup>

SUKHOZHILOV (*surprised*): Really?

LENIN: You see, you didn't know. Another mistake.

A WORKER: Comrade Lenin, would you take the trouble to explain world problems to us?

LENIN: *Pravda* didn't ask me to come here to raise world problems but to see how you are making steel. And that, you know, fills me with a sense of very deep satisfaction because all our hopes, our whole future, our whole life, lie in the proletariat, which can never let us down. Here we are making steel, only a little, maybe, but some—as good as the Germans make. That means the old regime won't be able to break in through a single window of our house. But as for carpets? Carpets are nonsensical.

IPPOLIT: Our foremen are waiting for you, Vladimir Ilyich. There's a risk the metal may overmelt:

LENIN: Delighted. Let's go. Are you coming, Masha?

MARIA ILYINICHNA: No, I've seen it before. I want to speak to Dyatlov.

*All leave except Maria Ilyinichna and Dyatlov*

DYATLOV: Sit down, Maria Ilyinichna. You must be awfully tired.

MARIA ILYINICHNA: No, Dyatlov, I'm not tired. It's something else. Why have you stopped visiting Ilyich?

DYATLOV: Times have changed, dear Maria Ilyinichna. There was a time when the Party sent me to Petrograd to protect the safety of the leader of the Socialist Revolution. In those days I really believed that without my iron hand the great leader Lenin wouldn't remain alive for a minute. Those were dedicated times. Romantic times.

MARIA ILYINICHNA: Yes, romantic, of course. But it's very wrong of you to have stopped coming to see us.

DYATLOV: Coming to see you! It sounds simple enough, but you go along those Kremlin corridors, you wander about and have to turn back. You either find the Sovnarkom<sup>5</sup> in session, or some very important person being received. The helm of state. . . .

MARIA ILYINICHNA: Telephone me at *Pravda*. I'll arrange the time with Vladimir Ilyich myself. He's fond of you.

DYATLOV: I'm touched. . . . I can't explain how touched I am. . . . But what a good mood Vladimir Ilyich is in! I've rarely seen him so gay. Another day he'd give it to us about that carpet.

MARIA ILYINICHNA: He's ill.

DYATLOV: What? Who? What are you saying?

MARIA ILYINICHNA: Volodya's ill. . . . very ill. He doesn't attach any importance to it. In fact, he doesn't realize how ill he is. Keep it to yourself, Fyodor. It's a secret.

DYATLOV: How terrible! I can't believe it! No!

MARIA ILYINICHNA: It is terrible. . . . but he's ill, all the same. People always call Volodya a great man, but what is it, after all, to be great? It's simply a very difficult thing. D'you think NEP is easy to put through? To make a change of policy? To retreat, not to advance, but to retreat—and without faltering? You see, he hasn't changed at all, he is even more full of fight, more implacable. And he works everything out in his mind, plans it and then puts it into political terms. We who are close to him know when he is doing that. Always. During the most hectic hours of work. . . . while he's out for a stroll. . . . at home. . . . A thought comes into his mind like a flash of lightning. And there he is, pacing the room, and he's just as he was in his youth, brisk and joyful and mischievous. But it's not easy.

DYATLOV (*hotly*): We must consult the best doctors in the world.

MARIA ILYINICHNA: The best doctor in the world can do nothing if the organism can't fight off the disease. But let's not talk about it. Perhaps he'll outlive us all.

DYATLOV: They're coming back, I think.

MARIA ILYINICHNA: And how are you getting on, Comrade Fyodor? Have you married? Still a bachelor?

DYATLOV: I'm on my own. . . . quite on my own now. I lost my father in the first revolution. Mother passed away not long ago.

MARIA ILYINICHNA: It's a bad thing to be alone. But you're not too old to fall in love, Dyatlov. Have you ever been in love?

DYATLOV: Yes. I'm in love now, with a very fine girl. But she doesn't know it.

MARIA ILYINICHNA: The old, old story. Is there some difference between you?

DYATLOV: Yes. Cultural. She's a doctor, and clever. And what am I? A plumber. Doesn't sound too good.

MARIA ILYINICHNA: But you said she was clever.

DYATLOV: Very.

MARIA ILYINICHNA: Then you ought to get on well together.

DYATLOV: Not very.

MARIA ILYINICHNA: Why not?

DYATLOV: Oh, it's a bitter story. Here they are.

*Enter Lenin with the rest*

LENIN (*beaming*): You missed a great deal by not coming with us, my friends. That foreman is a real brick. We ought to organize our meetings the way he does his work. All the time I was watching him, I was thinking: That's what we need from top to bottom.

*Enter Sukhozilov*

SUKHOZHILOV: Vladimir Ilyich, please don't consider it beneath you to answer my question.

LENIN: I won't. What is it?

SUKHOZHILOV: How did you know it must have been I who laid the carpet for you?

LENIN: Didn't you say I was the leader of the working world? What kind of leader would I be if I couldn't understand such simple things?

SUKHOZHILOV: You're joking, but I still wonder. . . .

LENIN: But it's all very simple. You're a man of the old school and the old pattern keeps urging you to stick to the ways of the past. Now many people of the old school honestly think that we've gone back to the past. And the Mensheviks and Socialist Revolutionaries are helping them to think that way.

SUKHOZHILOV: Remarkable.

LENIN: Why is it so remarkable?

SUKHOZHILOV: It's not because you notice life so truly. It's the way you give all your observations a political twist.

LENIN: It flatters me to hear you say that because I'm a politician to the marrow of my bones. But as for organizing things the way you do here, that, unfortunately, I can't do. I'd like to be able to, though.

SUKHOZHILOV: Maybe you're right. I haven't noticed. But it depends on the job at hand. Pronya will learn to melt steel too—look at him grinning over there—but Pronya will never learn to run the state.

LENIN: He will.

SUKHOZHILOV: No, he won't.

LENIN: He will, definitely.

SUKHOZHILOV: You also said that every kitchen-maid will run the state. But that's not working out the way it's supposed to.

LENIN: True. It's not working out now. It will, later. It is bound to, when every kitchen-maid reaches a level of development that our generation never even dreamed of.

SUKHOZHILOV: There won't be any kitchen-maids then, Vladimir Ilyich.

LENIN (*delighted*): That's just what I said myself. But I put it briefly and simply so that people should know what they're aiming at. But Pronya will learn to run the state. Won't you, Pronya?

PRONYA (*in high spirits*): No.

LENIN: Do you really mean that?

PRONYA: I do, word of honor.

LENIN: Why are you letting me down like this?

KUZMICH: Oh, he's like that. A softy. He'll do it, he'll do it.

PRONYA: No, I don't want to. I'd waste the money and then find myself in Butyrki.<sup>6</sup> I'm too fond of money.

LENIN: Oh, how he's let me down! Doesn't want to run the state.

(*Laughs.*) Afraid of Butyrki. Oh, if we only had a bourgeois writer here. He'd have written that Soviet power had gone forever. But all the same, we'll go on believing in Pronya. But Pronya is very smart. I believe in our Russian Pronya a thousand times more than he believes in himself. The time will come—it is not far off—when Pronya will recognize his world significance, his remarkable dignity. . . . No, I am not building castles in Spain. In the incredible chaos of contradictions I already see the man of tomorrow, the man we may be proud of in the face of the whole world. That's why I have endless faith in Pronya. And without that faith there would have been no October.<sup>7</sup>

<sup>1</sup> Workers' lounge with books, magazines and newspapers; equipment for chess, checkers, etc.

<sup>2</sup> Abbreviation of Extraordinary Security Commission

<sup>3</sup> A poet and publicist

<sup>4</sup> Chairman of the Central Executive Committee at the time

<sup>5</sup> Council of People's Commissars

<sup>6</sup> A prison in Moscow, now torn down

<sup>7</sup> The Great October Socialist Revolution

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# THE MOISEYEV DANCERS ARE BACK



*Director Igor Moiseyev, with members of his famous dance ensemble rehearsing for their present American tour.*

One of the ensemble's newest numbers, *Metelitsa (Snowstorm)*, a dance dramatization of the Russian winter.

By Igor Moiseyev

Director, USSR Folk Dance Ensemble  
Photos by Yevgeni Umnov

**T**HIS APRIL our dance company will cross the ocean once again to say "hello" to our American friends. When we set out three years ago for our first tour of the United States, we had no idea of the reception we would get. We were the "first swallows" of the cultural exchange agreement newly concluded between our two countries. North America and its audiences were *terra incognita* for us Soviet artists, and we felt something of Christopher Columbus' trepidation when he stepped onto the soil of the New World.

Now we feel more like a champion before a stiff contest in which he has to defend his title before an expectant but friendly crowd. After the wonderful reception we got in the United States and Canada in 1958, we cannot possibly disappoint those who will attend our recitals again.

And so we have carefully chosen for our return engagement many dances which will be new to American audiences. We have plenty to choose from—a repertory of 200 folk dances and suites we have created in the 25 years of our company's existence.

We will be presenting new mass, group and solo dances, choreographic scenes and miniatures, including our newest dance suites *Metelitsa (Snowstorm)* which features lyric Russian winter scenes, *Matchmaking* and *Monograms*, which pleased audiences at home. We shall also be doing our *Navy Suits* and a number of folk dances, including the fantasy *Tsam*, based on the Buryat-Mongolian epic.

At the request of our American audiences we shall be repeating the *Partisans* suite. We have danced it in both the German Democratic Republic and the Federal Republic of Germany, in Hungary, Austria, Switzerland, Holland and Poland. Audiences everywhere have applauded it vigorously.

We are working hard to make our American program interesting and different. We hope once again to please our well-wishing audiences and to tie more closely the cultural bonds that unite our two great nations.









# TEACHERS' CLUB

By Pyotr Baibarin









*Concert at the club. The teachers have a string ensemble, symphony orchestra and ballet group.*



*The drama group stages both Russian and foreign plays in the original language.*

**S**TUDY ENGLISH. . . Make a movie. . . Learn ballroom dancing. . . Hear a lecture on world affairs. . . Play ping-pong, billiards, chess. . . See a foreign book exhibit or a variety show. . . This is a very partial sampling of the week's activities offered by the Moscow Teachers' Club to its members.

The purpose of this club, as well as the more than 300 like it in other Soviet towns and cities, is to give the teacher a choice of pleasurable and worthwhile leisure-time pursuits, besides, of course, the more obvious purpose, to supply him with a congenial social atmosphere where he can relax with fellow educators.

Most of the activities are designed to broaden the teacher's mental, physical and social horizons—to make him a better educator. On the more direct professional level, there are frequent meetings of both beginning and experienced teachers where classroom problems are discussed, conferences on methodology, exhibitions of the work done by the city's best schools and teachers, and gatherings where students of teacher training institutes meet eminent educators.

The club arranges lectures on current developments in science and engineering. A series of Wednesday evening talks are offered for

teachers in the same discipline. One week math teachers will hear a lecture by an expert on electronic computers. The following week an Antarctic explorer will talk to geography teachers. Other Wednesday evenings chemistry instructors will learn the latest about synthetics, or physical education teachers will hear how their subject is handled in Britain or in Czechoslovakia.

At the club foreign language teachers meet educators and cultural leaders from other countries. They also hold gatherings at which only the foreign language is spoken and frequent showings of undubbed foreign films.

The facilities of the club are, of course, also open to retired teachers. In addition, there are special activities arranged especially for them—lectures, excursions to places of interest, and recreation and sports programs suited to elderly people.

Although the Teachers' Club is intended for educators and their families, it welcomes people from other professions and trades. There are get-togethers from time to time with staff members of research institutes, engineers, doctors, students, and people from factories and offices. They serve the dual purpose of getting lay people acquainted



*An international forum of educators from ten countries met at the Moscow Teachers' Club last year.*

*Beginners find these conferences with experienced teachers that the club arranges most helpful.*

*Lectures are presented on developments in science and technology and on trends in literature and the arts.*



with educational problems and preventing teachers from becoming too narrow.

The club devotes particular attention to parents. Among other relevant activities, it organizes lectures and parent-teacher conferences at which the relation of the school, the family and the public to the growing child is discussed.

#### **University of Culture**

The club, like factories, big farms and offices all over the country, has set up its own University of Culture. Since this is an institution for educators, the lectures are more advanced than those in the usual adult education program. It has three departments—literature, music and art—and lecturers include the well-known art critics Fyodor Golovchenko and Roman Samarin, artists Sokolov-Skalya, Nikolai Zhukov and Boris Yefimov and theater stars Igor Ilyinsky and Alla Tarasova.

Instruction in the humanities in Soviet schools is getting more attention these days. The teachers are expected to know more about literature, music and art; therefore the emphasis on these subjects.

The complete course in each of the divisions comprises 32 lectures and seminars. Lectures are illustrated with slides and motion pictures, and occasionally with readings and performances by actors.

The literature course surveys the history of Russian, Soviet and foreign literature. The music course includes appreciation and the elements of theory. The fine arts course deals with the work of outstanding painters and sculptors of many lands. "Indian Fine Arts" is one of the representative topics in the lecture series.

Invitations are frequently posted in the club lobby for members to join a group visiting a synthetic fiber plant, the Institute of Genetics, the Gorky State Farm near Moscow, the Botanical Gardens of the USSR Academy of Sciences, or the radio electronics pavilion at the Exhibition of Soviet Economic Achievement. A teacher has to keep up with events in many spheres of knowledge, and the club helps him do it.

But to assure yourself that the club is by no means as solemn a place as all this professional activity would indicate, drop in and look around. Here is a chemistry teacher taking lessons in ballroom dancing. In one room down the hall a mathematician is reading a poem he wrote to a group of fellow teachers. And in another the club's amateur

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## THE THIRD YEAR OF THE SEVEN-YEAR PLAN

(Continued from page 41)

### Objectives for 1961

For 1961, the third plan year, these are the objectives:

Gross industrial output will grow by 8.8 per cent above the 1960 figure. The machine-building and power industries are slated for faster development. Output of machines is to rise by 14 per cent; about 800 new types of machines, mechanisms and instruments will be developed, and serial production of 790 new types of equipment will be started. The metallurgy and power industries, transport and agriculture will be getting new and highly efficient equipment. The output of oil and gas, to provide fuels and chemical raw materials, is to be increased. Oil production will rise by 17 million tons to a total of 164 million, and gas production by 519 billion cubic feet to a total of 2,232 billion. More than 327 billion kilowatt-hours of electricity will be generated and nearly eight million kilowatts of new capacities put into operation.

Living standards will continue to climb as more consumer requirements are met. In 1961 Soviet light industry will be turning out more than eight billion yards of textiles, 577 million pieces of knit goods, and 441 million pairs of leather footwear. There will be 740 million rubles' worth more appliances and other household goods manufactured than in 1960. Production of foodstuffs will rise by 7.7 per cent. Soviet farmers, with the help of state resources, will produce more than four million tons of meat, 763,000 tons of butter, about nine million tons of whole milk products and 7,235,000 tons of sugar.

National income will grow by nine per cent. The real income of factory and office workers and farmers will show a five per cent gain. Another 3,200,000 people will be employed.

More than a billion square feet of housing will be built and new schools, hospitals and recreational facilities provided.

The successful completion of the plan for 1959 and 1960 makes it a virtual certainty that the target figures for the plan's third year will not only be met but exceeded by a large margin. *end*

theater group is rehearsing a French play to be staged in the original. If you like to sing, you can join the chorus or the vocal ensemble. There is a string ensemble and a symphony orchestra for those who play a musical instrument, and a ballet group for those interested in the dance.

This past year these amateur actors, dancers and musicians have given 150 dramatic performances and concerts attended by audiences that totaled 50,000.

Amateur writers have their workshop, so do photographers and moviemakers. The film group has a well-equipped dark room, fine photo equipment and professional consultants. It has shot several shorts and is looking forward to the happy day when it will be showing a full-length comedy on the club's big screen.

These hobby activities bring many teachers to the club. A good many more come for the regular film showings, concerts and Saturday night dances.

To fill out the picture of activities add hiking and camping trips, a special study group for kindergarten teachers, and joint functions with rural teachers' clubs.

Clubs throughout the country keep open house for foreign colleagues. Last spring the Leningrad Teachers' Club welcomed American educators Roy M. Hall, Assistant Commissioner for Research of the United States Office of Education; Dr. Chester Harris, professor of the University of Wisconsin; and Dr. Jacob Getzels, professor of the University of Chicago, when they visited the city to study Soviet educational research.

The Moscow Club was the setting for an international forum of educators from Poland, Czechoslovakia, Hungary, the German Democratic Republic, China and Vietnam held at the end of last year. The subjects discussed were vocational training and ways in which the school could be more closely related to life. For ten days, in a half-dozen languages, the teachers shared their experiences. The general feeling was that the exchange would contribute to educational progress in the socialist countries.

### For the Children of Members

A word on the activities for youngsters offered by the Moscow Club. The annual New Year's party is a gala occasion for the children of members. During the winter holiday the club scheduled a party for "The Strong, the Agile and the Brave" at which polar explorers and famous athletes were the guests of honor. Another unforgettable occasion was the exhibition of simultaneous play given by ex-world champion Vasili Smyslov at the club for junior chess players.

Who foots the bill for these activities? Not the teachers nor the schools. Club expenses are paid for entirely by the state and the Teachers' Union. The Moscow City Soviet allocates 110,000 rubles annually; the union adds 7,500 rubles to fill out the subsidy.

Olga Kremleva, the club's director, explains: "The sum is sufficient to cover building maintenance expenses and salaries for our administrative staff and to pay for concerts, exhibitions, lecturers and the expenses of our hobby groups. A good many of the things we do take no money, they are the products of our members' creativity and ingenuity."

Club activities are directed by a council elected for a two-year term at a citywide conference of the Teachers' Union. Among the members of the present council are Alexander Bessmertny, head teacher at school 606; Nina Vasilyeva, education department inspector; Maria Pokrovskaya, a teacher on pension; Trofim Poleshchuk, principal of school 122; and Antonina Rachinskaya, a kindergarten teacher.

There are more than a thousand schools in Moscow and each of them appoints a teacher as liaison to the club. These people keep the teachers in their school informed of club activities.

The turbines of the Stalingrad Hydroelectric Station, whose capacity is 2,415,000 kilowatts, began rotating this year.



# BRUMEL MEETS THOMAS

By Vladimir Bogachev

**A**PPLAUSE rocked Madison Square Garden as 16,000 people gave a standing ovation to a new winner of the Knights of Columbus gold medal for the high jump. In the middle of the arena, surrounded by a large crowd of correspondents, photographers, well-wishers and autograph-hunters, stood a slender youth in a red jersey bearing the Soviet state emblem. The boy was shy and had surely felt much more at ease a few minutes earlier clearing the bar at the unbelievable height of 7 feet 3½ inches.

Just before the competition Valeri Brumel had warmly congratulated his friend and principal rival on his twentieth birthday and wished him the best of luck. Now as John Thomas was walking toward Valeri to compliment him on his brilliant jump, the photographers, who wanted a picture of the two best high jumpers in the world, readied their cameras.

Valeri Brumel first met John Thomas in 1960 at the Olympic Games in Rome. The famous American athlete had just cleared 7 feet 3¾ inches, setting a new outdoor world record in the high jump. Sports writers throughout the world had unanimously predicted his victory in Rome. At that time only a few enthusiastic track-and-field fans in the Soviet Union knew the name of the 18-year-old boy from Lugansk. Leading Soviet coaches first noticed Valeri when he took part in the *Spartakiada* of the peoples of the USSR in 1959. The slender youth with a crew-cut could do no better than eighth place with a mediocre jump of 6 feet 5 inches, but his stubborn determination to win in the face of competition from outstanding jumpers like Shavlakadze, Bolshov and others won him warm sympathy from the fans.

When it came to selecting the high-jump team for the Olympic Games, the Council of Coaches was split. Everybody agreed that the well-known Soviet sportsmen Shavlakadze and Bolshov should go, but many objected to the selection of Valeri Brumel. They argued that the Lugansk high school boy lacked experience, that his best results were a couple of inches lower than those of Vasili Khoroshilov, a 20-year-old sportsman from Rostov. Only after heated debate was it decided that Brumel should join the Soviet team in Rome. And Valeri did not disappoint the people who had placed their hopes in him. At the Olympics he not only showed excellent results but also finished second, ahead of World Champion John Thomas.

Many people were inclined to ascribe the success of the young jumper merely to good luck and circumstances. But Valeri had his own ideas about competition and continued to work hard at perfecting his technique.

When he returned home he jumped 7 feet 2 inches. After the meet at Uzhgorod in the Ukraine, where he cleared 7 feet 2½ inches, Brumel topped the list of the best jumpers in the Soviet Union. But it was not easy.

Valeri is now a freshman at the Moscow Institute of Physical Culture, and his studies very often require that he drop training altogether.

"In December I had to prepare for my exams," Valeri said when he was interviewed. "I got up at seven every morning and went to bed at midnight. I resumed practice with Coach Dyachkov only in January, after I had passed my last examination in anatomy. We learned then that a group of our sportsmen, myself included, were invited to compete in the United States. It was a great responsibility for me—since 1958 Soviet sportsmen have won all meets with American athletes in the high jump. I could not let my friends down; I just had to maintain the tradition."

In the remaining weeks before the first meet in New York the young sportsman really trained hard. At the end of January he cleared 7 feet 4½ inches at the Leningrad Winter Stadium. No man had ever jumped as high. It betters the world outdoor record set by Thomas in 1960.

This achievement made headlines around the world. "Overnight," said *The New York Times* sports writer Arthur Daley, "Brumel became the most sensational single attraction of any indoor season."

However, although many American experts pay tribute to the talented Soviet jumper, they doubted that he could beat Thomas here in the

United States. They cited the excellent condition of the American athlete, his 57 jumps over 7 feet, his 4-inch superiority in height, his determination to make up for the defeat in Rome. On the other hand, the newspapers pointed out that Brumel did not have much experience in jumping from a board take-off, that he had never even seen the floor of Madison Square Garden before. After all, there is a definite advantage in competing on familiar ground. They had a point, but Brumel came to the United States and, in spite of everything, won his first meet, at the New York Athletic Club, clearing 7 feet 3 inches.

For the first time in his sports career, the "Boston grasshopper" finished second in an indoor meet, clearing the bar at 7 feet 1 inch. When Brumel won his second and then his third duel with Thomas at Madison Square Garden, he was unanimously acclaimed the greatest jumper in the world even by the most skeptical sports experts in America.

World fame hasn't changed Valeri. He is still the same shy youth with a boyish smile. When American correspondents asked the head of the Soviet team, "How do you manage to keep your boys modest after achieving such success?" Leonid Khomenkov replied with a smile, "They just know that when their noses are turned up the results go down, and vice versa."

"Some people think that I was very cool during the competition at the Garden," says Valeri. "It's wrong. I was quite excited the whole month before coming to New York. But I'd say it helped me. When I have good competition, I show better results."

Brumel really thrives on competition. His coach says that Valeri usually jumps two to four inches higher in competition than during practice. When he is not very busy with his studies, Brumel trains four days a week for two or three hours at a stretch. Besides jumping he runs and does a lot of weightlifting.

During their stay in New York the Soviet sportsmen did a lot of sightseeing. They visited the United Nations, went to the top of the Empire State Building, attended lectures at colleges, visited museums and just walked along the streets, stopping from time to time to talk to passers-by.

Their old friends, American sportsmen, often came to the Paramount Hotel in New York to chat with Valeri and to congratulate him on his success.

"The reception in New York was very good," Valeri Brumel said. "We've made a lot of friends here. I am very thankful to American fans for their warm and friendly welcome. They actually helped me jump better. I am sure American sportsmen will be accorded the same warm reception by our public when they come to Moscow."

During his nineteen-day stay in the United States, Valeri Brumel won all three meets and carried home three gold medals. His last jump at Madison Square Garden (7 feet 3½ inches) was better than the United States indoor record.

When asked what his plans for the future are, Valeri answered: "In the first place I must get back to my studies and catch up with my friends at the institute. I won't practice for a month after I get home. After that I have a lot of problems to solve. I've never beaten Robert Shavlakadze in a man-to-man competition and I'm sure it won't be easy. I can't say I'm satisfied with my results. Then, I've got to get ready for my next meet with Thomas in Moscow this summer. He's a very strong jumper with tremendous possibilities. Incidentally, I am going to study English harder so that I can talk to my American friends in their own language next time we meet."

Brumel has again been officially invited to come to the United States this summer to take part in the AAU outdoor track-and-field championship at Downing Stadium in New York.

A few days before leaving New York Brumel found a short note in English at the hotel where both American and Soviet sportsmen stayed during the competition. It said: "Valeri, Beat 7 feet 5 inches! John".

"Thank you, John," answered Valeri. "The best of luck. Hope to see you soon. To our next meeting."





