USSR

FIFTY SAN FRANCISCOS IN SEVEN YEARS

—See Story Page 12

JULY 1960—20 Cents

USSR

ILLUSTRATED MONTHLY

1706 Eighteenth Street, N.W.
Washington 9, D. C.
ADams 2-3426

The magazine *U S S R* is published by reciprocal agreement between the governments of the United States and the Soviet Union. The agreement provides for the publication and circulation of the magazine *U S S R* in the United States and the magazine *Amerika* in the Soviet Union.

July 1960 No. 7 (46)

Front cover: Soviet city planners and building workers are among the busiest men in the country.—*See story on page 12*

Subscription Rate:
6 Months $1.00
1 Year 1.80
2 Years 3.00

Published by the Embassy of the Union of Soviet Socialist Republics in the USA.

Second class postage paid at Washington, D.C., and at additional mailing offices.

Printed by The Cuneo Press, Inc.

Alexander Korneichuk

Cyrus Eaton

INTERNATIONAL L

Academician Dmitri Skobeltsyn Chair

EACH YEAR LENIN PEACE PRIZES are awarded to those international figures who have done most to promote international peace.

It was Lenin, in whose name the prizes are bestowed, who laid down the principle upon which Soviet foreign policy is built—the peaceful coexistence of countries with different social systems—a principle now beginning to serve as guide in efforts to find equitable answers to complex international problems. Peace is the goal toward which the best and most sincere people of all countries are today bending their energies.

It gave our Committee particular pleasure to award this year's Lenin Peace Prizes to men of five different countries, all of them well known to the world public. The Committee's basis of choice is solely the service rendered in solving this most crucial problem of our time—the preservation of peace. We are not concerned with either the political, social, racial or religious affiliations of the nominees.

Prizes were awarded to the head of a non-socialist country, a leading American industrialist, a French Communist, a Soviet writer and an Arab national leader. This diversity is typical of the world peace movement that unites varied political and social trends in the common task—to save humanity from the catastrophe of a nuclear-rocket war.

An Asian Statesman

An International Lenin Peace Prize was awarded to the President of Indonesia, Dr. Sukarno, one of the most distinguished of Asia's leaders, who has been pursuing an independent foreign policy directed at strengthening world peace. Dr. Sukarno treats the problem of ensuring lasting peace as inseparable from the struggle against colonialism. Associated with his name is the Afro-Asian Conference in Bandung which framed the ten principles for peaceful coexistence.

Addressing the Indonesian National Peace Congress in January 1960, Dr. Sukarno declared: "All of the 88 million people of Indonesia stand for peace. . . . We demand that atomic energy be used for peaceful ends, that the Summit Conference put an end to the 'cold war' and reach agreement on disarmament, and that leaders of nations get the very idea of war out of their heads and think of peace."

Dr. Sukarno

Laurent Casanova

Aziz Sharif

LENIN PEACE PRIZE WINNERS

Chairman, International Lenin Peace Prize Committee

Besides his contributions as a great statesman, Dr. Sukarno has, in his many books, articles and speeches, advocated international relations based on the principles of peaceful coexistence and national independence.

An American Industrialist

An International Lenin Peace Prize was awarded to Cyrus Eaton, the well-known American industrialist, for his distinguished service in behalf of peaceful coexistence and friendship among nations. In a world atmosphere poisoned by the "cold war" Mr. Eaton has realistically and resolutely condemned the criminal adventurism of war planners and has done much to mobilize public sentiment for peace.

Mr. Eaton rejects war as a means of resolving disputed issues between the U.S. and the USSR, the two world powers today comparable in strength. He is irrevocably insistent that these two great nations must and can find the way to mutual understanding and friendship. In 1960 he hailed the visit of Nikita Khrushchev to America in the effort to thaw the "cold war."

It was due to Mr. Eaton's financial and moral support that the Pugwash Conference was held in his native Canadian town in 1957. This was the first conference of outstanding world scientists to consider problems arising from the atomic war menace and has since been followed by four other international conferences. The "Pugwash" movement presently takes in scientists of many nations.

The Lenin Peace Prize award to Mr. Eaton is recognition of the world's regard for those business leaders who do not permit themselves to be moved by drum-beating war propaganda, who realistically appraise the true course of international developments and the compelling need for peaceful coexistence.

A French Political Leader

Laurent Casanova, French political leader, was awarded a Lenin Peace Prize. During World War II this fighter against reaction was one of the national heads of the franc-tireur and partisan movement that carried on an underground struggle against the Nazis. After the war he served for several years as deputy in the French National Assembly.

Casanova is known throughout France and to many people in other European countries for his work in behalf of peace. He is one of the leaders of the French National Peace Council whose name carries great weight with French intellectuals.

A Soviet Playwright

The well-known Soviet playwright Alexander Korneichuk has won a Lenin Peace Prize for his unceasing activity for peace. He has done much to establish contact and cooperation with peace organizations in other countries. He is a member of the Presidium of the World Peace Council and first Vice Chairman of the Soviet Peace Committee.

His plays treat of the vital and important social questions of our day and are infused with the same concern for peace and belief in mankind's future as are his organizational activities.

An Iraqi Patriot

Aziz Sharif, Iraqi patriot, was awarded a Lenin Peace Prize, the first time a citizen of that country was so honored. His life has been dedicated to the struggle of the Iraqi people against colonialism and for national liberation. Even during the period when the reactionary government of Nouri Said was in power, Sharif worked for democracy and was persecuted as a result of his activity.

He was forced to emigrate to Syria and under those difficult conditions he continued his work in support of the Asian and African national liberation movement. With his active participation, a national peace committee was set up in Iraq, and when he returned from Syria, he was elected Secretary-General. Sharif has performed valiant service in rallying the people in support of the republic and in combating domestic and foreign reaction. His work has also contributed to the international peace movement and the Afro-Asian solidarity movement.

LENIN PRIZES FOR 1960

THE LENIN PRIZE is the Soviet Union's most honored award for creativity in science, engineering, industrial and farm production, art, literature, journalism and related fields of endeavor.

Prize winners are named by two committees—one for science and technology, the other for literature and the arts. Committee members are people who are outstanding in their fields—scientists, engineers, dramatists, painters, trade union leaders, and industrial and farm workers of national repute.

The Committees, before making their final selections, consider the large number of nominees proposed by public and professional organizations. Wide discussion in the press and at public forums of scientific and artistic work of special merit precedes the nominations.

Prize winners for the year are announced on April 22, the birthday of V. I. Lenin. The awards this April 22 commemorated the ninetieth anniversary of the birth of the founder of the Soviet state.

Sergei Vernov

Awards in Science and Te

By NIKOLAI ARZHANNIKOV

Secretary
Committee for Lenin Prizes
In Science and Technology,
USSR Council of Ministers

THE COMMITTEE for Science and Technology awarded Lenin Prizes this year for eight achievements in science and six in various technological fields.

Physics

For research in cosmic radiation and the magnetic fields of the earth and moon a Lenin Prize was awarded to physicists Sergei Vernov, Alexander Chudakov, Shmai Dolginov and Nikolai Pushkov.

Their studies demonstrated that the earth is surrounded by what may be described as a cloud of charged particles of great energies, retained by the earth's magnetic field. This cloud is divided into an outer and an inner belt. The inner belt was first discovered by the Amerian scientist Van Allen. Prize winners Sergei Vernov and Alexander Chudakov discovered the outer belt and made substantial contributions to the study of the inner belt.

Space rockets equipped with precision instruments supplied the data from which the physicists derived the characteristics of radiation in the earth's outer belt and the composition of cosmic radiation in interplanetary space outside the magnetic field of the earth.

Detailed study of the magnetic field of the earth was made possible by extra-sensitive instruments. The study established a considerable difference between the actual and calculated field of the earth and discovered that the moon has no noticeable magnetic field or radiation belts.

For his research in quantum theory Academician Vladimir Phok was honored with a Lenin Prize. His studies are used widely in modern physics. The strict method of "secondary quantization" he worked out is very important, particularly in its broad application to the meson theory of nuclear interaction. He also developed the "Phok-Hartley method," a theory for the solution of most difficult problems connected with studies of the structure of the atom. Another method he worked out makes it possible to solve the problem of interaction between particles and the field.

Professor Nikolai Chetayev was awarded a prize posthumously for a cycle of brilliant studies on the theory of stability and analytical dynamics. His research summarized and further developed the well-known work of the Russian scientist Alexei Lyapunov on the stability of movement and made practical application of that theory possible.

For work on the physics of nuclear reactions with fast neutrons, prizes were awarded to Alexander Leipunsky, member of the Ukrainian Academy of Sciences; Oleg Kazachkovsky, Igor Bondarenko and Lev Usachev.

Biology

For his book *Microbiology of the Sea*, Professor Anatoli Kriss received the award. The book summarizes years of laboratory research and expeditions for the study of the microflora of both inland seas—the Black and Cas-

Nikolai Pushkov

Alexander Vishnevsky

Shmai Dolginov

Yakov Tsypkin (left)

Sergei Ilyushin (left) and Vladimir Kokkinaki

...nd Technology

pian—and oceans from the North Pole to Antarctica. Professor Kriss, by use of new and original research methods, identified and described the little-known microflora of seas and oceans and discovered a new class of microorganisms. His work shed new light on microbiological processes of transformation of organic and inorganic combinations and the influence of high pressures at oceanic depths on the vital activity of microbes.

Surgery

A Lenin Prize was awarded to Professors Alexander Vishnevsky, Pyotr Kuprianov, Yevgeni Meshalkin and Boris Petrovsky for their work in surgery of the heart and the larger blood vessels. They originated 12 major cardiac operations and improved the technique in a number of operations originated by surgeons of other countries. The work reduces the possibility of postoperative complication and the related incidence of mortality.

The Applied Sciences

Three-volume work *Calculations of Strength in Machine Engineering* won a prize for Sergei Ponomarev, Vadim Biderman, Konstantin Likharev, Nikolai Malinin, Vladimir Makushin and Vsevolod Fedosiev. The study summarizes in a practical and useful form the latest work done on strength, hardness, sliding, stability and vibration.

For research on the theory of automatic im-

Awards in Science and Technology

pulse and relay systems Yakov Tsypkin, of the Institute of Automatics of the USSR Academy of Sciences, won a Lenin Prize. His studies are used widely by designing engineers and have been highly commended by Soviet and foreign authorities.

A Lenin Prize was awarded to Saveli Feinberg, Vladimir Goncharov, Taras Zubarev, Georgi Stolyarov, Pyotr Khristenko, Valentin Kozlov and Oleg Lubimstev for their design of the first serial Soviet research reactors to use ordinary water as a moderator and heat transmitter and concentrated uranium as a nuclear fuel. These reactors have several advantages over similar types used in other countries. Among other things, the design and manufacture of the main unit, the heat producing element, is very simple; the concentration of the fuel is low (10 per cent as against 20-90 per cent in American reactors); and the critical mass is less than in American models—2.47 kilograms (5.4 pounds) as against 2.8-3.4 kilograms (6.1-7.4 pounds).

New Methods

A prize was given to Ilya Korobov, Vasili Surovov and Zot Nekrasov for a new method which raises the technical and economic indices of blast furnaces operating with ordinary or oxygenous blast by use of natural gas. In October 1957 natural gas was used for the first time in a blast furnace at the Petrovsky Works where prize winner Korobov is director. Now 30 blast furnaces use natural gas.

For an important contribution to metallurgy —a method of obtaining fine and superfine wire directly from the liquid phase—a prize was won by Professor Alexei Ulitovsky, Nikolai Averin and Veniamin Krasinkov. The new method produces glass-insulated copper wire 1 to 200 microns thick and cast iron wire of 0.2 to 12 microns which can either not be obtained at all or obtained only with great difficulty by other methods.

For finding and prospecting the Gazli deposit of natural gas in Uzbekistan, geologists Abdulkhat Bakirov, Leonid Zhukovsky, Konstantin Sotiriady and other scientists received a Lenin Prize. The deposit holds about 600 billion cubic meters of gas, 35 per cent of the country's presently registered industrial reserve. The discovery is of prime importance since it radically alters the balance of fuel and energetics.

A group headed by Sergei Ilyushin was awarded a Lenin Prize for the design of the turboprop plane IL-18.

A prize was awarded to biologists Olga Kolomiyets, Alexander Popov, Georgi Mokan and Maria Bordonos for developing a monospermous variety of sugar beet. This type produces only one shoot instead of the usual two or four, so that sprouts do not interwine and are sufficiently separated in the row to permit machine cultivation.

Sergei Bondarchuk (left) and Vladimir Monakhov

Awards in Literature

By NIKOLAI TIKHONOV

Chairman
Committee for Lenin Prizes in Literature and the Arts, USSR Council of Ministers

MIKHAIL SHOLOKHOV, the novelist, was awarded a Lenin Prize for his book *Virgin Soil Upturned*, the concluding volume of which was completed last year.

The theme of this epic novel is collectivization, that great and widesweeping movement that transformed the poverty-ridden Russian village and gave birth to socialism in the countryside. This novel has all of the depth of characterization and understanding of historic change which have given Sholokhov a commanding position in contemporary literature.

A Lenin Prize was awarded to Maxim Rylsky for his two books of poetry, *Roses and Grapes* and *Distant Skies*. Many of his poems, romantic in tendency and thoughtful in mood, are set in other lands.

Mirzo Tursun-Zade was honored with a prize. His poetry has been translated into many languages, and he is known in many Eastern countries for his work in behalf of peace. His *Voice of Asia* treats of great themes in stirring graphic verse—the awakening of the peoples of Asia and their struggles against

Roman Karmen

David Oistrakh

Georgi Zhukov

Nikolai Gribachev

Mirzo Tursun-zade

...rand the Arts

the colonial yoke. One of his best-loved poems, *Hasan-Arbakesh,* is set in Tajikistan during the first years of Soviet power and contrasts the old and new, showing country and people as they both grow and change.

A Lenin Prize for journalism was awarded to the joint authors of the book *Face to Face with America,* the report of Nikita Khrushchev's visit to the United States. Prize winners were Alexei Adzhubei, Nikolai Gribachev, Georgi Zhukov, Leonid Ilyichev, Vladimir Lebedev, Yevgeni Litoshko, Vikenti Matveyev, Vladimir Orlov, Pavel Satyukov, Oleg Troyanovsky, Andrei Shevchenko and Grigori Shuisky.

Composer Georgi Sviridov was awarded a Lenin Prize. His work has won the applause of music lovers and critics. His *Oratorio Pathetique* revealed new facets of his talent. Based on Mayakovsky's heroic verse, the music is boldly conceived, richly colored and extraordinarily moving.

David Oistrakh, the eminent violinist, was awarded one of the coveted prizes for his brilliant technique and mastery of his instrument. His interpretations are unmatched for beauty and simplicity.

Actor-director Sergei Bondarchuk was awarded a prize for his dual contribution to the film *The Fate of a Man,* judged by viewers, both at home and abroad, one of the best motion pictures of recent years. The film was adapted from the short story by Mikhail Sholokhov. Bondarchuk created the role of Andrei Sokolov, a simple Russian soldier who retains his belief in victory and in mankind in spite of the trials of war and the horrors of a fascist prison. Vladimir Monakhov, a camerman, shared this prize for his contribution as both photographer and co-author of the scenario.

A Lenin Prize for work in documentary color films was awarded to Director Roman Karmen, and Cameramen Javanshir Mamedov and Sergei Medynsky for *Story of the Caspian Oil Workers* and *Conquerors of the Sea.* Both films record the labor exploits of Soviet oilmen working in the offshore Caspian oil fields.

Mikhail Sholokhov

The Soviet Union — a country WITHOUT TAXES

By Alexander Birman, *Economist*

OFFICIALS AND PRIESTS, soldiers and ballet dancers, schoolteachers and policemen, Greek museums and Gothic towers—all these fabulous creations come like embryos from one common seed—taxes, said Karl Marx.

We have had taxes ever since we have had states. It would seem as inconceivable for a government to function without taxes as for a man to live without food. Nevertheless, the USSR Supreme Soviet at its last session in May passed the law "On the Abolition of Taxes on Wages and Salaries," thus becoming the first state in history to free its citizens of this burden.

To begin with, as of October 1, 1960, taxes presently levied on bachelors, spinsters and childless couples and those with small families will be discontinued. Also workers earning 500 rubles a month or less will no longer be required to pay taxes, and taxes paid by workers earning between 500 and 600 rubles will be reduced by 40 per cent. Each year thereafter the taxes now levied on higher salaried workers will be discontinued until by October 1, 1965, all industrial and office workers will have been covered and the tax on income will have been entirely abolished.

What this means in actual personal family budget terms is a general leveling upward of the earnings of all but a very small number of the highest paid workers. By October 1965 the incomes of 59,400,000 persons will be increased by the full amount of the taxes they previously had to pay. The incomes of several million workers will be increased by approximately half the amount of the tax they previously paid. The incomes of the relatively small group at the top salary levels will stay more or less the same.

It will be the lower and medium salaried industrial and office workers who will profit most. This was the clear and equitable intent of the law—to boost the incomes of the very large majority of the country's wage earners and to narrow the gap between the highest and the lowest paid workers. Notice, however, that the leveling is upward.

Nikita Khrushchev underlined this point in his report to the Supreme Soviet. "We must follow a policy," he said, "of narrowing the gap by bringing up the earnings of factory and office workers in the lower paid categories to the medium level and of those at the medium level up to the higher paid categories. This is our way—the right and just way."

Source of Budget Revenue

Because of the tax law, budget revenue by 1966 will be cut by an approximate 84 billion rubles. This gigantic sum has to be made up. Where is it to come from? There is also this complicating factor to take into account—the sums allocated by the budget for industrial and farm development and for educational, medical, recreational and other social services, far from being cut, keep growing year by year.

To answer the question is really to define a socialist economy. The country's factories and mills, railroads and canals, commercial enterprises and banks, land and minerals are nationalized and belong to all the people. The profits they make go into the national treasury and not into the vaults of private companies as is true in a capitalist economy. The whole of the national income in the Soviet Union —which, to take last year alone, increased by 100 billion rubles and this year will come to a colossal one trillion 450 billion rubles—is spent to meet the needs of the people.

All of the money made by the country's industry, transport and commerce is at the disposel of society as a whole. This is also true of money made by the state-owned farms. So far as the collective farms are concerned, their profits to a very considerable degree also serve the interests of society even though they are distributed by the collective farm members themselves.

The revenue from these sources will cover 90.9 per cent of the national budget in 1960. Only the comparatively small 9.1 per cent remainder will need to be covered from taxes paid by the population.

Up to the present, taxes were necessary although they performed a function quite different than before the Revolution. In czarist Russia they were used as an additional means for depressing the living conditions of the working people. After the Revolution, their function was reversed and for the first time in history taxes were used to raise the general standard of living.

The country's economy had to be built, however, to ensure this rising standard and for the most part it had to be done without foreign credits or loans. There were only the internal resources and potentialities to depend upon, including taxes. Time has made it abundantly clear that these inner resources were well employed. The Soviet Union now stands second in the world in volume of industrial output and takes a leading position in scientific and technological development. With the present productive capacity tax abolition is feasible—therefore the new law.

Foreshadowing it were previous tax cuts. In 1953 the agricultural tax was cut 60 per cent. In 1957 the non-taxable minimum was raised to 370 rubles a month and taxes on wages of less than 450 rubles a month were reduced. In 1958 a considerable number of people were exempted from the tax on bachelors. All of this added up to tax savings of 13 billion rubles. The present law is therefore the final step in a systematic policy of tax abolition.

An Indirect Tax?

Most modern states levy not only direct taxes on income but other indirect duties—excise taxes, sales taxes, etc. These are generally paid in the form of higher rents and higher consumer prices for food and other items. There are no such indirect taxes on Soviet citizens.

Over the years since the Second World War prices of both producer and consumer goods have been cut. Prices in the Soviet Union are fixed by the government—except for those on the collective farm market—and the sale of a

commodity above the fixed price, even by as little as a kopeck, is a criminal offense.

For the government to raise prices does not make financial sense in a socialist economy where the means of production are nationalized. Income and expenditure of the population must balance in the national economic plan. A rise in prices would have to be offset by an immediate rise in wages.

Some Western economists claim that the so-called turnover tax which exists in the Soviet Union is levied only on consumer goods. From this they proceed to argue that it is an indirect method of taxation. Since this tax accounts for nearly a half of the national budget revenue, they conclude that taxation of the population will continue in the Soviet Union. But their allegation that the turnover tax is an indirect consumer sales tax is quite obviously based on misinformation.

In the first place the turnover tax is not levied on the sale of vegetables, fruits, meat, butter, fabrics and a long list of other consumer goods.

Secondly, the turnover tax is paid when such producer items as oil and oil products, various types of metal articles, building materials and electric power—none of them having anything to do with consumer buying—are sold.

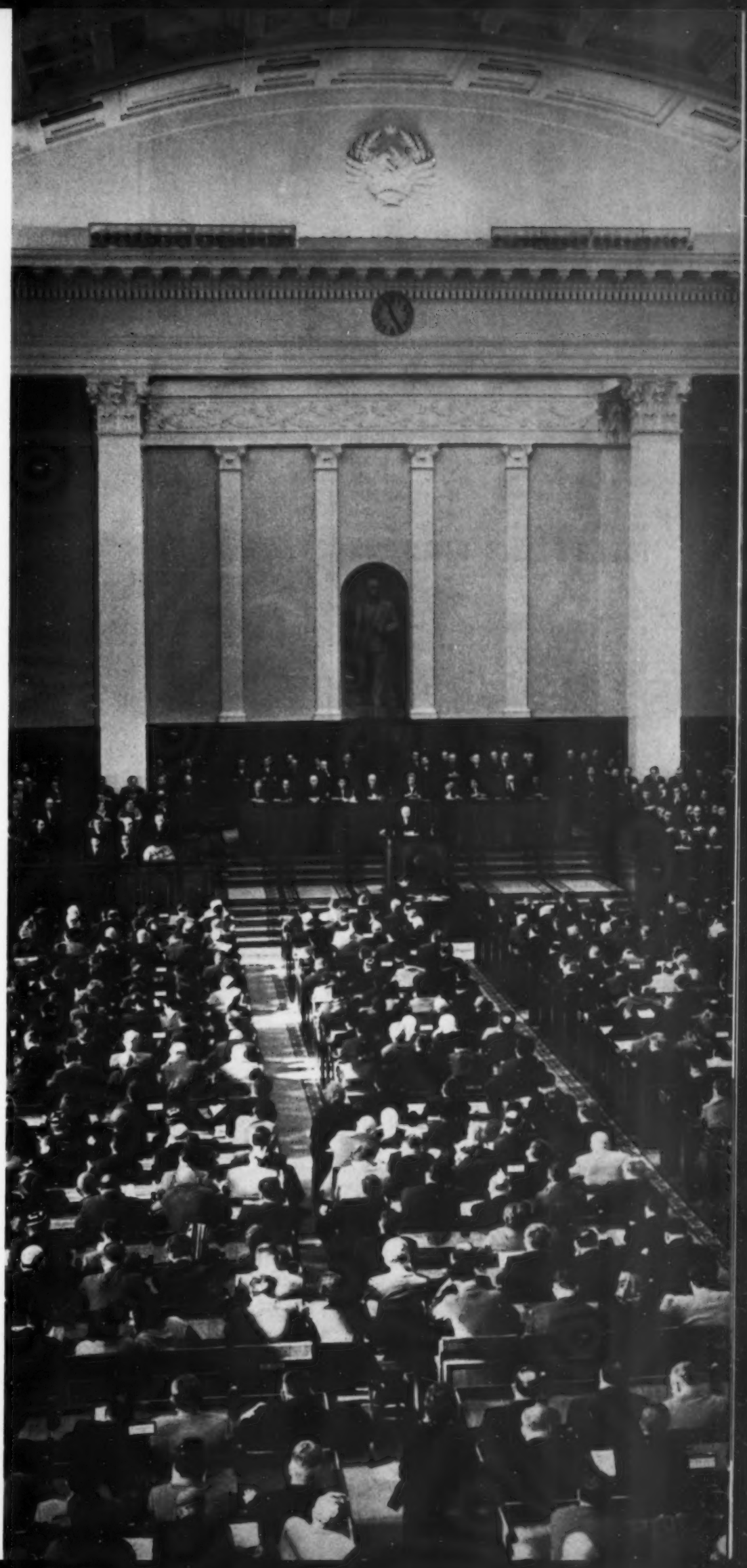
Lastly, the turnover tax is levied by the government on certain goods sold retail and also on goods sold wholesale to enterprises and institutions that are nationally-owned and run.

Does this mean that the state itself levies and pays a state tax? But this would be absurd, to say the least. Then what is the turnover tax? It is, in fact, an accounting device.

The turnover tax is part of an enterprise's accumulations just as profit is, and differs only in the way it is used. If nationally-owned enterprises turned over all their profits to the national budget, they would have nothing left over for expanding production. On the other hand, if they held on to all their profits, the government would have no money for schools, hospitals and all of its multiform activies.

Back in 1930, this system was worked out. The profits of an enterprise were grouped roughly into two divisions. One part, called the turnover tax, was to be paid to the government immediately upon the sale of goods. The other part, called profit, was to be held by the enterprise and used as needed for such things as capital investment, payment of bonuses, cultural services for its employees and the like. What is left of the profit after all these needs are financed goes to the national budget.

To sum up, there is not even a grain of indirect taxation in the turnover tax. We can say without any qualification whatsoever that the Soviet Union abolished indirect taxes long ago. Now it is abolishing direct taxes as well —in another step toward a communist society.



The law to abolish income tax was adopted by the Fifth Session of the USSR Supreme Soviet last May.

The nationa
the S
Soviet's d

FACTS and FIGURES

The national income of the Soviet Union will grow by 9 per cent in 1960 as compared with last year and will amount to 1.45 trillion rubles. This is 25 times more than the national income of Russia in 1913, the most favorable prerevolutionary year for the economy. In the Soviet Union about three-quarters of the national income goes to satisfy the personal material and cultural requirements of the population, while the remainder goes for the expansion of socialist production and other social requirements.

* * * * *

In spite of the great material losses sustained by the country during the Second World War, the real wages of factory and office workers in the Soviet Union in 1959 doubled that of 1940 and the real incomes of farmers increased 2.2-fold.

* * * * *

To satisfy the social and cultural requirements of the working people—social insurance, various grants, pensions, scholarships for students, paid vacations, free universal education, medical service, etc.—244 billion rubles will be spent in 1960 out of the state budget and the funds of enterprises as against 42 billion in 1940.

* * * * *

In 1959 there were 56.3 million factory and office workers employed in the national economy. In 1913 the number of factory and office workers on the present territory of the USSR amounted to 12.9 million.

For the past thirty years there has been complete employment throughout the country.

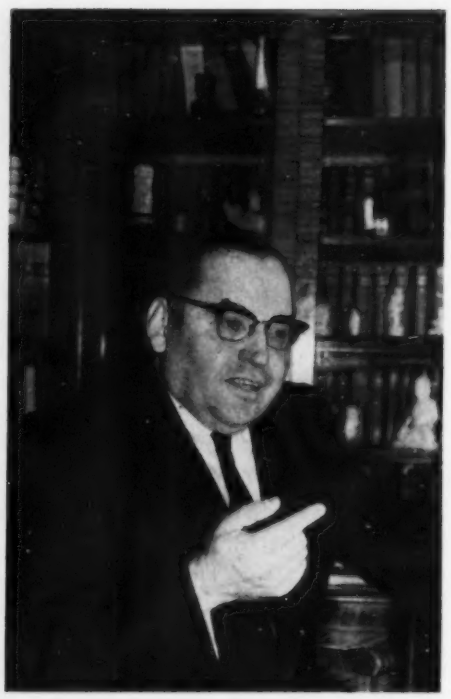
* * * * *

Since 1957 there has been a gradual transfer to a seven-hour and a six-hour working day in the Soviet Union. About 16 million people now enjoy the shorter workday. The change-over of all factory and office workers to a seven- and six-hour workday will be completed by the end of 1960, the second year of the seven-year plan.

This reduction in the workday is being effected without any cuts in pay. On the contrary, wage scales are rising steadily.

* * * * *

The plan drawn up in 1957 by the government and the Central Committee of the Communist Party of the Soviet Union provides for ending the housing shortage throughout the country in the next 10 to 12 years. The first three years of the fulfillment of this great plan of housing construction show that it will be carried out ahead of time. A total of 2,195,652,000 square feet of housing, or almost 6,500,000 modern apartments, have been built in the cities and small workers' towns during this period.



BILLIONS OF RUBLES MORE TO SPEND

Kirill Plotnikov
Director, Institute of Economics

I VISITED the United States not long ago with other Soviet economists. In our discussion with Americans, the question of taxes frequently cropped up and we compared the tax situation in both countries. Americans were skeptical about the promise made early in 1959 at the 21st Congress of the Communist Party that the Soviet Union would abolish all taxes in the near future. Now the promise has become fact and tax abolition has been written into the law.

In the Soviet Union much the larger part of the national revenue—more than 90 per cent—is derived from the receipts of nationally-owned industry, commerce and agriculture rather than from taxes levied on citizens. As the economy grows more productive, its greater revenue makes up a larger proportion of the national budget and the proportion that comes from taxation decreases. The level of economic development that the country has now reached will make it possible to get along without taxes altogether by 1965.

The first step has already been taken—taxes on earnings are no longer required from workers in the lower wage brackets. This is gradually being extended to cover all industrial and office workers. By 1965 no Soviet citizen will be paying taxes.

What will this amount to in savings? By 1966 Soviet workers will have 74 billion rubles more to spend for consumer goods, recreation, entertainment, or whatever else they choose. This will serve to stimulate still greater production of consumer goods.

Besides the law to abolish taxes, the Supreme Soviet at its last session passed another law affecting the country's finances. This one raised the value of the Soviet monetary unit by changing the price scale of goods.

All prices for goods as well as payments for services are to be divided by ten. Income will be recalculated in the same ratio. The relative values remain the same, nobody suffers any loss from this monetary reform, but it does offer the advantage of simpler accounting.

The same thing will apply to the rate of exchange of the Soviet ruble for foreign currency. Here again, the ratio remains the same as at present with no loss either to the foreign country or to the Soviet Union.

Our Institute of Economics is presently at work checking on the results of the measures passed by the Supreme Soviet. What is already evident is that they serve to raise the general standard of living.

...approves ...Supreme ...t's decisions

THE STANDARD OF LIVING IS GOING UP

Larisa Kopytchenko
Clerk, Savings Bank No. 22, Moscow

ONE OF THE TELLERS at the bank said, "That means more work for us," when the radio announced that the tax abolition law had been passed. And it does. Not that we mind.

With more money around, we've had a lot of new accounts opened and the old accounts are running larger. This has been the trend for some time now. It started much before the tax law.

Nikita Khrushchev made the point in his report to the Supreme Soviet. He noted that during the past two years the country's savings bank deposits had grown by 20 million rubles. At present the number of depositors tops the 50-million mark and total deposits exceed 105 billion rubles. What it amounts to is that practically every Soviet family has a bank account.

I like to think of these figures in a different way. To me they are the people who come in to our bank to make a deposit or a withdrawal—people of different ages and professions and characters. Some of them drop in to ask for advice on one financial matter or another and we chat and get to be friends. We have farmers coming in from the country around Moscow to deposit their savings and old people coming in to draw on their pensions that they keep in a current account. This is besides a larger number of Moscow factory and office workers.

If our depositors and our growing deposits are an index, there is no mistaking the fact that everybody's standard of living is going up—and fast.

FACTS and FIGURES

The retail trade turnover of state and co-operative enterprises will amount to almost 766 billion rubles in 1960 as against 175 billion rubles in 1940.

* * * * *

The seven-year plan for the economic development of the Soviet Union for 1959-1965 provides for an increase of from 62 to 65 per cent in the production of consumer goods, as compared with the 1958 level. This plan is being overfulfilled. For example, during the first two years of the seven-year plan, 1959 and 1960, more than 435 million yards of fabrics and 24 million pairs of footwear will be turned out above the plan.

* * * * *

At present the Soviet Union has 13.4 million people with a higher or specialized secondary education. More than 4 million people combine work with studies in general schools, specialized secondary schools and higher educational establishments. Every year 2.5 million workers master new trades and more than 5 million factory and office workers improve their skill.

Those who combine work with study have a shorter workday, special leave for taking examinations, and other privileges.

* * * * *

In 1959, there were 5,700,000 working people who spent their leave at vacation resorts situated in the most picturesque parts of the country. Three and a half million factory and office workers were issued accommodation tickets by their trade unions either free of charge or at a 70 per cent discount.

For the mass development of physical culture, sports and tourism, the Soviet Union has 22,600 stadiums, swimming pools, aquatic centers and other facilities.

* * * * *

The Soviet Union has the world's lowest mortality rate. The steady growth in the well-being of the working people and the improvement in the medical services for the population have lowered the mortality rate by 75 per cent as compared with the period before the Revolution. Infantile mortality has decreased by almost 85.7 per cent.

Average life expectancy of men increased two-fold and that of women 2.2-fold as compared with the prerevolutionary period.

The nation approves the Supreme Soviet's decisions

IT ADDS UP TO A BETTER LIFE

Klavdia Dvoryashina

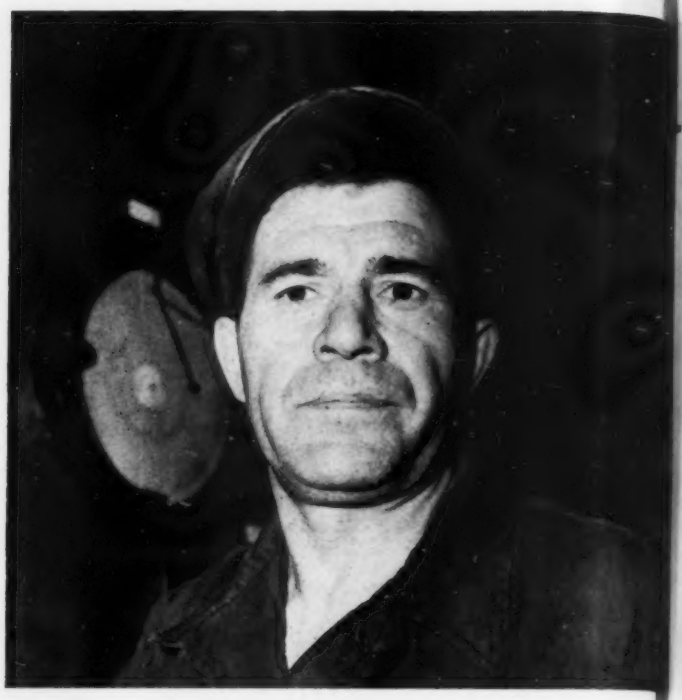
Housewife

I AM NOT an expert in high politics, but you don't have to be to understand the importance of the laws passed at the last session of our Supreme Soviet. When Chairman Nikita Khrushchev reported to the elected representatives of the country that day last May, our whole family gathered around the TV set—my husband who is an engineer in the leather industry, my elder daughter who is a kindergarten teacher, my younger daughter who is still at school, and my nine-year-old granddaughter.

What he talked about—the abolition of taxes and the changeover to a seven- and six-hour working day—concerned all of us in one way or another. Like every other Soviet family, we were glad to see the new laws adopted. They mean more income and more leisure for everyone.

The shorter workday gives my husband and my son-in-law more time to spend with the family. My husband has already disposed of that extra spare hour a day. He has volunteered to be piano teacher for our younger daughter and our granddaughter.

As a housewife I am very pleased that special attention is being paid to the production of consumer goods. They are being put out in sufficient quantities and their quality is good enough to satisfy the most demanding taste. What it all adds up to is a better life for everybody's family.



3,000 RUBLES' SAVING

Vasili Pukov

Welder

AS WE FOLLOWED the Supreme Soviet discussion over the radio in our shop, we got to talking of what the new tax law meant to each of our families. There are nine in my family, five of us work in the shop.

In 1957 our plant went over to a seven-hour working day with a six-hour day for the hot shops. Our earnings weren't cut, they went up. Before we went over to the shorter workday I earned 2,000 to 2,100 rubles a month, today I make 2,500 rubles.

The same for the other members of my family who work at the plant. Our combined earnings have gone up by more than a thousand rubles a month. This came about because of wage adjustments and the greater output possible with automation.

Tax abolition will give us still more income. My wife Yelizaveta not only runs the house but is also the family banker and she figures that it will save us 3,000 rubles a year.

And we're not the only workers in the plant whose earnings have been climbing. In our shop, for instance, average monthly earnings have gone up from 1,300 to 1,450 rubles in the past three years. And this does not take into account various other savings like the cut in food prices and other goods. Or the fact that workers who have moved into new and modern apartments pay no higher rent than they paid for the old ones.

Nikita Khrushchev put it well when he said at the Supreme Soviet session: "The Soviet people are the complete masters of their own destiny. They are forging their own happiness, increasing the country's strength, and improving the well-being of the whole of society and of every worker from one day to the next."

THE FIRST COUNTRY TO ABOLISH TAXES

Konstantin Rozhkov

Tractor Operator

SPRING is a special season for any farmer. For us Soviet farmers this spring was doubly special. The bright sunshine and the fresh green shoots promised a good crop, for one thing. And for another, the Supreme Soviet met for its Fifth Session and passed laws that make things easier and better for every farmer and every worker.

Every session of the Supreme Soviet is memorable because of the benefits it brings. Other sessions have approved large-scale housing construction, greater output of consumer goods, lower taxes for collective farmers, and so on and so forth.

This session, too, continued our government's policy of improving the well-being of the people when it passed the tax abolition and shorter workday bills. The Soviet Union will be the world's first country to abolish taxes.

My family—there are three of us, my wife, my five-year-old son and myself—will benefit immediately by the tax bill. My wife and I make 1,600 rubles a month. The tax cut gives us an extra 1,200 to 1,300 rubles a year.

People generally will have more money to spend because of the tax abolition and there is sure to be a greater demand for foodstuffs, especially milk, meat and butter.

We farmers are getting set for that greater demand. At our farm we have expanded the hot house area six times over and have been doing more intensive field cultivation. We are also raising more livestock. This year we will be growing and selling 2,000 more tons of vegetables and 700 more tons of meat than last year. And since we will be lowering our production costs, we'll be able to sell at lower prices.

I SELL MORE TV AND RADIO SETS NOW

Alexander Smirnov

Salesman

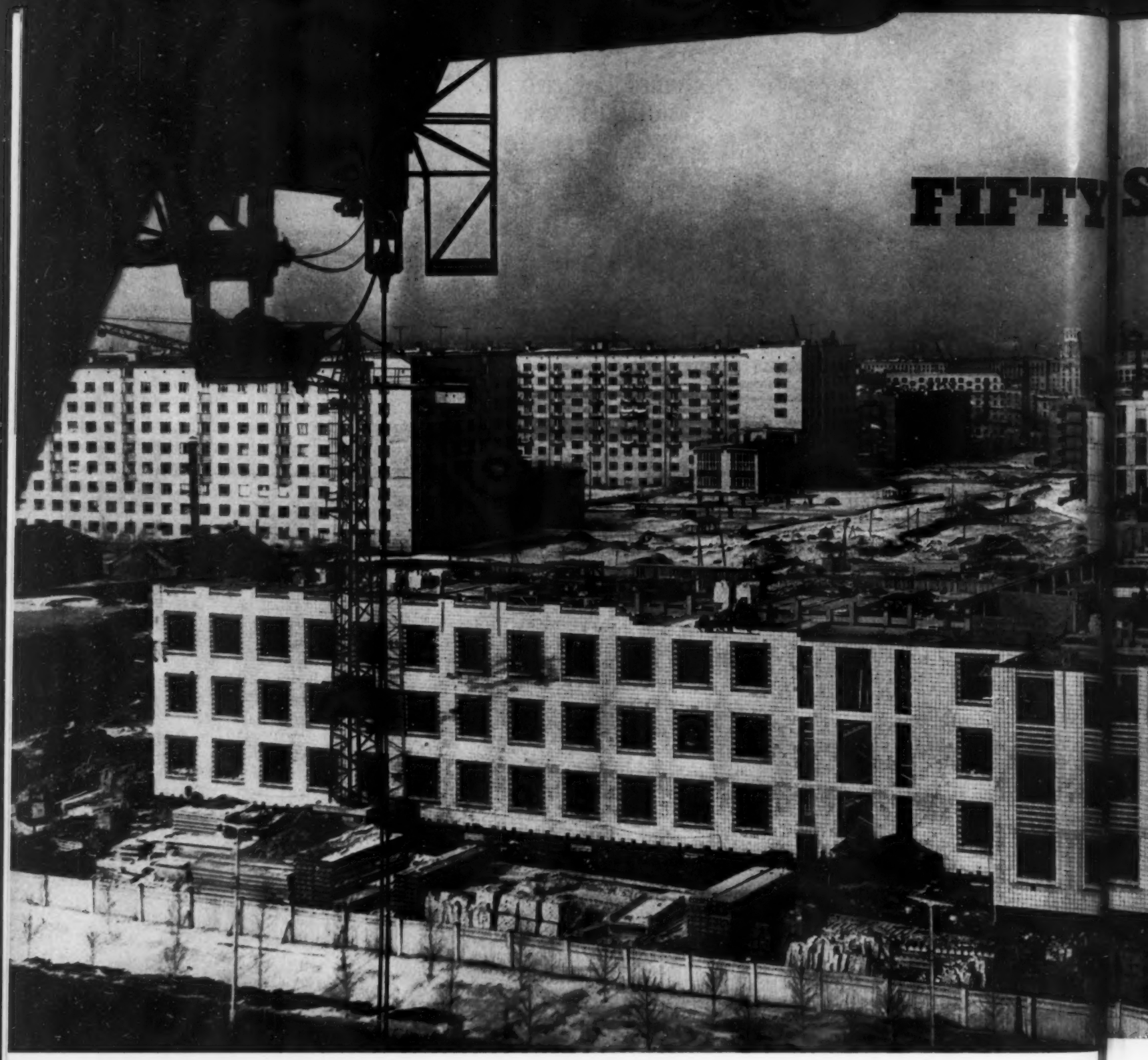
IN THE STORE where I work—I sell radio sets and parts—the effect of the new law to abolish taxes is already felt. We have many more customers. Ours is a new store, located in a recently built housing development in the southwest district of Moscow. A good many families have been moving into the new apartments, and that means new furniture and household appliances and also new radios and TV's.

Our prices keep dropping and people have more money to spend because of higher wages and pensions, so that it's simple enough to account for our crowded store. Our sales total keeps shooting up. In the first three months of this year alone we sold about 5,000 TV sets and 2,000 radios. This is a lot more than we sold in the same period last year.

More often than not a customer will say, "I want your best make in a TV set,"—or radio or tape-recorder, as the case may be. They don't seem to be too bothered by the fact that the best make is, of course, the most expensive make. Our greatest demand is for top-quality goods like our Festival radio, Znamya and Rubin TV sets or Melodia tape recorders.

We try to make it as easy as possible for people to buy. We take advance orders for sets to be picked up and paid for at a specified date. We've also introduced the installment system but our customers still seem to prefer paying for a set in full. They are more accustomed to doing business that way, I guess.

As far as I am concerned, the laws passed at the last Supreme Soviet session affect me very personally. The tax abolition law adds nearly 100 rubles to my monthly income. And the shorter workday law gives me an extra hour that I am going to use by taking evening courses in a commercial school.



By Oscar Kurganov

NEW HOUSING enough for 50 cities the size of San Francisco—that is the guide rule by which Soviet builders measure their work under the seven-year plan covering the period from 1959 through 1965. No wishful fancy, this goal—the reality in brick and cement can be seen in cities, towns and villages anywhere and everywhere in the country.

Accomplishments in housing construction before the seven-year plan realistically forecast the present estimates. The 1957 and 1958 target figures, for example, were topped by 10 per cent. The pace last year was even more rapid. All told, in the three years ending with 1959, nearly 6.5 million dwelling units were built, over half a million more than were scheduled by plan. These are comfortable apartments with modern conveniences. They have hot and cold running water, central plumbing and heating, gas cooking and garbage chutes to a central incinerator. All are wired for telephone, radio and television.

Many of the American and West European countries are doing extensive housing construction, but on nowhere near the accelerated pace demonstrated by this table of Soviet building for the past decade.

Number of Dwelling Units Built

City apartments and rural cottages

Year	*Dwelling Units*
1950	1,107,000
1954	1,351,000
1958	2,692,000
1959	3,050,000

These are not jerry-built structures, they are built to last. About 77 per cent of all the housing is brick and stone.

SAN FRANCISCOS in SEVEN YEARS

This project in southwest Moscow is part of the Soviet Union's seven-year plan (1959-1965) to build 22 million dwelling units. The overall goal is to end the housing shortage completely in a dozen years.

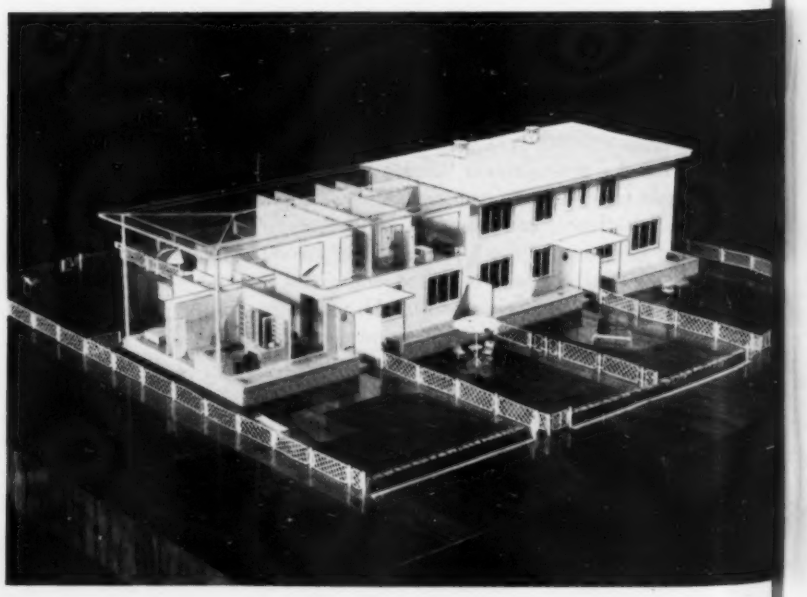
In this two-continent country that stretches from beyond the polar circle almost to the tropics, housebuilders must cope with all sorts of varied climatic conditions. Most of the country has severe, long winters similar to those in Canada and Alaska. Walls must therefore be rather thick and well insulated, and mains must be deep enough underground so that the water won't freeze. All this increases the cost of construction by 50 to 100 per cent compared with that in more temperate climates.

But even though climatic conditions make housing construction more difficult and more expensive in the Soviet Union, the rate of construction is double or more that in most other countries. Every day now 8,800 Soviet citizens move into new houses. Experts say, and quite confidently, that they expect to end the country's housing shortage in ten to a dozen years. That will mean not merely a place to live but an up-to-date apartment or house for every Soviet family.

Soviet city planners are working in terms of residential groupings separated from the industrial sections by garden and tree belts.

FIFTY SAN FRANCISCOS IN SEVEN YEARS

A standard four-apartment prefabricated house for rural and suburban districts. Each unit has its own private plot for gardening.



This type of *dacha*—summer cottage—was designed by Estonian architects. These are summer retreats which are very popular with city dwellers.

These apartment houses are fairly typical of the standardized construction being done. About 77 per cent of all the new housing is brick and cement.

Housing History

Russia, during all of its existence up to the Socialist Revolution of 1917, built a total of 721 cities and towns and 54 urban-type settlements. These were lived in by a sixth—no more—of the country's entire population. The remaining five-sixths, about 135 million people, were cooped up in log cabins and flimsy straw-roofed huts in the countryside.

According to czarist statistics, only 23 cities had a sewage system some fifty years ago. There were 250 cities with water mains but only a tenth of their inhabitants had the use of this convenience. To make a long statistic short, no more than two or three per cent of city residents had even the most elementary facilities.

As soon as the grim years of Civil War and foreign intervention ended, the Soviet government began to reconstruct the old towns and build new ones. Cities like Sverdlovsk, Novosibirsk, Gorky, Kharkov, Khabarovsk, Kuibyshev, Minsk and Tashkent changed almost beyond recognition. Towns grew up around new industrial centers. At the close of the thirties there were hundreds of new names on the Soviet map.

By 1940 the country had entered on a phase where elimination of the housing shortage was becoming reality. But then came the war. Before the Nazi invaders were driven out, some 1,710 cities and towns and tens of thousands of villages had been razed. Nearly 25 million people were left homeless.

Freedom in Design

All land in the Soviet Union is national property and is used for everyone's benefit. This gives city planners and architects unusual freedom of movement. Magnitogorsk is an interesting case in point.

The city is a big iron and steel center built in the early thirties on the left bank of the Ural River. It grew fast until in the last few years the new residential districts were pushing uncomfortably close to the industrial section. The municipal authorities thereupon decided to move new housing developments to the right bank of the river. Now the residential districts are separated from their noisy, fire-spitting and dusty neighbors by both the river and the park land along the same right bank.

The city planner is Lev Bumazhny, a corresponding member of the USSR Academy of Construction and Architecture. Designing the Magnitogorsk of tomorrow, he assumes as a matter of course that he can shift the whole city from the left bank to the right. He is planning a picturesque parkway, a man-made lake, attractive flower gardens and trees planted along all streets. And he assumes further that the government will be spending some hundreds of millions of rubles to give Magnitogorsk iron and steel workers attractive living and recreational facilities.

Apartments range from one to four rooms plus kitchen and bathroom. Rents are set at no higher than four to five per cent of family income.

Soviet builders favor standard type design and large panel construction. They avoid monotony by using regional architecture.

FIFTY SAN FRANCISCOS IN SEVEN YEARS

Conveyor System for Building

As the country's housing program was rapidly growing in scope, many new subsidiary industries were developed. Thousands of automated and mechanized factories were set going to produce cement, reinforced concrete, woodwork, furniture and a multitude of other building and equipment items.

By now this is a sort of huge national conveyor system. To accelerate housebuilding, improve its quality and cut the costs much attention is devoted to the extensive use of prefabricated parts. Construction sites are becoming places where houses are assembled rather than built, in the old meaning of the word.

Take Moscow's southwest district. Actually this is a new city by itself whose population soon will be as large as that of all Moscow before the Revolution. Its houses are built from large panels and sections made at factories and assembled on the spot. Similar conveyor systems are operating now in Leningrad, Magnitogorsk, Zaporozhye and Angarsk, to mention only a few places.

Zaporozhye deserves more than passing mention. This Ukrainian city was in ruins when the war ended but you wouldn't know it today. There are new fine houses everywhere, many streets are fringed with tall poplars and blooming acacias. A wide belt of greenery—some 125,000 acres of pine, oak, ash and acacia—was grown around Zaporozhye to shield its residential districts from factory smoke and grime.

The city looks more like a resort town than the industrial center it is. Its apartment houses are from three to seven stories high and are grouped into more or less self-contained microdistricts, all with their own schools, shops and recreation grounds.

The apartments in Zaporozhye, like in any other Soviet city, run from one room to four. The kind of apartment a family gets depends on the size of the family, not on vocation or earnings. This is general procedure—each District Soviet has a committee responsible for housing distribution.

Rent in the Soviet Union is never more than four to five per cent of the family's income, which covers only the cost of maintenance. As to the cost of all housing construction, it is covered mainly by the funds from the national budget.

Modern Architectural Profile

The Siberian city of Angarsk is a good illustration of the modern architectural profile you see in the country's new towns. Its buildings look simple but beautiful. The city is well planned. The broad streets seem to head straight into the taiga with its century-old firs, oaks and cedars.

The Soviet architect makes as much use as he possibly can of standard-type designs—this to reduce construction time and costs. But he avoids monotony and gives each street and district a distinctive character. When planning a new city, he takes into account local scenery, climate and the region's traditional architecture. As a result each city has an appearance peculiarly its own which is not repeated anywhere else.

Instead of the old criss-crossing pattern of corridor-like streets dividing the city into practically identical sections, you now see freely composed ensembles of buildings standing amidst the greenery. This is a garden-like city with residential areas separated by green belts from the factories and with garages and roads on the rims of the microdistricts. A good deal of attention is being paid to the development of recreation zones for these microdistricts with gardens, parks, sports fields, swimming pools, clubs, libraries and cafes.

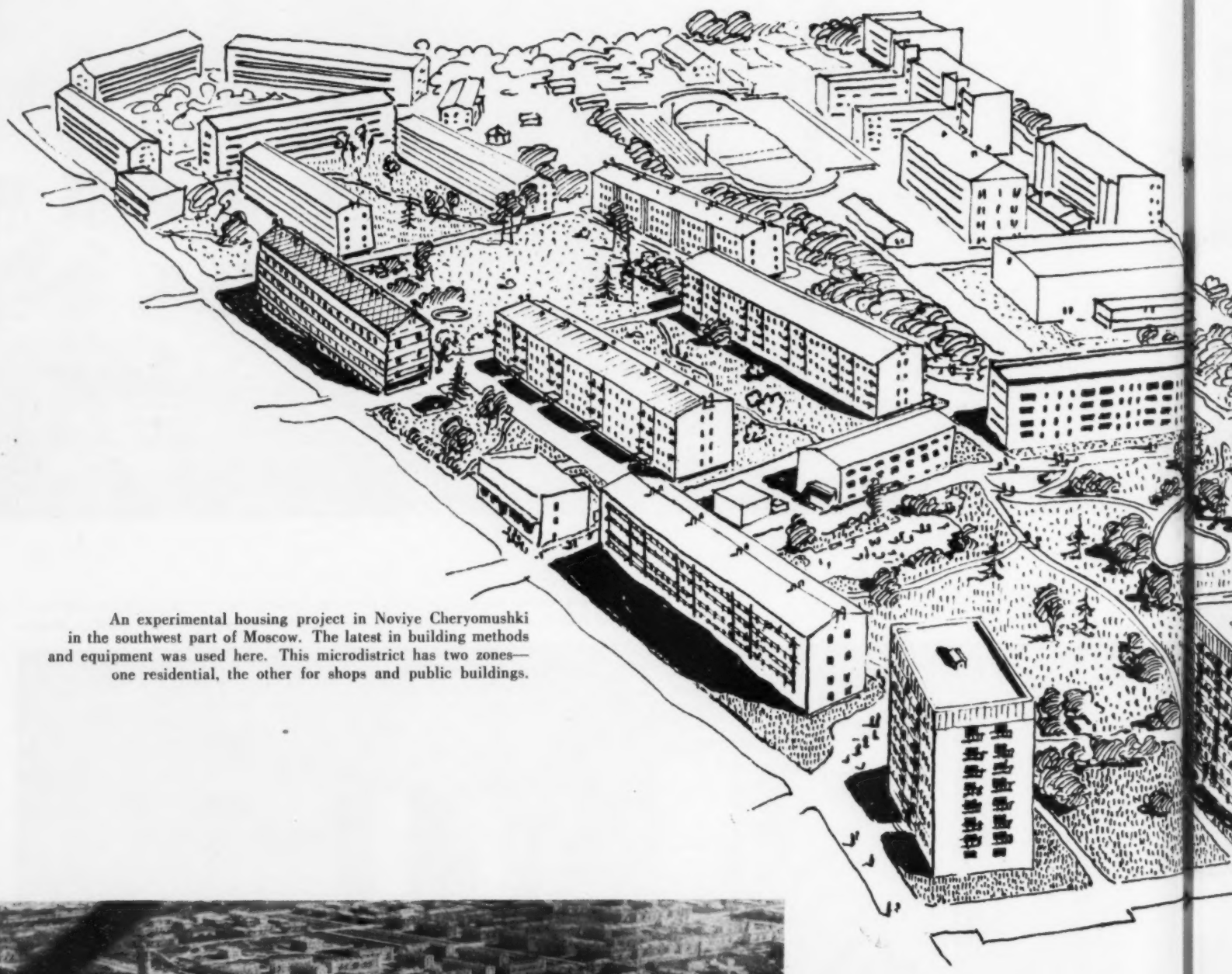
Prefabricated panels are used on a large scale to expedite construction and to reduce building costs. Panels are made at the factory and assembled on the site.

This large-panel house is only one-third as heavy as a brick house with the same number of apartments. It is just as durable and can be built in twenty-eight days.

All new apartments are equipped with the usual conveniences—hot and cold running water, central plumbing and heating, gas for cooking, modern bathrooms and garbage chutes.

Planning Residential Areas

By Dmitri Petrov



An experimental housing project in Noviye Cheryomushki in the southwest part of Moscow. The latest in building methods and equipment was used here. This microdistrict has two zones—one residential, the other for shops and public buildings.

Volzhsky is one of the newest Soviet cities. It grew up around the construction site of the Stalingrad Hydropower Project on the Volga River since 1950.

CREATIVE EXPERIMENTATION is the word for housing design in the Soviet Union today. There is only this one requirement of architects—that they design houses for maximum comfort, fresh air, sunshine and greenery.

The great scope of residential area building makes it possible to create complete architectural ensembles. In Moscow, for example, a big experimental housing project has been built on what was wasteland in Noviye Cheryomushki in the southwest district. Incorporated in the project were the newest construction methods and the most modern equipment.

The project has two zones—a residential zone and a zone for public service buildings. The residential zone comprises 13 four-story and 3 eight-story houses. The architecture is simple, no extravagances. The interiors are designed for maximum convenience with a good deal of built-in furniture.

The public service zone is comprised of a school, kindergarten, nursery, movie theater, restaurants, stores, repair shops, laundry, automatic telephone exchange, and a special building with an auditorium, library and rooms for amateur art, dramatics and other activities.

There are shrubs, flower beds and lawns all over the project. The houses are screened off from the street by a belt of trees to cut down noise and keep the air fresh. The courtyards are planted with blue firs, Pennsylvania cherry trees, Siberian larches, western thujas, as well as apple, pear and other fruit trees.

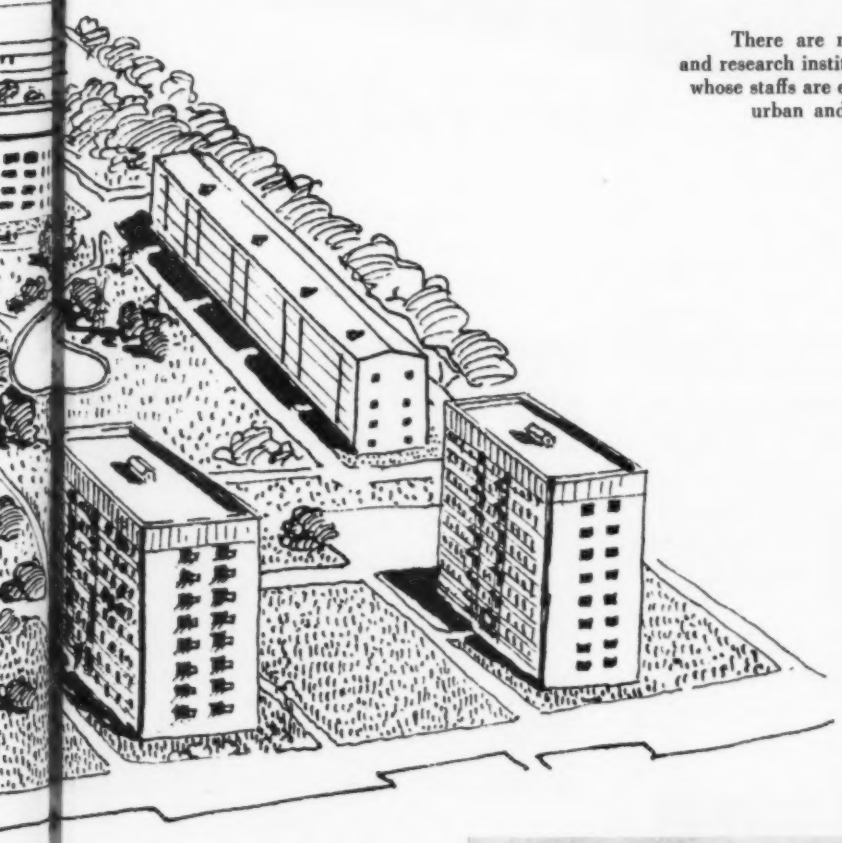
Each courtyard has arbors and benches with sunshades. There are playgrounds for children with swings and wading pools, and recreation areas for out-of-door games. Driving into the courtyards is not permitted. Parking areas for cars, motorcycles, scooters and bicycles are set aside.

The experience garnered by the builders of this model project is now being employed in many other cities where similar developments are under way. Experimentation is going on along a number of lines but the direction it seems to be taking is the self-contained neighborhood complete with apartment houses and all cultural and utility-service facilities.

The total area of a neighborhood will usually run from 50 to 125 acres and the number of residents, varying with building heights, will not exceed 15,000. Many such projects are now being constructed in Kiev and Novaya Kakhovka in the Ukraine, in Chelyabinsk and Magnitogorsk in the Urals, in Novosibirsk, Perm, Leningrad and other cities.

Near Novosibirsk, a small town for the Siberian branch of the USSR Academy of Sciences is being built on a 2,700-acre plot, most of it still covered by forest. It is designed for a total of 20,000 people. When finished, the project will have several residential neighborhoods each to house about 6,500 people.

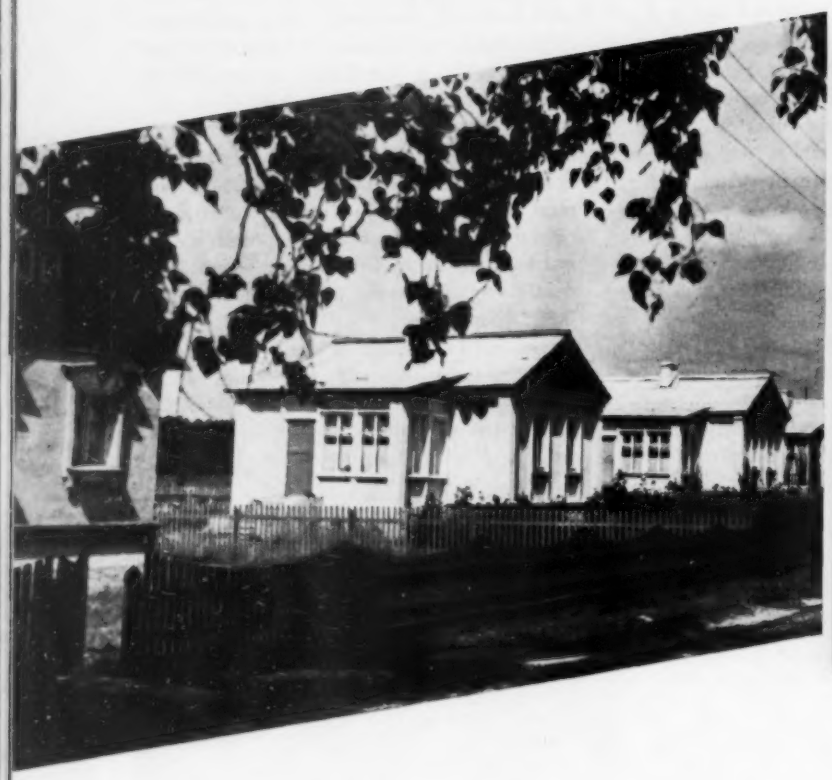
The over-all design of the town leaves as many of the trees standing as room permits so as to retain the flavor of the country. The administrative, public and utility service buildings are concentrated in two major areas.



There are many designing bureaus and research institutes all over the country whose staffs are engaged in planning both urban and rural residential areas.

A section of a microdistrict. These are self-contained neighborhoods with gardens and greenery to screen the houses from street noise and dust.

Houses for ONE



and T

SMALL HOUSES for one or two families constitute a sizable portion of the 22 million new dwelling units which are to be completed under the seven-year plan. These private houses are being built mostly by individual citizens with government loans. They are typical for the smaller towns and especially for villages.

The trend is to toward standardized houses, to simplify construction and reduce cost. There is a choice of prefabricated wooden houses consisting of two, three or four rooms for one or two families. In the last eight years 1,750,000 families have moved into these or similar factory-made houses.

The cost of a two-bedroom prefabricated wooden cottage with central heating and other conveniences, completely assembled and finished, runs from 30,000 to 35,000 rubles—$7,500 to $8,750 at the official rate of exchange—and compares favorably with the house displayed at the American Exhibition in Moscow last summer.

But prefabricated wooden houses are beginning to give way to cottages built of brick, stone, reinforced concrete, silicates, slag-concrete and similar materials. They are favored because they are much more durable and offer many other decided advantages. There are quite a few villages already built exclusively of these solidly constructed cottages. In many cases they come prefabricated in reinforced concrete panels.

There is one such factory-made standard two-story house with two three-room apartments. Each of these occupies equal space on both floors. These dwellings cost from 65,000 to 70,000 rubles completely assembled and finished. So that the cost per family runs not very much more than for a wooden house.

Also built in considerable number are reinforced concrete single-story cottages with attics. These have a glassed-in porch, a living room, a kitchen-dining room, and a storage-utility room on the first floor and two bedrooms in the attic.

All of these various types of houses, of course, have plumbing, hot and cold running water, electric lighting and central heating.

Brick and cement are much preferred to wood. Types of ferro-concrete one-family houses in a collective farm village near Moscow.

d TWO families

By Alexei Vasilyev

Director, Housing Design Institute

A two-family house in the same village. A group of these were built about a year ago. The photos to the left show some of the interiors.

GROUNDWORK FOR FURTHER EXPERIMENTS

THE SATELLITE-SPACESHIP launched by the Soviet Union on May 15 is a direct descendent of the sputniks and luniks. Its great size—the satellite without the last stage of the carrier rocket weighed 4 metric tons 540 kilograms (10,006 pounds)—enabled it to carry a heavy payload of instruments and a cabin with a dummy astronaut.

The satellite-spaceship moved into a precalculated orbit which was almost circular. At the altitude of some 320 kilometers (200 miles) above the surface of the earth it separated from the carrier rocket's last stage.

The spaceship carried a "signal" radio transmitter operating in both telegraph and telephone regimes. It was also fitted with special radio equipment to transmit data gathered by its instruments.

The hermetically sealed cabin weighing some 2.5 metric tons (5,510 pounds) was not intended to be returned back to earth. The aim was to check its reliability under actual operating conditions and safety in separating from the spaceship. Both the spaceship and the cabin had to descend on command from the earth and burn up in the dense layers of the atmosphere.

On May 19 the satellite-spaceship completed its program of research. A command was sent to the ship to switch on its braking engine in order to deflect it down from its orbit and detach the cabin.

The ship, as planned, was stabilized during the firing of the retrorocket. However, as a result of a fault which had developed by that time in one of the instruments in the orientation system, the direction of the retrorocket's impulse deviated from that planned.

Therefore the speed of the ship, instead of being reduced, increased slightly. The ship slipped into a new elliptical orbit lying in almost the same plane but having a much higher apogee. As to the cabin, it detached from the ship, and the cabin's stabilization system worked normally.

As a result of this first spaceship launching, certain important scientific and technical problems were solved.

The powerful carrier rocket accurately followed the flight program and placed the ship into an orbit very close to the circular.

Reliable control was maintained through the ship's flight and its orientation over a period of several days.

The data radioed from the ship showed that the equipment was functioning smoothly and that the temperature and pressure in the cabin were within the preset limits. This demonstrates that dependable conditions for human flight can be maintained.

Telegraphic communication with the ship was normal. In the telephoned regime, broadcasts of ground radio stations relayed through the ship's equipment produced static and marked distortion.

The special radio facilities designed for transmitting commands to the ship, for controlling its orbital movement and for transmitting to earth telemetered information on the operation of the different systems functioned effectively. So did the self-orienting solar batteries.

All the basic equipment for descent control was properly designed, proving that it can fulfill the task of descent.

The first flight of the huge satellite-spaceship furnished valuable data on many aspects of future manned cosmic travels and safe return of future astronauts to earth. The information obtained is good groundwork for further experiments.

These figures (in pounds) show that each successive sputnik and lunik was heavier than the one preceding it, thus permitting heavier payloads of research instruments.

TOWARD MANNED C

THE EXPLOSIVE RATE at which modern science and technology is developing has enormously narrowed the gap between science fiction and science fact. Within a matter of decades man has become a sky traveller. It is safe to predict that he is well on the way to becoming a cosmic traveller in much less than that time.

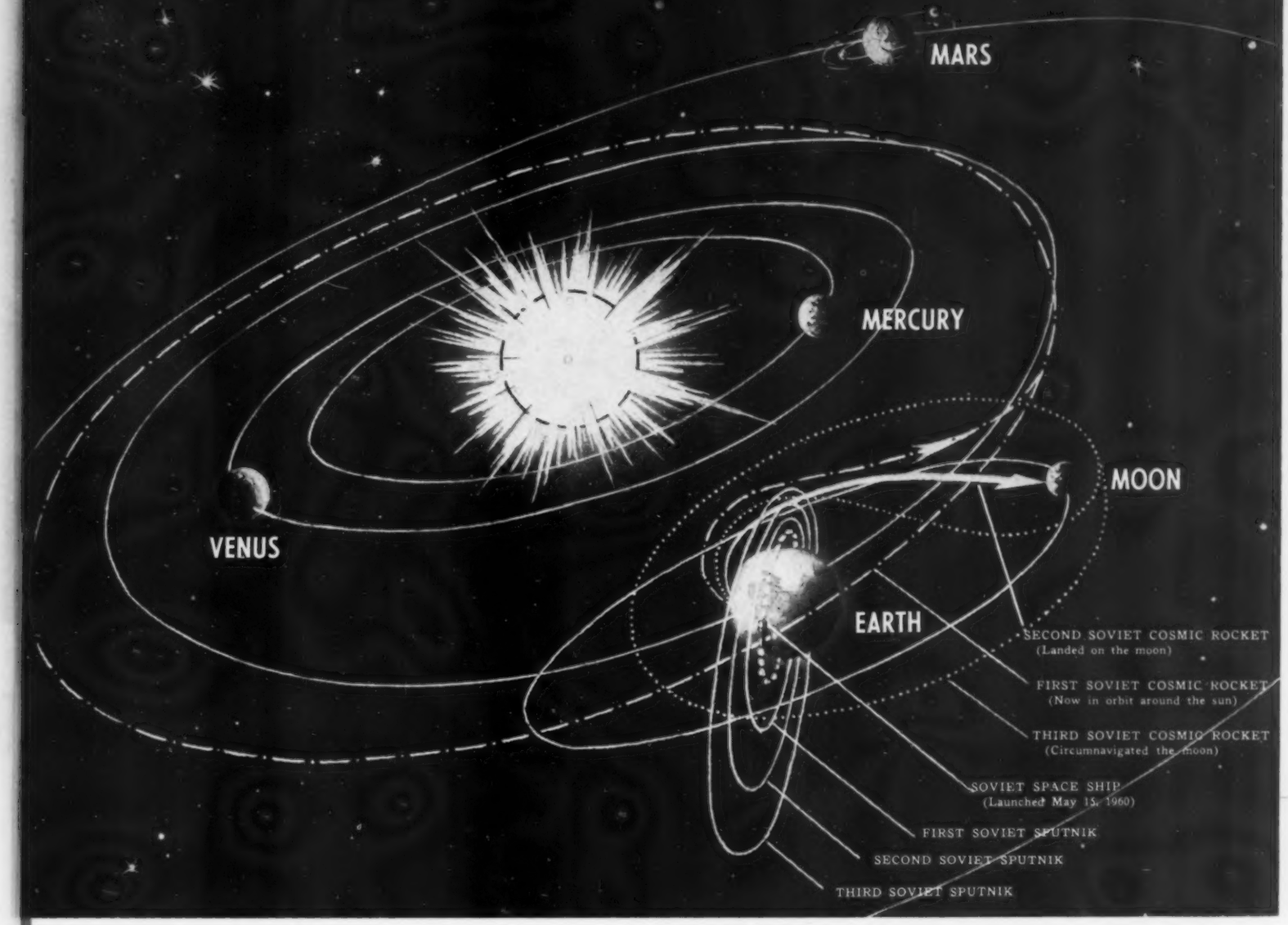
We have created earth satellites and artificial planets carrying various instruments. It might seem that man could explore space by entrusting the whole job to these extraordinarily sensitive instruments created by his hands and brain.

They have registered and transmitted back to earth the most minute details of the physical and chemical processes that occur in interplanetary space. They have given us photographs of the far side of the moon. Their uses are infinite and their sensitivity immeasurably greater than that of the most sensitive of human organs.

Man nevertheless is impelled to move out into cosmic space to see and feel and hear and touch for himself. He wants to observe his instruments at work and to see their limitations under actual operating conditions so that he may perfect them. He wants to see what he has not yet seen—this is the nature of man.

The satellite-spaceship launched on May 15 brought us markedly closer to prolonged manned flight into cosmic space. In addition to its heavy payload of research instruments it carried a hermetically sealed cabin with a dummy astronaut and all the equipment needed to maintain human life in space flight conditions.

It was equipped with regulating systems which can maintain conditions in the cabin required for normal vital activity of man. These systems operated on commands transmitted from the earth—a completely new approach in solving an exceptionally difficult



ED COSMIC FLIGHTS

By **K. Koshtoyants** *Member, Armenian Academy of Sciences*

technical problem of maintaining a constant environment.

Not all problems were solved, however. There are still many remaining that are related to the specific physiological features of the human organism.

Definite success was achieved in regenerating the atmosphere in the cabin. Advantage was taken of the remarkable faculty of certain lower forms of plant life to absorb carbon dioxide and give off oxygen.

In addition to normal air composition and pressure, normal metabolism must be maintained for human life. The problem of feeding of future astronauts is being studied and there have been some advances in spite of its difficulty.

The hermetically sealed cabin with a pilot inside will be a closed system with constant temperature, humidity and atmospheric regeneration and will provide for a metabolic cycle —the materials discarded by the human organism will be absorbed by the plant organism in the same circulatory process that takes place on earth.

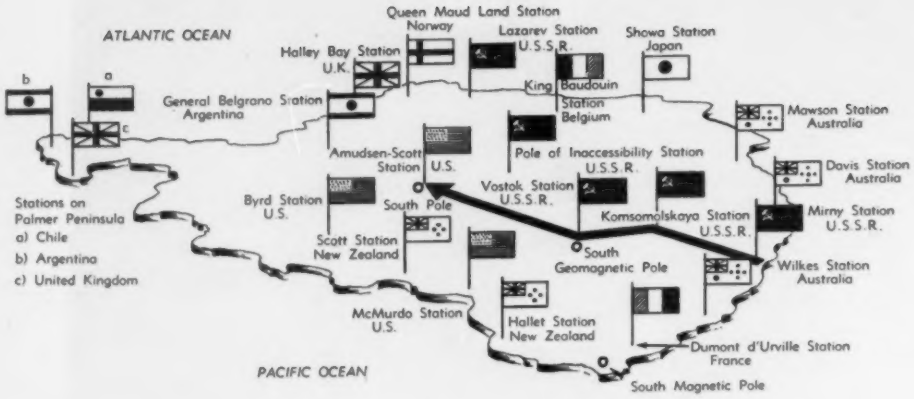
In those closed system conditions account must be taken of such factors as acceleration and its effect on the human organism. Soviet scientists have done significant research in this connection, especially in experiments with the dog Laika, the first space traveler. American scientists have also done work with animals and men in laboratories simulating space flight conditions.

As of now, the problem has been only partially solved—and for brief periods. Manned flights will entail lengthy periods of stress caused by acceleration, as well as by weightlessness, another factor to be considered. These phenomena may primarily influence the nervous system and its receptive functions in particular. This may critically disrupt physiological coordination. Further study of these factors is necessary before we can send a man into space and return him safely back to earth.

The criteria for selecting our future space pilots must be most demanding. We must remember that the astronaut will have to endure conditions which the normal nervous system is not equipped to stand. Training is therefore exceedingly important. The success achieved with the dog Laika was due largely to preliminary training.

Experimenting with an animal, however, is one thing and sending a man into space is quite another.

The highly reliable data recently gathered on the chemical reactions of the nervous system is likely to be very useful here. The man in the cabin of the future spaceship will not be feeding on miraculous super-nourishment pills, but he will be taking other pills to compensate for disturbances that his nervous system will have to undergo in non-terrestrial conditions.



ANTARCTICA

ANTARCTICA TODAY is a successful experiment in global co-operation. It is the world's first continent to ban any type of military activity by international treaty—no armed bases, no war exercises, no weapons tests. Instead, 42 scientific stations, some of them manned by hundreds of people, have been set up on the great ice stretches. Scientists from different countries continue the cooperative researches they began under the International Geophysical Year program, working together to uncover the mysteries of this enigmatic white continent.

Nine Soviet stations were set up, six of them deep in the mainland, in places hardest to reach. Station Vostok, for example, with its crew of 11, is situated on the South Geomagnetic Pole, 875 miles from shore and 11,200 feet above sea level. This is the highest station in Antarctica, where the thermometer in winter registers lower than anywhere else in the world, 124 degrees below zero.

Work at another Soviet station, **Pionerskaya**, went on for three years in spite of the fact that it was covered by a 26-foot layer of snow.

Mirny, main Soviet base, is located directly on the coast, in one of the stormiest regions of this stormy continent. The first year after it was set up, Mirny was swept by 23 hurricanes. It is under these conditions that Antarctic scientists carry on their investigations.

When the IGY ended, some of the Soviet stations were put in mothballs. One of them—Oasis—was given to Poland. At present, observations are being taken at Mirny and Lazarev on the coast and at Vostok deep in the mainland.

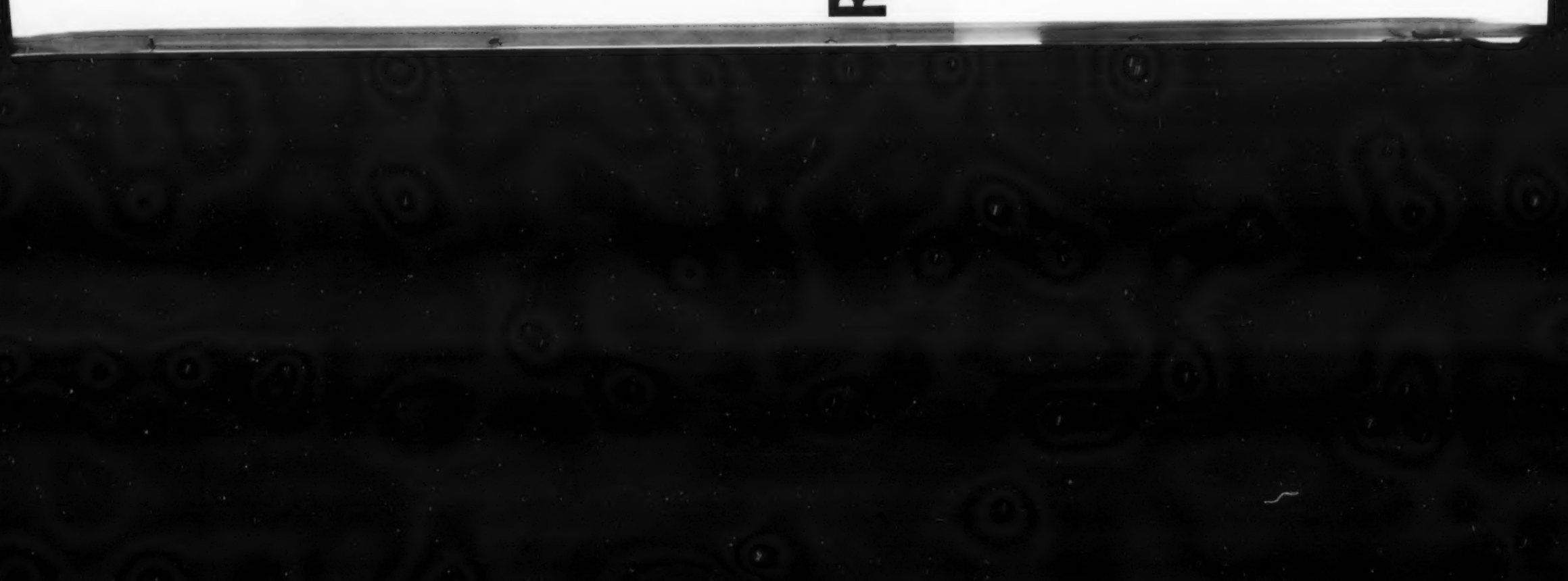
Sea or Continent?

Is it a continent or an archipelago—a sea studded with islands—that is hidden under the five million square miles of heavy ice armor that covers Antarctica?

Thanks to the truly heroic journeys made by scientists of various countries across the ice dome deep into the mainland, this question has been answered. En route, they measured the thickness of the armor by the seismic method to get a picture in relief of the bedrock buried under the ice. They found that it averaged more than 6,500 feet in thickness.

Soviet wanigans — these are tractor-caravans designed for travel across snow-covered country—made a 1300-mile journey far into the mainland in 1958 and another 1640-mile trip in 1959. Both these expeditions contributed to our knowledge of Antarctica's ice-covered relief. On the strength of the combined observations we may reasonably assume that the ice armor covers a continent and that the central regions of this continent at the places measured rise more than 6,500 feet above sea level.

Antarctic scientists are hardy men—in the photo immediately to the right meteorologist Vasili Teterin measures sun radiation of the Vostok Station where the thermometer in winter reads 124 degrees below zero. The photo alongside shows a research laboratory at the bottom of a crevasse at Mirny, the main station on the coast, in one of the stormiest areas of this stormy continent. At the far right is a wanigan, a tractor sled for deep snow.



R

REVEALS ITS SECRETS

By Mikhail Somov *Chief, First Soviet Expedition*

American and Soviet explorers meet at the South Pole during IGY — a good example of successful international cooperation.

ANTARCTICA

Its size and shape are still to be determined. From the data available we are inclined to think that the continent's outline and extent differ markedly from its ice cover. In some places far into the mainland it was found that the ice extends for hundreds of feet below sea level. What would that indicate? Gulfs cutting deep into the continent or straits dividing it? Further study will give us the answer.

New Islands, Bays, Mountains

The Soviet Antarctic scientists have been concentrating particularly on the physico-geographical part of the research program. They have taken aerial photographs of the continent and compiled and published the first reliable topographic maps and sea charts covering nearly a third of Antarctica's coastline (longitudes 45° to 166° East). They have found and charted about 200 major geographic features — islands, capes, bays and mountains—not indicated on earlier maps. All these have been given names. Incidentally, the underwater chute extending along the coast of East Antarctica has been named after Russian explorer Admiral Mikhail Lazarev.

Flag that flew at the South Pole is presented by U.S. station head Dr. Dumais to Soviet expedition leader Dralkin.

All the national expeditions participating in this international scientific effort have been carrying on geological investigations. There is reason to believe that the mineral resources of Antarctica are no less abundant than in the other continents. Rich coal deposits have been found and geologists forecast uranium ores, diamonds, gold, beryllium, iron and other deposits in the eastern part which, in geological structure, resembles Gondwana, the ancient continent that once took in present-day Australia, Africa, Brazil and India.

West Antarctica, structurally similar to the South American Andes, may have lead, tin, copper and gold.

More Ice or Less?

Frozen in the continent's ice cover is ten times as much fresh water as is contained in all the lakes and rivers of the globe. If this huge mass of ice were to melt, the world's ocean level would rise more than 160 feet to inundate great land areas. One of many related problems of interest to exploring scientists is whether the amount of ice on the continent is increasing or decreasing and at what rate. The precipitation of water and hoarfrost on the surface accounts for ice accretion. Ablation is accounted for mostly by icebergs that break off from the edge of the ice shield and float off into the ocean.

Repeated aerial mapping in the vicinity of Mirny reveals that a yearly average of 1,765,000 cubic feet of ice breaks off this way. Soviet scientists have gleaned other interesting data. Topographic mapping of the edge of the ice shield near Mount Hauss where a previous mapping was made in 1902 showed that the rate of ice ablation had averaged 5.9 inches a year. A note of comparative interest is this one: the average rise of the ocean level for the past 50 years is 2.5 inches.

There is not enough information at hand, however, to tell whether the total quantity of ice in Antarctica increases or decreases. The thickness at the edge of the cover is decreasing where ice melting is intensive in summer, but that may be attributed to the fact that the Antarctic climate has temporarily become warmer. In the central regions where intensive melting never occurs, this temporary warming may have an adverse effect due to the greater precipitation caused by the raised humidity of the air brought to the continent from the ocean. But additional studies will have to be undertaken before a final answer can be given for this problem too.

The Soviet expedition made year-round aerometeorological measurements in the central regions, on the slopes of the ice shield and the coast. Its sea parties studied atmospheric conditions from survey ships in the drifting ice zone and the open ocean.

Weather Forecasting

These basic investigations looked into the mechanism of atmospheric circulation over Antarctica. Among other things they refuted an idea previously held that the strong westerly winds blowing at high southern latitudes—the so-called roaring latitudes—block Antarctica from any influence it might have on the climate of the rest of the Southern Hemisphere.

Antarctica has a very direct bearing on atmospheric phenomena in the Southern Hemisphere, Soviet scientists found. According to their tentative estimates, the energy of air motion in the Southern Hemisphere exceeds that in the Northern Hemisphere and atmospheric phenomena that occur in the Southern Hemisphere may influence such phenomena in the Northern Hemisphere. If detailed calculations prove these hypotheses true, they will have a decided effect on long-term weather forecasting.

The geophysical program of the Soviet expedition included studies of the terrestrial magnetic field, the ionosphere, cosmic rays, terrestrial currents, auroral displays and earthquakes.

We know that the Southern Lights (Aurora Australis) are much weaker than the Northern Lights (Aurora Borealis). In the Northern Hemisphere, auroral displays and magnetic disturbances are caused by protons, or positively charged particles, impinging upon the earth's atmosphere. In the Southern Hemisphere we may assume that these phenomena are caused by electrons, or negatively charged particles of lower energies.

One of the most dramatic findings was that Antarctica is the best place in the globe yet discovered for communicating with the moon. In Antarctica the beeps of the sputniks and luniks were heard at all times of day. Elsewhere on the globe reception was spasmodic.

Soviet Antarctic scientists made the first studies of terrestrial currents. Their observations led to this important conclusion: that the polar night has a marked effect on the more regular steady oscillations of terrestrial currents. In the middle of the polar night the oscillations are practically nonexistent, while in the summer they are an everyday occurrence. It follows that these oscillations are connected directly with solar radiation.

Soviet oceanologists traced the mechanism behind the distribution and motion of water masses in the Southern Ocean. The characteristics of the waters of the oceanic ring surrounding the Antarctic shores have been compiled in detail. The wealth of data gathered on the geology of the sea floor gives an itemized picture of the sedimentation and bottom structure of the Southern Ocean.

Shared Research

These and other findings are all shared. Regular contact is maintained among the Antarctic stations of the various countries. Mirny is in radio touch with the majority of the Antarctic stations.

This central Soviet base has been host on several occasions to the Australian group of scientists led by the eminent explorer Philip Low. In January of 1958 the icebreaker *Burton Island* cast anchor off Mirny. More than a hundred American scientists have visited the Soviet station.

A group of Antarctic researchers led by Yevgeni Tolstikov, chief of the Third Soviet Expedition, visited McMurdo, the American base, and were cordially welcomed. The reception was attended by Rear Admiral Dufek, U.S. Chief of Antarctic Operations.

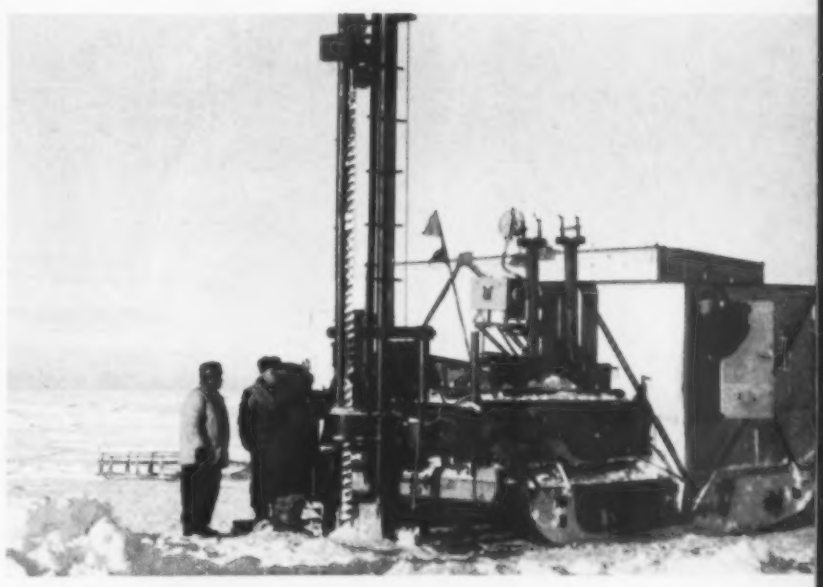
Still closer relations were established between the American and Soviet expeditions when the two countries exchanged scientists. American meteorologists Gordon Cartwright and Morton Rubin worked at Mirney for two years, while Soviet weathermen Vladimir Rastorguyev and Pavel Astapenko carried on their observations at Little America. Right now Soviet glaciologist Sveneld Evteyev is working at McMurdo and Gilbert Dewart is at Mirny.

As often as Soviet scientists flying between Mirny and Lazarev stop off at Australian stations Mowson and Davis or Japanese station Showa or Belgian station King Baudouin, they are cordially welcomed.

All the Antarctic expeditions observe the unwritten but unbreakable law—immediate and selfless help in emergencies.

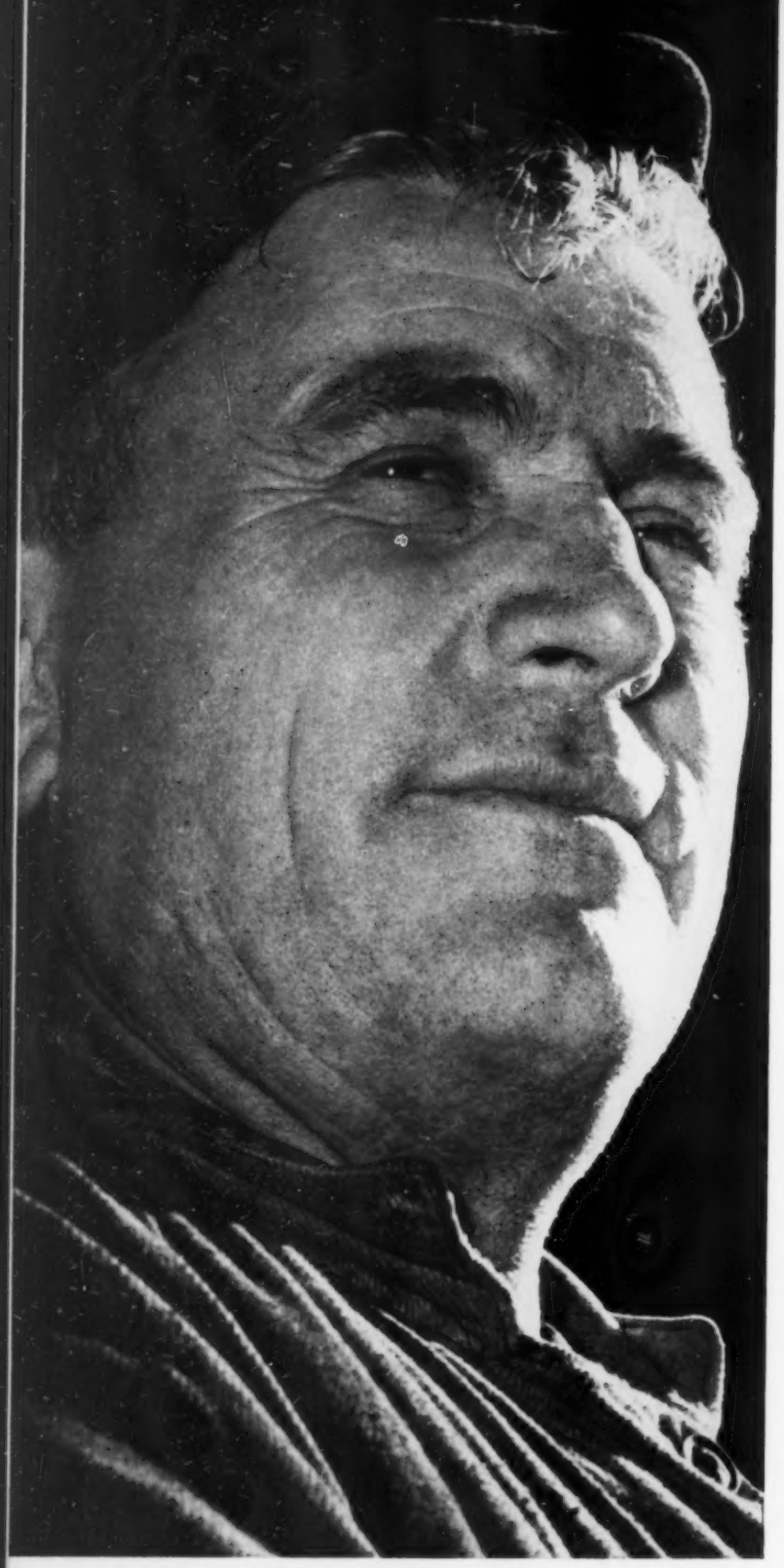
Antarctica is certainly as close as nations yet come to ideal international cooperation. It provides the pattern for joint study of such other matters of global concern as cancer, for example, or the peaceful uses of atomic energy or any of a hundred others of nature's mysteries, large or small.

The stations exchange data and personnel. American Gordon Cartwright (left) worked at the Soviet base for two years.



Boring into the heavy ice armor near the Pionerskaya base. Scientists estimate its average thickness to be 6,500 feet.

A routine chore in Antarctica—digging out after a storm. Mirny Station was struck by 23 hurricanes in one year.



Ivan Komov is one of several thousand worker-owners of this Ukrainian machine-building plant. It belonged to a French company before 1917.

SEVERAL THOUSAND

FOR A GOOD MANY DECADES the Stalino Mining-Machinery Plant in the Ukraine has been making hoists and winches for mines. Before the Revolution it belonged to French owners. Nikita Khrushchev worked at the plant as a fitter between 1909 and 1913 when it consisted of a rather primitive foundry and a cluster of machine shops. The building Khrushchev worked in is still standing, housing one of the plant laboratories.

But that is one of the few old landmarks left in this modern machine-building plant. Presently it is manufacturing a continuous-action rotary bucket excavator, used for opencast coal and ore mining, that shovels up 1,300 cubic yards of dirt an hour. This machine does ten times more work in a given time than the big walking excavators, widely used in the Soviet Union and abroad, made by the Urals Heavy Machinery Works. The first rotary excavators have already been turned out and the plant is now gearing for quantity production.

In the days before the First World War there was one and only one decisive voice at the plant, the owner's. Major decisions like mass producing the excavator, which meant a thoroughgoing reorganization and retooling, are now made with the direct and active participation of all the workers.

That does not imply that Vasili Dotsenko, the director of the plant, is nothing more than a figurehead. By no means—his is the final responsibility and he therefore has the final and decisive say. But he works with and must report on progress to the various organizations at the plant through which the workers express their points of view—the Permanent Production Conference, the Trade Union and the Communist Party branch.

Let's stroll along with the director on this bright summer morning. It's early, a little before seven, but the street is full of people walking toward the big pale gray plant buildings. And very active, very talkative people these are; southerners don't like to walk in silence and the street sounds a little like a debating society. One of the debated items is very probably yesterday's production conference.

The Permanent Production Conference

Vasili Dotsenko greets many of the workers as he walks along. Nikolai Makhonin, a lathe operator in the machine shop, stops to shake hands and say he hopes there are no hard feelings. Makhonin had some sharp things to say about the work of the director and the chief engineer at the conference. The director says, "Of course not, it's all in the day's work." That's what the production conference is for — open and constructive criticism.

To a very considerable extent the plant's production efficiency depends on this permanently functioning conference. It is made up of 230 workers and specialists elected at trade union shop meetings. The conference has helped plan the organization of production of the new rotary excavator at every stage of its manufacture. Recommendations made by workers at these meetings have already saved many thousands of hours of working time.

Yesterday's production conference discussed the state of affairs in the foundry — obviously a most important department since it casts the excavator parts. Director Vasili Dotsenko reported that the department's reorganization was complete, and that everything that could be done had been done.

Not everyone agreed and various people took the floor to say so. By the time they got through, the outline of a more efficient organization of production in the foundry had begun to take shape. It involved

Anatoli Glinsky, like many other division heads, is a professional school graduate.

Pyotr Sergeyev, recently demobilized, is representative of the plant's younger generation.

Andrei Karpov, the chief metallurgist, started in the foundry as an unskilled worker. The same climb was made by many of the top personnel.

OWNERS

By Yakov Usherenko

SEVERAL TH

One of the assembly teams that has set the plant's enviable record for production efficiency.

Union chairman Alexander Yalovenko (at right) with Director Vasili Dotsenko.

In a lunch-hour seminar Chief Accountant Alexander Dikin gives a group of interested workers a picture of the plant's finances and production costs.

Engineer Lyutsevopal Kutsegeorgi at the factory's school.

speeding up mechanization of all the electric furnace processes, modernizing the molding machines and automating earth removal. As a result of the discussion, in which some dozens of workers took part, a plan was drawn up for 29 additional steps to bring the foundry to top operating efficiency.

The "Chiefs" Meet

The white three-story administration building is near the plant entrance, but the director goes right by. He spends the first three hours of the morning, from seven to about ten, in the shops. Today he's on his way to the foundry to check up on some items related to yesterday's conference.

At 10 he gets to his office and tells his secretary to call a meeting of the "chiefs" and the chairman and secretary of the production conference.

The "chiefs" are Izrail Rakhovsky, chief engineer; Anatoli Glinsky, chief designer; Grigori Drevitsky, chief mechanical engineer; Andrei Karpov, chief metallurgist; Nikolai Ostapenko, chief power engineer; Victor Shevchenko, chief production engineer; and Alexander Dikin, chief accountant. With the exception of Rakhovsky and Glinsky who come from the intelligentsia, the "chiefs," like the director, are former workers. They all went through professional school, some of them while they held down jobs at the plant.

Each of the "chiefs" goes over the foundry plan outlined at the production conference as it applies to his sector of the plant and works out a timetable. Production Engineer Victor Shevchenko says that the new recommendations will involve a sizable outlay. Are the additional funds available? Chief Accountant Alexander Dikin explains that the plant has more than half a million rubles over and above the figure scheduled by the plan that may be used to improve the plant's equipment and flowsheet.

Ivan Puzanov, chairman of the production conference, announces that besides the proposals made from the floor at yesterday's meeting, a large number of additional recommendations and suggestions from workers for expediting production were submitted to him and to the secretary either in conversation or in writing. He suggests that the management go through them.

A Class in Production Costs

The meeting adjourns shortly thereafter since Accountant Dikin has to leave for a lunch hour seminar he leads for 36 workers on production costs. Among his students are fitter Fyodor Tatarchuk, whose suggestions for expediting work have saved the plant 130,000 rubles in two years, and Natalia Popenko, a drill press operator, who was awarded the Order of the Red Banner of Labor by the government for her exceptional work.

Instructor Dikin introduces the subject: "The cost of turning out a machine," he says, "is determined by every one of us here. It's determined by the designer, of course, in the first place, by the lightness and compactness of his machine and the kind of materials he puts into it. It is determined also by how much manpower and material the production engineer saves or wastes. But primarily, it is determined by the workers at the bench—those who operate the tools, use the materials, turn the power on and off, and so on. Every worker at the plant influences the cost of producing a machine. Every worker stands to gain personally by lower production costs of an excavator because

AL-THOUSAND OWNERS

The plant makes this continuous-action rotary bucket excavator used for opencast coal and iron ore mining.

The grievance committee in session. Almost everyone at the plant, including the director, belongs to the Machine Builders Union.

Milling machine operator Ivan Nechipurenko is a deputy to the Supreme Soviet of the Ukrainian Republic. He tells his shopmates about the recent parliamentary session.

this means lower costs of the ore it will mine, lower costs of the metal melted from this ore, lower production costs of the articles made from this metal and lower prices all the way down the line."

Then the discussion gets down to the specifics—what were the possibilities of lowering production costs in one or another shop. Nikolai Borisov, a mechanic, gave this illustration. He asked, "What is cheaper —leather or rubber?" and gave the answer himself, "Rubber, naturally. That's the answer that I suppose would have been given by the man who designed the cylinders and pistons for our molding machines, yet he used leather. We mechanics suggested that the leather be replaced by rubber. That one recommendation has saved the plant tens of thousands of rubles a year."

Accountant Dikin reminded the students of Lenin's famous words, "Communism begins when the *rank and file workers* begin to display a self-sacrificing concern . . . for increasing the productivity of labor, for preserving *every pound of grain, coal, iron* and other products, destined neither for the workers personally nor for their 'close' kith and kin, but for their 'distant' kith and kin, for society as a whole . . ."

Worker-Management Relations

Practically everyone at the plant including Director Dotsenko and Chief Accountant Dikin are members of the machine builders' union. No question of any importance at all, including appointments to managerial positions, is decided without the participation of the trade union. The union is concerned not only with production but with every other aspect of worker-administration relationship.

That relationship is defined by the annual collective agreement. It establishes the system of pay; the responsibility of both worker and

A relic of the prerevolutionary period, when the plant consisted of a primitive foundry and a few machine shops.

Cause for celebration. All five passed the course for foremen.

SEVERAL THOUSAND OWNERS

management for fulfilling production quotas scheduled by the national plan; the sums to be spent by the plant for technical training during the year, for labor protection, for workers' housing, for added cultural and sports facilities.

At about this time of year the plant trade union conference is held at which Director Dotsenko and Trade Union Chairman Alexander Yalovenko make their semi-annual report to the workers to check on whether the provisions of the collective agreement have been lived up to by both parties.

The agreement does not come as a result of a strike or economic struggle between workers and management, nor is it a compromise of conflicting interests. The interests are common and the goal is the same—more production in fewer working hours at higher wages, in short, a continual climb toward a higher standard of living for everyone.

There are still people in Stalino, now long retired on old-age pension, who worked at the mining machinery plant before the Revolution. They occasionally reminisce about worker-management relations in the old days. These were two irreconcilably hostile camps lined up against each other—on the one side, the workers; on the other, the management concerned only with the interests and profits of the owners. The result was strike and bloody conflict.

After the Socialist Revolution, when the plant was placed in the hands of the people, production relations changed drastically. There was no longer any reason for hostility between worker and management, worker and foreman, mechanic and engineer, since their interests were no longer contradictory.

Workers and managerial personnel are members of a united collective, all interested in better production, and they work cooperatively. The more experienced and better trained workers help their less qualified shopmates. A case in point is the plant's school for advanced technique where 340 workers are studying under 70 volunteer teacher-engineers.

Do differences arise between workers and management on whether one or another proviso detailed in the collective agreement has been carried out? Of course. People have their differences and their idiosyncracies and practice does not always conform to theory. Disputes do arise between individual workers and management and sometimes between groups of workers and management. These are settled by special committees that function in each shop. They are made up on a parity basis, one representative from management, one from the union.

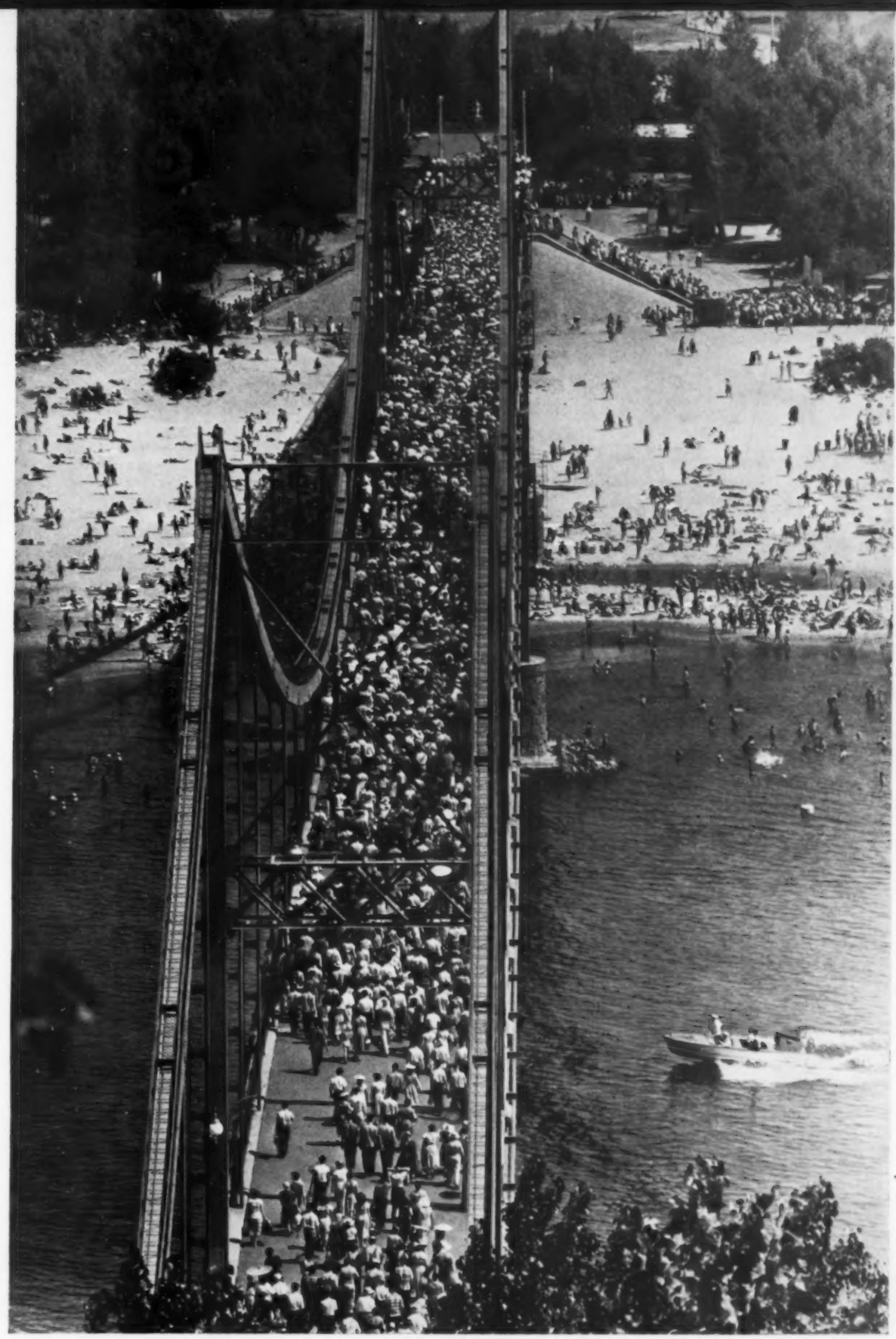
The Communist Party and Management

The Communist Party is another organization through which the workers express their collective will. There is a branch at the plant, as there is at every other industrial and farm enterprise in the Soviet Union, with some 400 members—workers, engineers, economists. Director Dotsenko is a member as well as other managerial people but the very large majority are steelmakers, fitters, lathe operators, forgemen, foundrymen and other bench workers.

The director and the other managerial personnel are there to manage the plant and it is not the function of the Communist Party branch to undermine that authority. Quite the contrary, the party tries to build up their prestige, assuming that it is deserved, and to help them in whatever way possible to do a better job.

At the same time, the Party reserves the right to check on progress. There are general membership meetings, frequently open to every worker, and meetings on the department and shop level to hear the reports of management in one or another area of operation.

In the first years of Soviet power there were only 20 Communists at the plant. But as time went on, the best workers joined. These are people who earned the high regard of their shopmates for working skill and civic-mindedness. The Communist is expected to be among the high-quota workers, the man who keeps training and educating himself so that he will understand and be able to make others understand the plant's share of the job in the nationwide effort to build communism with its abundance of material goods.



It would seem, on most fine summer Sunday mornings, that everyone in the Ukrainian capital were headed for the beckoning outdoors as thousands of people cross the Dnieper Bridge to the other side of the river with its white sand beach and its cool forest picnic groves.

Photos by Dmitri Baltermants

Sunday in Kiev

Sunday in Kiev

THE STREETS OF KIEV, usually bustling with activity, are deserted on summer Sundays. Endless streams of people in cars and buses leave for a day of picnicking in the nearby countryside, or go off to one of the city's many parks and pools, or walk across the bridge to the beautiful sandy beach on the Dnieper River.

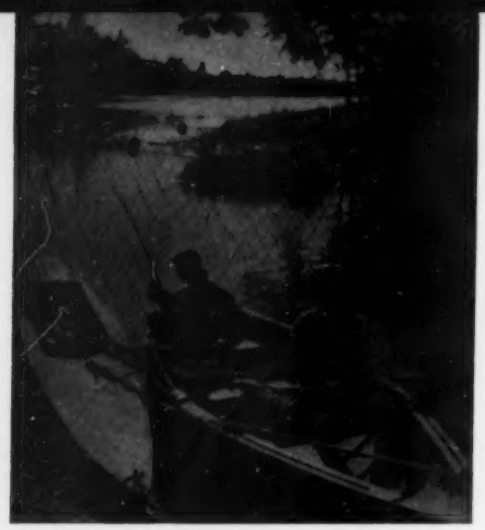
There's good fishing in the Dnieper, and anybody can rent a boat and take off to his favorite spot. Even if the fish aren't biting, the solitude is relaxing. Or you can enjoy an all-day trip down the river and back in an excursion boat.

The river offers attractions to suit every taste and inclination. Awaiting the sailor and angler are boats, either motor or muscle propelled, rented for a modest fee. For the more daring and adventurous, there is the thrill of water skiing and for everyone there is the sunshine and sparkling water.

If you do have to stay in town on Sunday, there are plenty of substitutes for shore and country—one of the courtyard wading pools or a shaded lane in the park.

Kievites say that they would match their beautiful forest land in the suburbs against that of any city anywhere.

And to finish off a summer Sunday in style you take your girl to a cafe or for a slow stroll along the river bank.



Vacation on a Lake

By Yevgeni Simonov
Photos by Victor Ruikovich

LAKE SELIGER in the forest country northwest of Moscow is actually a chain of divided water stretching some 50 miles. Its crystal blue surface contrasts with the greenery of the islands—160 all told—from tiny ones where two fishermen hardly have foot room, to big ones where half a dozen villages have plenty of space to sprawl.

Sailing on the small steamer you can see lovely sights—the beaches of white sand carved into fanciful shapes by the water, the great rocks jutting out from the pines, leftovers of the glacial action that made the lake. There are spots where the water spreads away to distant horizons and the shores can barely be discerned, and other places where the lake narrows so much that the steamer has to wedge its way slowly between banks close enough for the passengers to smell the newly mown hay.

Once you've paddled your canoe through the lilies that carpet the surface, pitched camp on the shore and listened to the early morning concert of the birds, smelled the cooking fire and the taste of freshly caught fish, you'll always want to go back to Seliger.

There is a little peninsula on the lake which looks like a bustling beehive from early spring to late fall. This is a trade union tourist base camp. Amidst tall pine and fir trees stand small cottages surrounding a big white house. The camp fleet—everything from speed

LAKE SELIGER, WITH ITS TRADE UNION TOURIST CAMP ALONG A PICTURESQUE SHORE, IS ONE OF THE MOST POPULAR VACATION SPOTS IN THE COUNTRY.

The camp fleet—from speed gliders to small do-it-yourself rowboats—is anchored in a bay deep in the woods.

The favored Lake Seliger dish is Lake Seliger fish. Dessert is wild strawberries eaten wherever picked.

With its offshoots the glacial lake is 50 miles long. It is dotted with islands big and small—160 of them.

Vacation on a Lake

You rent boat, tent and all the rest of the equipment and camp on shore—or on an island, if you prefer.

KP duty doesn't seem such a chore on one of those famous Seliger overnight expeditions away from base camp.

From early spring until late in the fall Lake Seliger is alive with fishermen—and women—of all ages, sizes and aspirations.

gliders to canoes and "shuttles," as the local folk call the home-built boats—is anchored in a bay cut deep into the woods.

You can meet people here of all ages and sizes, single people and families, from all over the country. You are as likely to meet a distinguished professor as a factory mechanic, a ballerina as a college student. All come to the lake for "a good rest."

"A good rest" at Seliger has a rather special meaning. It might mean walking the trails for miles, or canoeing for hours toward distant alluring waters, or squatting in the reeds with a gun from dawn till dark. There are nights when the cottages at the base camp are abandoned for an overnight fishing trip on the still water or a tent on one of the scattered islands.

Lake Seliger campers fall into three rough categories. There are the "stay-at-homers," who don't move far from the base camp; then the "wood elves"—those are the hikers and hunters; and the sailors and fishermen—the "water sprites," who are usually among the busiest of the "resters." Each of them has to bring in a bigger catch than the next fellow, tan himself a deeper brown, swim enough to last him through the whole winter.

Dawn and dusk—when the lake looks its best—are also the fishermen's favored times. They group along the still shores, the quiet broken every once in a while by a line whipping out of the water. The reeds are full of wild duck, hazel grouse, capercaillie and gray hens. During the hunting season gun shots are heard on the lake one after another, almost like at a firing range. And if you don't have any luck fishing or hunting, what's to stop you from going to one of the many village markets and picking up something tasty for dinner? There's no reason for you to make an announcement if your friends assume you came by it otherwise.

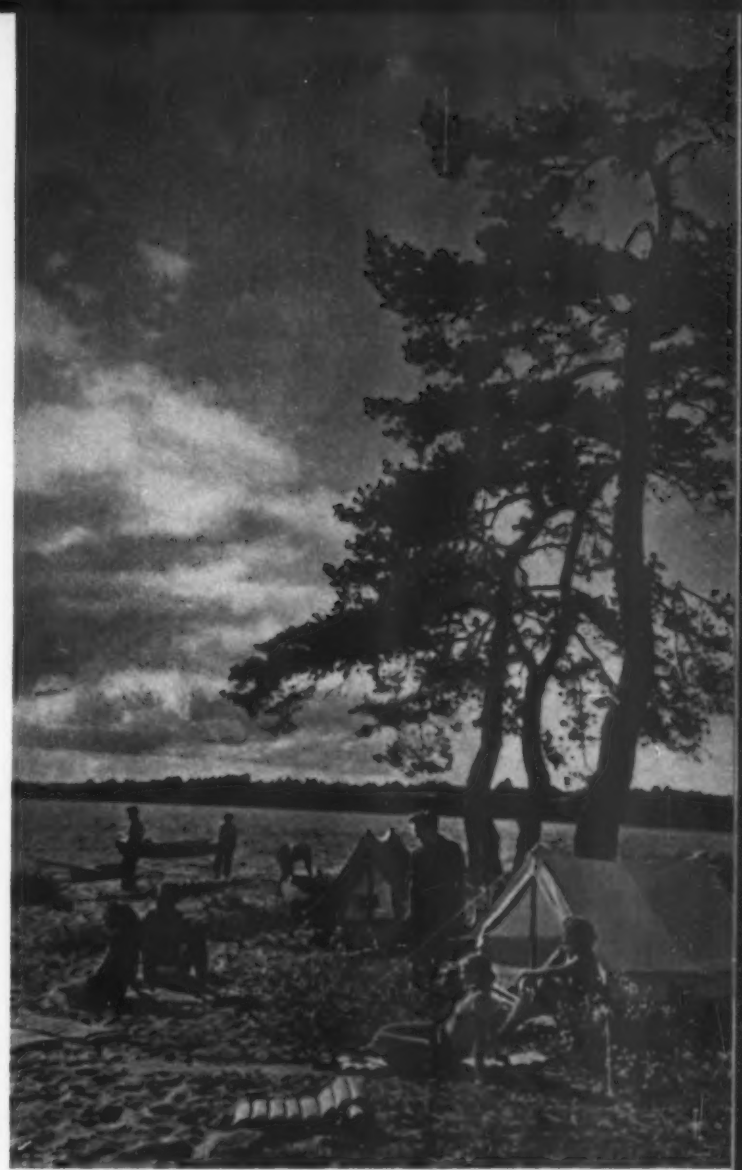
It's not unusual for people staying at Seliger for the first time to tell the camp manager a little apologetically: "If you don't mind, I'd rather have a nice quiet rest instead of going on the hike. I'm not as young as I used to be." The manager is a very understanding man. He smiles, pats the "rester" on the back and waits for him to return after he has seen and talked to tanned hikers just back from a two

or three-day trip. The question this time, a little sheepish, will be: "Any chance of getting a new hike organized soon?"

A vacation at Lake Seliger is arranged in much the same way as at any other resort. You obtain accommodations through your trade union. They are sold singly or in fours. Four friends, a small family, two pairs of newlyweds—any four people—can buy a ten-day accommodation for 130 rubles ($32.50 at the official rate of exchange) that gives them a boat, tent, knapsacks, axes, buckets, dishes, cups and the rest of the paraphernalia a camper needs. A day's hiking costs the vacationer 3 rubles 25 kopecks (80 cents), and for 7 rubles ($1.75) he is provided with food. So that for a very reasonable cost the camper is completely outfitted with everything from food to a 24-hour-a-day view of this surpassingly beautiful lake.

How about a vacation at Lake Seliger? The palms in the South will wait till next year.

There are spots where the water spreads so that you can barely discern the opposite shore and other places where the lake narrows down almost to boat width.

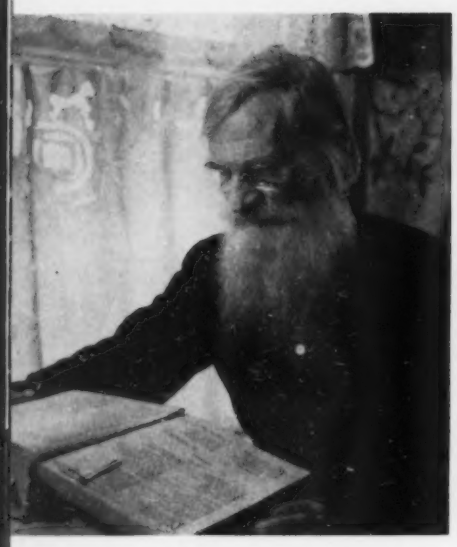


For 10 rubles a day—$2.50—the camper is outfitted with everything from food, boat and hiking gear to a beautiful view.

Once you paddle your canoe through the lilies that carpet the surface, you can never forget that serene lake in the forest.

When Old Age

By Mitrofan Derevnin
Editor of the magazine *Sotsialnoye Obespecheniye (Social Maintenance)*




ONE OF THE FUNDAMENTAL RIGHTS of a Soviet citizen, says the USSR Constitution, is "the right to maintenance in old age and also in case of sickness or disability. This right is ensured by the extensive development of social insurance of industrial, office and professional workers at state expense, free medical service for the working people, and the provision of a wide network of health resorts for the use of the working people."

There are no deductions made from the workers' paychecks for these benefits. They are financed entirely through the national budget out of funds accumulated from payments made by enterprises, institutions and organizations. The amounts expended annually are truly staggering. Last year alone the budget allocated 230 billion rubles for social and cultural needs, including pensions, grants, sick benefits, free medical services, maintenance of homes for the aged and related items.

This years' expenditure will be even larger, amounting to 244 billion rubles, and the amount to be spent in 1965, the last year of the seven-year plan, is estimated at 360 billion rubles.

Social Insurance for the Aged

The present old-age insurance system—it was revised in 1956—gives a pension to a man who has reached the age of 60 after a minimum 25 years of service and to a woman of 55 after 20 years of service. For those who work at particularly taxing or hazardous occupations the retirement age is five years less—55 for men and 50 for women. The length of service required is the same. For those who work underground and in hot shops, there is an especially preferential arrangement—retirement at 50 with 20 years of service. Preferential conditions are also provided for women who have borne five or more children. They can retire at 50 after 20 years of service.

A recent issue of the magazine *Sotsialnoye Obespecheniye (Social Maintenance)* carried an article by Maria Knyazeva, now a pensioner who is retired in 1,200 rubles a month. At the official rate of exchange, this is $300. Her husband was killed in the war and she had to raise a large family by herself. She was able to do it, she writes, thanks to such things as free education, free medical services and grants given by the government to mothers of large families.

She had 11 children, two of them were killed at the front. Three of the nine she has now are graduate engineers, two are at college, two are skilled industrial workers and two are still at secondary school.

Soviet citizens are entitled to old-age pensions regardless of their state of health or ability to work. Pensions run from 50 to 100 per cent of former earnings. The guiding rule by which the district pension offices operate is: the lower the earnings, the higher the percentage on the basis of which the pension is calculated.

There are, in addition to the basic pension sum, various supplements. For example, a person who has worked for 15 years uninterruptedly is entitled to a 10 per cent addition to his basic pension. There is also what is called a "family" addition — a 10 per cent supplement if there is one dependent in the family and a 15 per cent supplement if there are two.

Mikhail Sergeyev's pension allotment is more or less typical. He worked as a mechanic at a textile mill in the city of Ivanovo and recently retired. He gets 50 per cent of his former earnings—the amount is 1,044 rubles 50 kopecks—and an added 10 per cent—or 104 rubles 5 kopecks— for a long, uninterrupted service record. This brings his total pension to 1,148 rubles 55 kopecks a month.

Pensions for Farmers

Collective farmers and members of their families are also taken care of in old age but on a somewhat different basis than workers in nationally owned factories and farms.

Collective farmers who are war invalids and the families of collective farmers who were killed in the war receive government pensions. Others are pensioned by their collective farms. Each farm builds its own pen-

e Comes . . .

Soviet people consider their old-age security program one of the country's most significant achievements. The Constitution guarantees the right to maintenance in old age, sickness or disability. Men are pensioned at 60 after 25 years' service, women at 55 after 20 years' service.

sion fund by setting aside a certain percentage of its income. In the Russian Federation, the largest of the republics, the old age of some 6 million collective farmers is secured by 20,000 such funds. Their combined budget last year was in excess of 200 million rubles.

The system of retirement pay is established by decision of a general membership meeting of the collective farm. Individual pensions are allocated by the farm's general meeting, by its board or by the mutual aid fund.

In addition to pensions, members of collective farms who reach retirement age receive various privileges and services at the expense of their social insurance funds. For instance, the Pobeda Collective Farm in Rostov Region maintains a sanatorium at a vacation resort where pensioners can rest and get medical treatment. The Kuban Collective Farm in Krasnodar Territory spends an annual 1,300,000 rubles for its aged people on pensions and for the purchase of accommodations at vacation and health resorts. It grants pensions to men at 60 and women at 55.

Still Active After Retirement

Like able-bodied elderly people elsewhere in the world, many pensioners in the Soviet Union prefer to keep active and working even after they are eligible to retire.

A rather unusual movement has been developing throughout the country. Former mechanics, engineers, doctors and teachers in very considerable numbers are voluntarily sharing the rich background of their experience with the young people working at the plant or hospital or school where they were previously employed.

Some have formed into pensioners' advisory councils. They serve as consultants and their advice and suggestions have been proving exceedingly helpful. There are 27 such councils in Balashikha District of Moscow Region. They assist in a variety of ways. They explain the pension law provisions and help applicants to fill out their forms. Former teachers organize and conduct literary forums. Former gardeners, whether by trade or avocation, do community planting. Former engineers and builders check on the quality of housing construction and building repair.

Homes for the Aged

For those aged people with no families or close relations, homes have been founded where they live with people of their own years and similar interests. These old people have no financial worries, they live at the expense of the government. There are about 180,000 people in these homes for the aged.

Pensioner Yevgeni Vylegzhanin, a former woodcutter, writes this about the home he has been living in for three years now: "This is a real home for us old people. It is pleasant and comfortable. The living facilities are excellent and so is the service and attention we get. We have a fine library, movie room and TV."

There are a great many medical and welfare specialists in the Soviet Union who direct their research emphasis on the problems of old age and invalidism. In 1959 more than half a million invalid pensioners received free artificial limbs, hearing aids, and specially equipped automobiles.

Within the next three years the Soviet Union plans to revise old-age and invalid pensions upward. These are elements in a carefully conceived and wide ranging security program for the aged.

Two years ago a delegation of American social security workers visited the Soviet Union for a study of our social welfare program. The delegation leader, Charles I. Schottland, who was Commissioner of the U. S. Social Security Administration at the time, said that one could judge the economic strength of the country by its social security program. The Soviet citizen would not disagree with this statement. He regards the old-age program as one of the country's most significant achievements.

Trail Blazers to Abundance

By Pavel Lobanov
President, USSR Academy of Agricultural Sciences

TRAIL BLAZERS TO ABUNDANCE may sound somewhat poetical, but it is a factual enough denomination for Soviet scientists who have been revolutionizing agriculture in the USSR. Their work has made an economy of plenty possible, not in some remote future, but in a nearby and continuing present.

In the four decades of Soviet state, the entire character of the farm has been transformed. The marginal peasant holding that gave the barest kind of living has made way for the large-scale, richly productive collective and state farms. Primitive hand implements have been replaced by tractors, combines and other mechanized tools in the fields, orchards, dairies and livestock farms. Most chores are now done by machines and in the offing is complex mechanization and automation of all farm processes.

As a result, the farmer's labor has been lightened immeasurably and his productivity increased. In comparison with prerevolutionary times, half the number of farm workers now raise almost five times as much wheat for marketing, six times as much cotton and vegetables and several times more milk and meat.

In prerevolutionary times the trained agronomist was the rarity, even on the large estates. On the peasant farm, he was non-existent. Now there are 370,000 agronomists, zootechnicians, engineers and other working specialists, an average of about six per collective or state farm. A minimal seven years of schooling in the rural districts is compulsory and there are millions who go beyond that minimum to study mechanization and scientific farming.

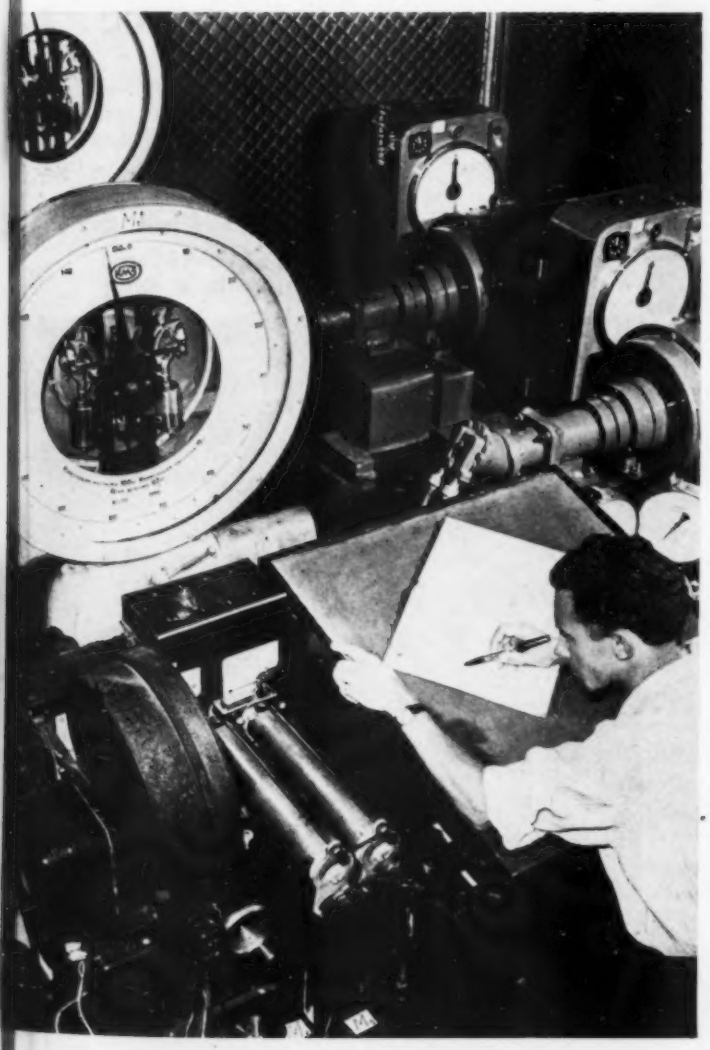
Soviet agriculture moves ahead without recessions or crises. It suffered a setback with the colossal vandalism and mass destruction of the fascists but made a quick recovery with the war's end. After 1953 when the Communist Party and the Soviet government drew up an extensive program for a sharp increase in agricultural production, the pace of farm development accelerated sharply. In the eastern regions close to 90 million acres of virgin and long-fallow land were turned to the plow. Within five years the country's yield of wheat grew by nearly 59 million metric tons, meat by almost two million, milk by more than 23 million and the yield of other farm products correspondingly.

The rate of Soviet farm development is higher with each passing year. The increase in gross farm production scheduled during the seven-year plan period is notably high — 1.7 times. Compare this with the gross output rise of 2.18 times for all the past 45 years!

A continued rise in output now is more dependent than ever before

Soviet research scientists and farm specialists have a close working relation. Biologist Trofim Lysenko (left) with collective farmer Terenti Maltsev who devised new high-yield growing methods.

Engineer Vladimir Fribus tests the hydraulic system of a tractor at the All-Union Institute of Farm Mechanization. Research is coordinated nationally by the USSR Academy of Agricultural Sciences.



on science. Further development will be based not nearly so much upon extensive farming—that is, enlarging the area sown—as upon intensive cultivation—to extract the maximum per unit of work per acre, to get the highest yield with the lowest expenditure of labor and money.

This type of intensive farming is predicated on a continuous supply of the latest machines to the farms and the use of the most advanced scientific growing methods.

Russian agricultural science has traditionally been tied in closely to practice. Therein lies its strength. The eminent naturalist Vasili Dokuchayev founded soil science as an independent study at the turn of the century. Plant physiologist Kliment Timiryazev, agrochemist Dmitri Pryanishnikov, and Academician Vasili Williams, all eminent theoreticians and research scientists, were strong advocates of applied science. Ivan Michurin, who earned the title "Transformer of Nature," took the speculation of Darwin and turned this theory for cognition of the organic world into a tool for changing it. "We cannot wait for favors from Nature. We must force Nature to give them to us." This declaration of Michurin has become the working slogan of Soviet scientists.

His researches enriched materialist biology. They gave scientists and practical farm workers an understanding of the laws of growth and the methods by which to control growth in order to improve existing varieties of plants and animals and to breed new varieties.

18,000 Farm Researchers

The Soviet government spares no funds for training scientific personnel or for expanding research facilities. Prior to the October Revolution in all of Russia there were only 44 experimental stations and 170 experimental fields staffed by 440 scientific workers. Now there are 800 scientific establishments with 135 large research institutes included, staffed by 18,000 people. This is aside from the research done in university laboratories.

Kazakhstan serves to illustrate a nationwide development. Before the Revolution the entire population was illiterate and for the most part the people were nomads. The chief occupation was cattle raising but on a quite primitive and unschooled basis. Now the Kazakh Republic has an agricultural academy of its own and the sons and daughters of these nomad breeders do advanced research in the academy's institutes. Uzbekistan, Georgia, Azerbaijan, Byelorussia and the Ukraine have set up their own academies of agriculture.

The Lenin Academy of Agricultural Sciences of the USSR coordinates research nationally. Under its immediate supervision are 36 institutes, each concerned with a special phase of work—soil science, plant sciences, animal husbandry, farm mechanization, etc.

There are also zonal research institutes that take into account the soil and climate of specific areas of the country. Besides, every region has its own experimental stations to help the collective and state farms boost crop and livestock yields.

The national and zonal institutes and the experimental stations all have large tracts of farm land and well-equipped laboratories. The institutes and stations of the USSR Academy of Agricultural Sciences, for example, use some 586,000 experimental acres.

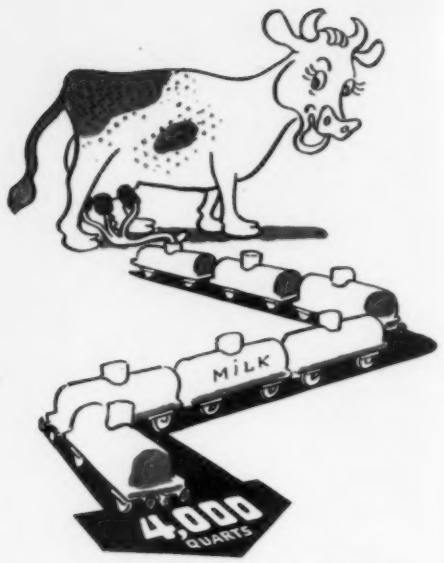
The large tracts make it possible to test new farm machines and new crop varieties and to try out new growing methods under actual field conditions. The stations also raise large quantities of high-grade seed, hybrid corn, fruit saplings, shade trees and purebred cattle for the state and collective farms.

Working actively with the research scientists in their quest for new techniques are many millions of practical farmers. These collective farm experimenters check the recommendations of the institutes to see whether they hold up under local conditions, and test and evolve new crop varieties and livestock breeds. This wide collaboration of researcher and farm specialist helps to narrow the gap between the two and makes for a good deal of cross-over.

For example, Stanislav Shteiman, a zootechnician at the Karavayevo State Farm, developed an original method for improving dairy cattle breeds. Cows of the Kostroma variety bred under his guidance give 2,500-3,000 gallons of milk annually, with the best giving as much as 4,000 gallons.

Maria Gnatenko, a Ukrainian collective farmer, who became famous for her high sugar beet yields, was sent to an agricultural school and is now working at the Sugar Beet Scientific Research Institute.

Konstantin Borin was a combine operator at a Kuban collective farm; now he does research and teaching at the Timiryazev Agricultural Academy.

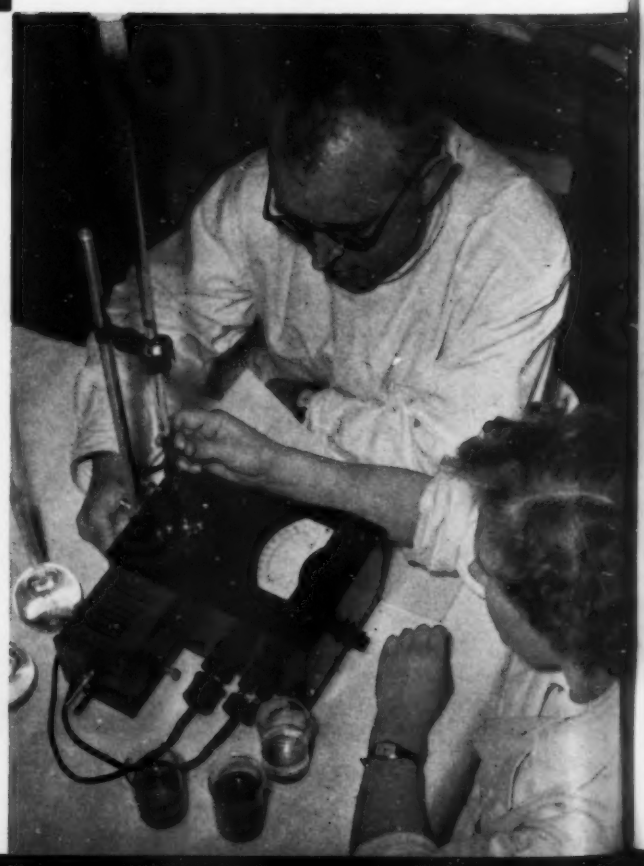


The best of the Kostroma cows, a breed developed by Soviet scientists, give 4,000 quarts a year.

Trail Blazers to Abundance

Radiophysics, ultrasonics, electron microscopes, isotopes are all used in farm studies. Lyudmila Yaglova checks tagged phosphorus distribution in a test plant.

Technicians analyzing soil samples from a Ukrainian collective farm with photoelectric device.



The orchards in Kalmyk Region now grow new fruit varieties developed by Ivan Michurin and his pupils. This area was nothing but barren steppe not so long ago.

Soviet-made self-propelled chassis with four-wheel drive to be used with various mounted implements.

The wool clip of Novaya Askaniya sheep is 30 kilograms (66 pounds) a year, seven times more than the original variety.

Terenti Maltsev, a field worker at the Zavety Ilyicha Collective Farm in the Kurgan Region, was elected honorary member of the USSR Academy of Agricultural Sciences for working out growing methods particularly suitable to conditions in the trans-Urals.

These few illustrations will give some notion of the work done by Soviet agricultural scientists. About 2,500 varieties of farm crops have been localized and are now cultivated in the USSR. More than 1,700 of the varieties were selected during the Soviet period and 1,600 additional new varieties are now being tested.

New Varieties and Breeds

Our selectionists created new high-quality varieties of Russian wheat with an even higher protein content and better baking qualities than the long world-famous older varieties. Fyodor Kirichenko, for the first time in farm history, raised a hard variety of winter wheat. Winter wheat belongs to the soft variety and softness was assumed to be its "inborn" quality. The Soviet selectionist showed otherwise. The winter wheat "Michurinka" he evolved is distinguished for its high vitreosity; it contains two to three per cent more protein than the soft varieties. Macaroni, vermicelli and other such products that cannot be made from the usual winter wheat flour are made easily from "Michurinka." This variety gives a high yield of more than 1.5 metric tons per acre.

Another important achievement of Soviet selectionists was the creation of a one-seed beet variety. In the ordinary sugar beet the seeds are clustered in one tight lump and, when planted, instead of a single shoot, the cluster grows several shoots in one hold. The time and hard work to get rid of the superfluous shoots are saved by the new one-seed variety.

Soviet selectionists have also raised varieties of fine-fibered cotton that give a higher yield than plants raised anywhere else in the world. They have also grown sunflower seeds with a 10-16 per cent higher oil content. The importance of this development becomes evident when we consider that each one per cent increase gives the country an additional 50,000 tons of vegetable oil.

In recent years the acreage sown to corn in the USSR has been increased almost sevenfold. In 1959 it came to 55 million acres. Within a period of only three to four years new high-yield corn hybrids were adapted to local conditions in various parts of the country, the production of double interlinear hybrids was organized on a national scale, and a system of hybrid seed production was evolved. At present, more than 50 research institutes are growing seeds of self-pollinating corn lines as well as elite seeds. In 1959 hybrid seed corn was already being sown on nearly 25 million acres.

Horticulture was largely developed during the Soviet period. The orchard belt was pushed far to the north and Ivan Michurin and his followers created many new varieties of apples, pears and other fruits.

Researchers developed dozens of new breeds of dairy cattle, sheep and hogs within a comparatively short period. Soviet zootechnicians worked out principles and techniques for large-scale artificial insemination, used generally now by cattle breeders in the USSR and elsewhere.

Soil scientists recommended tested methods for soil improvement and the cultivation of diverse field crops. They found better ways of using organic, mineral, bacterial and microfertilizers. They devised effective weed killers and insecticides, designed irrigation and swamp drainage systems and protected millions of acres of farmland against erosion with forest belts.

Soviet scientists have worked out scientific growing programs for the country's major farm belts. Now programs are being planned locally, for every collective and state farm, with account taken of individual soil and climate variations.

Completely Automated Farming

Scientists and engineers work with practical farmers on mechanization to raise labor productivity and reduce production costs. Plowing, preparation of the soil for planting, sowing, the inter-row cultivation of row crops and grain harvesting were almost entirely mechanized some considerable time ago. Now work is under way to improve on a set of machines evolved in 1957 for complex mechanization of all branches of farm production that can be used under widely varied conditions of soil and climate.

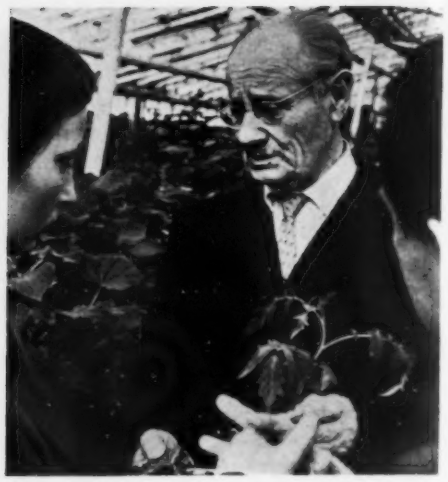
Machine builders and agricultural scientists have designed a self-propelled chassis, various tractor-drawn implements, high-speed machine and tractor aggregates and light and handy machines for loading and unloading. These machines are presently being manufactured and shipped to collective and state farms. Other new and ingenious machines are now undergoing tests—one is a universal seeder that plants at a speed of 12.5 miles an hour, about four times faster than the ordinary remote-control operated tractor.

Scientists have given a good deal of attention to the use of electric power in farming. This is an obviously important area of investigation in view of the fact that by the end of the seven-year plan period, the entire country will have been supplied with power. There is extensive research under way on the remote and group control of farm machines by use of automation and telemechanics.

All of the new instruments and techniques—the electronic microscope, isotopes, ultrasonics, radiophysics—are being looked into with a view to their use in researching hitherto closed areas. Biologists, physicists and chemists work together to investigate the processes that take place in living organisms, the relation of plant and animal to environment.

They are checking into the synthesis of proteins, carbons, fats and other organic substances in plants, animals and microorganisms. They are studying the relation between the intensity of photosynthesis, the very basic process through which the plant makes carbohydrates, and the spectral composition of solar radiation. The search for ways to raise

Working on Soviet farms are 370,000 agronomists, zootechnicians and other specialists—an average of six per farm. These are farmers taking extension courses at Timiryazev Agricultural Academy.



Academician Vitali Edelstein has developed improved high-yield varieties of vegetables.

Trail Blazers to Abundance

the coefficient of the absorption of solar energy by green plants has been very much intensified; it has a great deal to do with the quality and quantity of harvests.

Under study are such problems as raising the protein content of plants—protein is an irreplaceable element in nutrition; reducing ripening time and increasing the frost resistance of corn and wheat. Geneticists are investigating such biological phenomena as heterosis—the increased vigor or capacity for growth often displayed by crossbred animals or plants. Physiologists, biochemists and biophysicists are working on metabolism and the degree to which various factors affect the life functions of organisms.

The application of atomic energy to farm production is one of the very important fields of investigation. The Academy's research institutes have been experimenting with radiation effects on plants and microorganisms and insects. An apparatus that generates an intense field of gamma rays is operating at the Agrophysics Institute. It irradiates a large number of plants. A similar apparatus at the Plant Protection Institute is being used to investigate radiation effects on insects and microorganisms. In 1959 agricultural research with atomic apparatus was being carried on by 89 institutes and laboratories.

Honored Researchers

The Soviet men and women who do farm research rank high in public esteem. Veteran agronomist Vasili Yuriev has twice received the Hero of Socialist Labor award. The title was also conferred on biologist Trofim Lysenko, a member of the Academy of Agricultural Sciences. Selectionists Fyodor Kirichenko, Vasili Pustovoit, Pavel Lukianenko and others received Lenin Prizes. Academician Konstantin Skryabin, for his pioneering work in helminthology—the study of worms—was honored with both the title Hero of the Soviet Union and a Lenin Prize.

This spring, at a session of the Academy of Agricultural Sciences in Moscow, the work of its institutes was reviewed and its program of present and future research discussed. The goals had been outlined at the Plenary Session of the Central Committee of the Communist Party held in December 1959—to apply the most advanced findings of biology, physics, chemistry and the allied sciences to agriculture; to integrate the work of research groups even more closely with production; to raise the level of mechanization for both field crops and livestock.

The review was constructive, with some areas of work subjected to deservedly sharp criticism. Selectionist Vasili Pustovoit was critical of the lag in the seed production of some cereal crops. Honorary Academician Terenti Maltsev, the collective farm scientist, asked why the institutes were so remiss in their researches on techniques for growing cereals. These and other criticisms and proposals were subsequently incorporated into a seven-year plan for agricultural research drawn up by the Presidium of the Academy.

Our scientists have contributed to crop and livestock development in such underdeveloped countries as Iran and Afghanistan. Our findings are always available to researchers in other countries and we are glad to cooperate with foreign scientists and practical farmers in mutually beneficial projects.

As of the recent period, we have had closer ties with American scientists. Not long ago we received a visit from a delegation that included plant, soil and irrigation specialists, veterinarians, engineers and economists. We were happy to acquaint them with both our research and practical work at institutes, laboratories, experimental stations and collective and state farms in the Ukraine, Georgia, Uzbekistan, Kazakhstan, the Kuban, Siberia and other parts of the country. An informative exchange trip was made to American farm country by a Soviet delegation of agricultural specialists.

These contacts are of primary importance for scientists of all countries. The exchange of findings saves costly duplication in brain power and funds, for one thing. For another, it accelerates the rate of development of science internationally.

Scientists the world over face a common task—to help in every way possible to raise the standard of living of all people, to use the gifts of nature for all of mankind. The closer our scientific ties, the speedier progress we all make toward that great aim.

Agricultural scientist Konstantin Borin (right) was a harvester combine operator.

A newly developed variety of winter wheat has improved nutritive values.

KONSTANTIN PAUSTOVSKY

LYRIC POET OF PROSE

By Korneli Zelinsky

KONSTANTIN PAUSTOVSKY brings to literature a gift of his own original vision, his unyielding conviction and a great sense of his responsibility to the reader. "A single grain of truth kept from the people by the writer," he says, "is tantamount to a crime against his own conscience, something for which he will inevitably pay."

Throughout Paustovsky's writing one is aware of his intense sensitivity to everything beautiful and his love for his native land and people. "I would not exchange Central Russia for the most famous and magnificent landscape in the world." And indeed, Paustovsky sees the world as it is—magnificent!

Walt Whitman described the poet as a man who answered questions. And the works of any writer are his answers to the questions posed by his time. But the kind of answers a writer gives depends on his heart, mind, talent and on many other factors.

His answers may amount to complete detachment from the happenings of his own day. They may dress themselves in mystical phrases, put on the clothes of past millenia or disguise themselves in fairy tales. But the searching eye will always be able to find the clues that relate the writer to his own period.

In our own time, marked by great social conflicts, wars, revolutions, unprecedented discoveries in science and technology, people can no longer let their thoughts and feelings lie dormant or let themselves drift as though they were afloat on a quiet stream. In the stormy stream of today's history, millions and billions of human lives are swept along by the rapids and battered on the rocks. Our time demands a sharp eye, understanding of the processes taking place and courage to cope with surrounding life.

Not everyone, however, is born a fighter. Some gentle and lyrical natures are drawn instinctively to kindliness. They see the world painted in delicate water colors. They love man and all that lives. But this does not mean they are spiritual jellyfish, devoid of a moral backbone. The voice of conscience is strong in every man. Each of us is equipped with a mysterious "hearing aid" of the spirit, that sixth sense of perception which strengthens the individual so much.

Romance and Reality

Konstantin Paustovsky, as human being and as writer, is essentially a lyric poet who uses prose. His characters are the lyrical people, and he pictures them traveling the path of the great social revolution and learning on the way that its goals are their own.

His writing is characteristically romantic. But, explains the writer, romance is not incompatible with a fervent interest in the "coarser" side of life and a love for it.

"With some rare exceptions," he goes on, "a grain of romance may be found in all of reality and man's endeavor. This grain may be overlooked and trodden into the mire or, on the contrary, it may be given a chance to grow, to beautify and ennoble the inner world of man with its spreading blossoms. There is romance in everything and particularly in science and knowledge. The more a man knows, the keener is his sense of perception, the more intimate his bond with poetry, and the greater his happiness."

Konstantin Paustovsky is himself one of the thinkers and dreamers who opened their hearts to the storms of our century.

He was born in 1892 in Moscow where his father was a railway clerk. His childhood and youth were spent in the Ukraine, at first in a village and then in Kiev where he went through secondary school. He matriculated at Kiev University, then transferred to the University of Moscow, but his studies were interrupted by the outbreak of the First World War. During the Civil War he took his place among the defenders of the young Soviet Republic and, arms in hand, fought against the counterrevolution in the Ukraine.

His first story was printed in the Kiev magazine *Ogni* (*The Lights*) in 1911, when he was still at secondary school. This effort, he says, convinced him that he had insufficient experience at living, that he did not know people well enough. He stopped writing, therefore, and did not begin again until he had learned more about life.

Nikolai Gogol once wrote: "No writer should take a word lightly." That warning Paustovsky took to heart very early. His autobiographical novel *Long Years Ago* concludes with this speech made by a pharmacist to a young man who has dreams of becoming a writer:

"That's a great ambition but it calls for real knowledge of life, doesn't it? And you have very little of it, if any at all. A writer! He has to know so much that it's frightening even to think of it! He has to understand everything! He has to work like an ox and never chase after glory! Yes! That's how it is! There's only one thing I can advise you

KONSTANTIN PAUSTOVSKY

to do: go to people's homes, to markets, to factories, to night shelters. Go everywhere: to the theaters, the hospitals, the mines and the prisons. Everywhere! So that you'll be permeated by life as thoroughly as alcohol permeates a valerian drop. Let there be a real infusion! You'll be able to portion it out to the people then as a wonder-working balm. But only in specific doses!"

In his story *Voronezh Summer* Paustovsky introduces his readers to the little shepherd Fedya who imagines a writer to be a sort of legendary creature who must be gifted in every living endeavor, a sort of wizard who knows everything, sees everything, understands everything and does everything in the most expert way possible. The writer makes this comment:

"I did not want to rob the little village shepherd of his naïve faith, perhaps because his faith concealed the truth about real writing skill, the truth we do not always remember and strive for."

Learning By Living

It was only in 1926, after ten years of this began his search for experience, for the truth of living. He took a job as a streetcar driver, then as a sanitary worker, then as a foundryman in successive plants in Moscow, Bryansk and Dniepropetrovsk. He worked in the mines of the Donbas and at a boiler factory in Taganrog. Then he became a sailor, then a teacher of Russian literature, then tried a multitude of other trades. Always he was very much in the thick of life. Traveling far and wide through the Soviet Union, he visited the shores of the Caspian and Black Seas, went to Daghestan, the Caucasus, Murmansk, Karelia, the Crimea, the Northern Urals, the Baltic region and nearly all of Central Russia.

It was only in 1926, after ten years of this deliberate shifting of jobs and environment, that he began to write again. Defining the writer, he says: "It is imperative to know just what motives guide the writer in his work. The force and purity of these motives are directly proportionate to the recognition accorded the writer by the people, or to their indifference and even straightforward rejection of everything he has done."

Of himself, he emphasizes that his career as a writer began with the desire to see and know everything. The poetry of travel, mingled with the unadorned prose of reality—this was the alloy out of which his books were molded.

But the world of imagery conjured up by Paustovsky proved at first to be isolated from life, fluttering somewhere above the world of realities from which he had come. His early romantic stories and the novel *Radiant Clouds* had no echoes of the bustling Azov and Black Sea ports, none of the glowing heat and the sweat of the steel mills, no smell of the bilge of a ship at sea. The truths of living and the struggles for happiness were veiled by gilt-edged clouds, bookish vagaries and visionary romanticism.

As he matured as a man and writer, he gradually rid himself of the exotic with its pretense and its artificial sprightliness, its bathos, its indifference to ordinary, everyday people. But for a long time these tinseled passages kept turning up inadvertently in his stories.

His Turning Point

In his novels *Kara-Bugaz* (Romain Rolland was delighted with this book), *Kolkhida* and *Black Sea*, the writer showed that under socialism strength of character and consciousness of the individual's dignity could combine to create a reaction to reality that was lyrical. *Kara-Bugaz* was one of the first Soviet novels in which imaginative rein was so freely given to the romantic element so much a part of the daily life of construction workers—the dangers, risks and daring chances they take. He invests the life and work of people prospecting for quite unromantic sodium sulphate deposits with poetry, just as an earlier literature had done with the adventurers who prospected for gold.

Through his characters, Paustovsky argues with those who are devoid of imagination and incapable of a poetic view of the world. He shows them how the questioning mind of man and the imagination of science anticipate the future, the shores of a bay now lifeless in full bloom. At the same time he argues with those whose unreal, bookish romanticism is isolated from life. His disagreement with those who love their deserts untouched and virgin, his affirmation of the beauty of landscape transformed by man echo the view which Maxim Gorky held—that one of the chief tasks of the literature of socialist realism was to exalt the creative labor of man.

"I have always shared the lives of my heroes," Paustovsky writes. "I have always tried to reveal their true lineaments, the very essence of their characters, that uniqueness which is not always evident. Whether I have succeeded or not, I honestly do not know.

"I have followed my favorite heroes through all the circumstances of their lives—in sorrow and happiness, in struggle and trial, in victories and setbacks. At the same time I have loathed all human offal as intensely as I have loved all that is human in my most modest hero."

Paustovsky helps us to perceive what we do not ordinarily perceive, to see what does not readily come to our notice. These are the final lines of his narrative about the Meshchersk Forests: "At first glance, this seems a simple, undistinguished land under a drab sky. But the more you learn about it, the more you love this plain land, love it until your heart aches. And if ever I should be called upon to defend my country, I will know that I shall also be defending this bit of land that taught me to see and understand the beautiful. Dreary as this pensive, wooded land may be, I shall never forget how I loved it, just as I have never forgotten my very first love."

This was written two years before the outbreak of the Second World War in which Paustovsky served as a war correspondent. His lyricism and affection for his native bit of land merged naturally with his love of the whole Soviet land.

A Particular Genre

Paustovsky developed his own style and a particular genre that grew out of his lyrical perception of reality—a unique combination of sketch, diary, memoir and poetry.

Many of his books are diaries of our own time, his *Birth of the Sea*, for example. Much of the material in this novel about the construction of the Volga-Don Canal is informative but vividly alive, nevertheless. He writes about chemical and biological discoveries, new machines, the great scale of communist construction in the country—and everything seems to be alive. He shows us that poetry can be related to arithmetic and demonstrates that science can be translated into poetry.

Paustovsky has done a number of lives of noted men. "I have tried to find their common traits," he says, "the characteristics which brought them into the pleiad of mankind's outstanding figures." In addition to his separate volumes on the Russian painters Levitan and Kiprensky and the Ukrainian poet Taras Shevchenko, he has written on Lenin, Gorky, Chekhov, Pushkin, Gogol, Blok, Lermontov, Tchaikovsky, Vrubel, Mozart, Grieg, Maupassant, Hugo, Flaubert, Dickens, Poe, Charles de Coster, Hans Christian Andersen and Alexander Green.

The most important of his books in the last ten years are *The Golden Rose*, on the art of writing, and an autobiographical trilogy—*Long Years Ago*, *Restless Youth* and *The Beginning of an Unknown Age*.

In 1947 one of the chapters in the first volume of the trilogy published in the magazine *Vokrug Sveta (Round the World)* under the title *The Inn at Braginka* caught the attention of Ivan Bunin, expatriate Nobel Prize novelist living in Paris. Bunin did not know Paustovsky but he wrote to say that the story had pleased him greatly. Bunin called it "the best story in Russian literature."

The autobiographical trilogy concludes with a description of the headlong flight of the shattered remnants of the counterrevolutionary army from Odessa in 1920. Bunin, too, emigrated at the time. But to Paustovsky the farewell hoot of the ship's whistles sounded like a requiem for the people who had deserted their country.

"The steamers vanished in the fog. The North-East wind seemed to have turned a fresh page which was to record the heroic story of Russia, the extraordinary, long-suffering land we shall love to our dying day."

This fresh page eventually recorded the name of Konstantin Paustovsky, the lyric poet whose prose tells the story of man and his deeds. He is one of the best loved writers of the older generation. A six-volume edition, in 300,000 copies, of his selected works has been published recently and many of his 30 books have been translated and published abroad.

SNOW

By Konstantin Paustovsky

OLD POTAPOV died a month after Tatyana Petrovna moved into his house. Tatyana Petrovna stayed on with her daughter Varya and the child's old nurse.

The little three-room house was on a hill at the edge of town, overlooking the river. Beyond the house and the now naked garden gleamed a white birch grove. Jackdaws cawed there from morning till night, soaring over the bare treetops and calling down gloomy weather on the town.

After Moscow, it had taken Tatyana Petrovna some time to become accustomed to the deserted little town with its slant-roofed little houses and its creaking wicket gates, to the evenings when it was so still that you could hear the flame sputtering in the kerosene lamp.

"What a fool I was!" Tatyana Petrovna had thought. "Why did I leave Moscow, why did I give up the theater and my friends? I could have sent Varya to her nurse's place in Pushkino—there weren't any air raids there—and remained behind in Moscow myself. My God, what a fool I was!"

But now it was too late to return to Moscow. Tatyana Petrovna decided to give performances in the army hospitals — there were several of them in the town — and calmed down. She even began to like the town, especially when winter came and smothered it in snow. The days were mild and gray. The river did not freeze for a long time; vapors kept rising from its green waters.

Tatyana Petrovna had grown used both to the little town and to the stranger's house. She had grown used to the piano that was out of tune, and to the yellowed photographs of cumbersome armored coast guard ships pinned up on the wall. Old Potapov had once been a ship's mechanic. On the faded green baize of his desk stood a model of the cruiser *Gromoboi*, on which he had served. Varya was not allowed to touch it. As a matter of fact, she was not allowed to touch anything.

Tatyana Petrovna knew that Potapov had a son, a naval officer now serving in the Black Sea Fleet. There was a picture of him on the desk, next to the model of the cruiser. Sometimes Tatyana Petrovna would pick it up, examine it, and frown thoughtfully. She felt she had seen that face somewhere long, long ago, before her unsuccessful marriage. But where? And when?

The sailor gazed at her with calm, slightly mocking eyes, at though he were chiding her: "Well, how about it? Can't you remember where we met?"

"No, I can't," Tatyana Petrovna would reply very quietly.

"Mummie, who are you talking to?" Varya would call from the next room.

"To the piano," Tatyana Petrovna would laugh in answer.

In the middle of the winter letters addressed to Potapov began to stream in, all written in the same hand. Tatyana Petrovna stacked them up on the desk.

One night she suddenly awoke. The snow cast a faint sheen on the windowpanes. The gray tomcat Arkhip, Potapov's legacy, was napping on the couch.

Tatyana Petrovna put on her bathrobe, went into Potapov's study and stood there at the window. A bird swept some snow off a bough as it flew out of a tree. The snow floated down in a fine white dust and filmed the window.

Tatyana Petrovna lit the candle on the desk and sank into an armchair. She gazed at the flame for a long time—it was burning without even the slightest flicker. Then she carefully picked up one of the letters, opened it, and, glancing round, began to read.

"Dear Pa," Tatyana Petrovna read. "I've been in the hospital for a month now. My wound is not a very serious one, and it's healing well. Please don't start worrying and smoking cigarette after cigarette. Please!

"I often think of you," Tatyana Petrovna read on, "and of our house and our little town. It all seems far, far away, at the other end of the world. I close my eyes and see myself opening the gate and entering the garden. It is winter and there is snow on the ground, but the path has been cleared to the arbor overlooking the precipice. The lilac bushes are all covered with hoarfrost. Inside the house the stoves are crackling. There is a smell of birchwood smoke. The piano has finally been tuned and you have put the yellow candles—the ones I brought from Leningrad—in the candlesticks. The same music lies on the piano: the overture to *The Queen of Spades*, and *For the Shores of My Distant Land*. Does the doorbell ring? I didn't get a chance

to fix it before I left. Will I really see it all again? Will I really use the blue jug for my wash when I get back? Remember? If you only knew how I have grown to love all this! I guess it would surprise you to know that I used to dream about all this when the going was rough. Of course I knew that I was defending my country as a whole, but I also knew that I was defending the little corner dearest to my heart—you, our garden, our mischievous little boys, the birch groves beyond the river, and even our tomcat Arkhip. Please don't laugh and don't shake your head. I may be able to come home for a short leave after I am discharged from the hospital. But I don't know yet. Better not expect me."

Tatyana Petrovna sat at the desk for a long time, staring fixedly out of the window at the dawn spreading over the dark blueness outside. She was thinking that any day now a strange man, evidently a calm, courageous person, might arrive from the front, and that it would be difficult for him to bear the sight of strangers living in the house and to find everything quite different from what he had been looking forward to.

In the morning Tatyana Petrovna asked Varya to take a wooden shovel and clear the path to the arbor overlooking the precipice. The arbor was a ramshackle affair. Its wooden columns had turned gray and were overgrown with lichen. The doorbell Tatyana Petrovna fixed herself. It bore the amusing legend: "I hang at the door, so ring some more!" She rang the bell. It gave a high-pitched tinkle. Arkhip twitched his ears with displeasure, taking it as a personal affront, and stalked out of the entrance hall. To his mind the merry tinkle was obviously nothing short of outrageous.

Later in the day Tatyana Petrovna, flushed and vivacious, her eyes sparkling with excitement, brought an old piano tuner in from town, a Russianized Czech who tuned pianos when he wasn't repairing kerosene stoves, dolls and harmonicas. He had a very funny name—Nevidal. When he finished, he said that the piano was an old instrument but a very good one. Tatyana Petrovna was aware of that herself.

After he had gone, Tatyana Petrovna glanced carefully into all the drawers of the desk until she found a package of thick yellow candles. She put two of them in the candlesticks on the piano. In the evening she lit the candles and sat down at the piano, and the house filled with music.

When she finished playing and blew out the candles, a fir tree incense spread through the room.

Varya could not contain herself any longer.

"Why do you touch other people's things?" she said. "You won't let me, but you touch them yourself! You've touched the bell, and the candles, and the piano. And you put somebody else's music on the piano."

"Because I'm a grown-up," said Tatyana Petrovna.

Varya pouted and glanced at her with disbelief. At that moment Tatyana Petrovna didn't quite look like a grown-up. She was all pink and radiant and looked more like the girl with the golden hair who lost her glass slipper in the palace. Tatyana Petrovna herself had told Varya about that girl.

While still on the train Lieutenant Potapov had figured out that he could not spend more than a day at home. His leave was very short, and the trip was consuming almost all of it.

The train arrived in the afternoon. At the station the lieutenant learned from the stationmaster, an old acquaintance, that his father had died a month before and that a young Moscow singer and her daughter were living in his house.

"Evacuees," the stationmaster explained.

Potapov said nothing. He gazed through the window at the passengers in padded jackets and felt boots scurrying up and down the platform with teakettles. His heart sank and he grew dizzy.

"Yes," said the stationmaster. "He was a good man. Didn't live to see his boy come home."

"When can I get a train back?" Potapov inquired.

"At five in the morning." The stationmaster paused and then added, "You can spend the night with me. My old woman will give you some supper. There's no need for you to go home."

"Thanks," said Potapov. He went out, leaving his suitcase in the stationmaster's office. The stationmaster shook his head as he gazed after him.

Potapov walked across town to the river. Over it spread a blue-gray sky. A light snow was slanting down between sky and earth. Twilight was deepening. The wind blew from the woods on the opposite bank; it whipped tears into his eyes.

"Well!" said Potapov. "I'm too late. And now all this seems strange somehow—the town, the river, the forest, the house."

He turned and gazed at the distant precipice beyond the town. There they stood—the snow-covered garden and the house. Smoke was curling up from the chimney. The wind carried the smoke to the birch grove.

Potapov walked slowly in the direction of the house. He decided not to go in but only to walk past it, and perhaps enter the garden and stand for a moment in the old arbor. He could not bear the thought that strangers who cared nothing for him and his father were living in his father's house. It would be better not to see anything, not to torment himself—to leave and to forget the past.

"Well," thought Potapov, "you grow older as you go along and learn to see things with harder eyes."

He reached the house at dusk. He opened the gate carefully, but it creaked just the same. The white garden seemed to give a start.

A lump of snow fell rustling from a bough. Potapov turned round. The path leading to the arbor was cleared of snow. He went over to the arbor and put his hand on the rickety rail. In the distance, beyond the forest, the sky was tinged pink—the moon, evidently, was rising behind the clouds. He took off his cap and passed his hand through his hair. It was very quiet. Only below, at the foot of the hill, women were clattering their empty pails as they went to the ice hole for water.

Potapov leaned his elbows on the rail and clasped his head between his hands.

"How could it have happened?" he murmured.

He felt a light touch on his shoulder and turned to face a young woman with a warm kerchief on her head. She looked at him in silence. Snowflakes were melting on her cheeks—she had probably brushed past a bough.

"Put on your cap," she said softly, "or you'll catch cold. And come into the house. You mustn't stand here."

Potapov said nothing. The woman took his hand and led him along the cleared path. Near the porch he stopped. A spasm had gripped his throat and he could not breathe. The woman said in the same soft voice:

"It's all right. It'll soon pass."

She stamped her feet to shake the snow off her boots. The little bell tinkled and resounded through the entrance hall. Potapov took a deep breath.

He entered the house, muttering something in his confusion, and took his coat off in the hall. He smelled the birchwood smoke and saw Arkhip sitting on the couch, yawning. Near the couch stood a little girl with pigtails gazing with delighted eyes at Potapov. She was not looking at his face, though, but at the gold stripes on his sleeves.

"Come along," said Tatyana Petrovna. She ushered Potapov into the kitchen.

There was the blue jug filled with cold water and the familiar linen towel embroidered with green oak leaves.

Tatyana Petrovna went out. The little girl brought Potapov a cake of soap and watched him while he washed. Potapov still felt embarrassed.

"Who is your mummie?" he asked the girl, reddening.

He had asked the question just for the sake of saying something.

"She thinks she's a grown-up," the girl said in a mysterious whisper. "But she isn't at all. She's even a worse girl than I am."

"Why?" asked Potapov.

The girl did not reply. She laughed and ran out of the kitchen.

All evening long Potapov could not shake off the strange sensation that he was living in a dream. Everything in the house was just as he had hoped to find it. The same music lay on the piano. The same yellow candles sputtered as they illuminated his father's small study. Even the letters he had written from the hospital lay on the desk—lay there under the same old compass, where his father had always placed his letters.

After tea Tatyana Petrovna took Potapov to his father's grave, beyond the grove. A hazy moon had risen high in the heavens. The birches gleamed in its light, casting soft shadows on the snow.

Then, late in the evening, Tatyana Petrovna sat down at the piano. Running her fingers over the keys, she turned to Potapov and said:

"I have a feeling that I've seen you somewhere before."

"So have I," answered Potapov.

He looked at her. The candlelight fell slantwise, lighting up half her face. Potapov rose, paced the room and came to a stop.

"No, I can't remember," he said in a husky voice.

Tatyana Petrovna turned and shot an alarmed glance at Potapov, but she did not say anything in reply.

Potapov's bed was made up on the couch in the study. He could not fall asleep. Each minute in this house was precious, and he was loath to lose a single one. He lay listening to Arkhip's stealthy steps, to the ticking of the clock, to Tatyana Petrovna whispering something to the nurse in the next room. Then the voices died away and the nurse went out, but the strip of light under the door remained. Potapov heard the rustle of a page—Tatyana Petrovna was evidently reading. He gathered that she was sitting up so that she could wake him in time for the train. He wanted to tell her that he was not sleeping either, but he didn't dare call out.

At four o'clock Tatyana Petrovna quietly opened the door and called to him. He stirred.

"Time to get up," she said. "I hate to wake you so early!"

Tatyana Petrovna saw Potapov to the station through the sleeping town. They said good-by after the second bell. Tatyana Petrovna held both hands out to him.

"Write to me," she said. "We are almost relatives now, aren't we?"

Potapov said nothing. He only nodded his head.

Several days later Tatyana Petrovna received a letter from Potapov, written on the way:

"I hadn't forgotten, of course, where we met, but I didn't feel like talking about it back there, at home. Remember the Crimea in the autumn of 1927? And the old plane trees in the park in Livadia? A dimming sky, a pale sea. I was walking along the path toward Oreanda. On the way I noticed a girl seated on a bench by the path. She must have been about sixteen. She saw me, got up and walked toward me. As we came up to each other, I glanced at her. She passed by quickly and lightly; she held an open book in her hand. I stopped and gazed after her for a long time. That girl was you. I cannot be mistaken. I gazed after you and felt cold all over. It struck me then that a woman who could either ruin my whole life or make me happy had walked past me. I felt that I could have loved her to distraction, blessed her every step, her every word, her every smile. I knew then and there that I must find you at all costs. This is what I thought, standing there, but I did not move from the spot. Why—I do not know. Ever since then I have loved the Crimea, and that path where I saw you for only a fleeting moment and lost you. But life has been kind to me. I met you again. And if everything ends well and you should want my life, it is yours. Oh yes, when I was at home, I found my opened letter on father's desk. I understand everything and can only thank you from the bottom of my heart."

Tatyana Petrovna put away the letter and stared with filmy eyes at the snowy garden outside the window.

"My God!" she murmured. "I was never in the Crimea in my life, never! But can that make any difference now? And is it worth disillusioning him? Or myself?"

She broke into a short laugh and then covered her eyes with her hand. Beyond the window a lackluster sunset glowed faintly; somehow its light could not fade out.

A Memorable Tradition

By Boris Krylov *Historian*

THE FOURTH OF JULY, Independence Day, is a landmark not only in American history—it is a date whose memorable significance is recognized by freedom-loving people everywhere. When I visited Philadelphia a couple of years ago I made sure to stop at Independence Hall. Among the relics of this shrine I saw the Liberty Bell which proclaimed to the world that the American colonies had renounced their allegiance to the British Crown. I looked into the Declaration Chamber with its wax figures and felt as though I were present at the solemn moment when this charter of freedom was signed.

It is because of our own past struggles for freedom that we Soviet people have so strong a feeling of respect for the liberty and independence of other peoples. From our school days we are all familiar with the major events in American history, and we esteem the part played by such eminent men as Washington, Jefferson, Franklin, Lincoln and Franklin Delano Roosevelt.

Vladimir Lenin, the leader of our Revolution and the founder of our state, wrote in 1918 in a letter addressed to American workers that the history of the United States opened with one of the truly great, liberating revolutionary wars.

The American republic's government system was a challenge to the world. The monarchist states were hostile and threatened the young country. The good will of Russia played a significant part in keeping the newborn United States alive.

In a Moscow archive is the original of a letter dated September 1, 1775, that King George III of Great Britain wrote to Catherine II, Empress of Russia, asking for help to put down the revolt of the American colonies. And although monarchist Britain was certainly closer to the heart of Catherine than the American republic, she nevertheless replied with a polite but resolute "No," moved by definite national interests.

Shortly afterward the Russian Empress proclaimed an armed neutrality. Many other European states followed suit and this did a great deal to help the Americans in their fight for independence.

The friendly act moved Thomas Jefferson to seek out mutually advantageous trade relations with Russia. Shortly afterward he exchanged notes with Czar Alexander I. This resulted in Russia's recognition of the young United States, and normal diplomatic relations were established. The first American ambassador to Russia was John Quincy Adams, who was subsequently elected President of the United States.

During the War of 1812 when the United States was faced with new trials, Russia again showed good will by offering to act as mediator. The United States returned the service to Russia in a later conflict, the Crimean War of 1854-1856, with its friendly neutrality and its offer to mediate a peaceful settlement.

During the Civil War Russia refused to intervene against the North, as it was expected to do by some European states, but made an open gesture of friendship in behalf of the Federal government. In 1863, when military operations were at their height, two Russian squadrons cast anchor off American shores—in New York and San Francisco.

At this crucial period in American history the sympathies of progressive Russia were with the North and with the Great Emancipator. The Soviet people, Nikita Khrushchev said when he visited the Lincoln Memorial in Washington, will always revere the memory of "this most humane man of his time."

There are many instances, some comparatively little known except by historians, of mutual support demonstrated by one people for the other. While I was studying the reaction of American public opinion to the first Russian revolution of 1905-1907, I was pleasantly surprised to learn what a storm of protest "bloody Sunday"—the shooting of unarmed workers in St. Petersburg on January 22, 1905—evoked from Americans. Sympathy toward the Russian revolution manifested itself in the setting up of "Friends of Russian Liberty" societies in various parts of the United States. Such a society in California, of which Jack London was an executive committee member, published the *Russian Review*. This paper called on Americans to help the Russian people in their fight for democracy.

At the University of Wisconsin I was shown one of the leaflets put out in the United States at the time. It was an angry protest against the massacre of the St. Petersburg workers by the czar—a moving expression of moral support for the Russian revolution.

Nor are these demonstrations of sympathy confined to the distant past. The traditional friendship between our peoples was manifest in 1933 when President Franklin Delano Roosevelt, a far-sighted statesman, rose above the curent prejudices against Soviet Russia's political system and moved for reestablishment of normal diplomatic relations.

During World War II, when the fate of the world hung in the balance, our countries were companions-in-arms. Together we fought and defeated the common enemy—Hitler's fascism. I was in the United States at the time and saw the sympathy and help which the American people extended to us through the Russian War Relief committees they organized. Soviet-

Soviet children, like these in Moscow School No. 537, study United States geography and history.

David Armand is one of many Soviet scientists who are doing research in U.S. geography.

Architect Yuri Sokolov was an exchange student last year at Washington University in Seattle.

Moscow School 537 pen club carries on a lively international exchange, to judge by this mail.

The Foreign Literature Library in Moscow gets all the current American books and magazines.

American friendship has truly been sealed in common struggle for common ideals.

More often than not our national interests have coincided, rather than been opposed. That may very well be due to the similarity of our national characters which Walt Whitman wrote about in his famous Letter to the Russians. Our countries and our peoples, he said, so distant and so different at first glance, were very much alike in many respects. Written eighty years ago, the poet's words are just as true for today.

We Both Want Peace

When Nikita Khrushchev spoke in Los Angeles he made the same evaluation. "The peoples of the USSR and the USA," he said, "have much in common. The meetings I have had convince me that the American people value and love peace. I have discovered many other traits that bring our peoples closer together. They are industry, the quest for the new, the urge for knowledge and technological progress, and lastly, such good human qualities as frankness, a sense of humor, good will and love of country."

The people in the Soviet Union and their government are unanimous in their friendly feelings for the American people. Quite recently, at the Paris press conference on May 15, Nikita Khrushchev said:

"When I was in the United States, I talked with many Americans there—ordinary people, wealthy people, workers and farmers, statesmen. And I would say that most of the people I talked to have left me with good, even pleasant memories. They are people like people anywhere, they want to live in peace.

"Naturally, we differ in our ideological views. But this is no cause for a military clash. I do not agree with the views of the people who uphold the positions of capitalism, while the advocates of capitalism, who do not recognize communist ideas, disagree with me. This is a matter of conviction, and not a cause for conflict, let alone war. . . .

"What we want is the best friendly relations with the United States. We do not have any disputes with the United States which could not be settled by peaceful means."

America's achievements in science and technology, as well as American history, economics and literature receive a good deal of attention in our schools and colleges.

When I lectured at the University of Wisconsin my audience was surprised to discover how much work we in the Soviet Union do in American studies. At the History Department of Moscow University, for example, some 20 graduate theses in recent years have been done in American history.

Our History Institute, affiliated with the USSR Academy of Sciences, does extensive research and publishes articles, monographs and books on American history. A two-volume history of the United States, covering the colonial period to the present days, will soon be on sale.

Many American books are published in the Soviet Union both in the original and in translation. They give us an insight into life in the United States, past and present. We have published works by 235 American authors in a total printing of 95 million copies. Last year alone 93 American books appeared in a total printing of 8,300,000 copies.

Such names as Jack London, Mark Twain, O. Henry, Upton Sinclair, Theodore Dreiser, Ernest Hemingway and John Steinbeck are very familiar to Soviet readers. The novels of Jack London have been published 694 times in more than 20 million copies in 32 of the languages spoken in our country.

Soviet theatergoers have wide opportunities to get acquainted with American playwrights. In the past years they have seen the plays of 28 American authors staged by our theaters. Dramas of Lillian Hellman and Arthur Miller are among the most popular in the country's repertoire.

All this speaks for the fact that Soviet people are very much interested in things American and want to know more about life in the United States. The more we learn about each other, the fewer the misunderstandings that are likely to arise. We are pleased that so many more Americans have become interested in the Soviet Union and that cultural exchanges between our two countries have broadened.

As a result of the first exchange agreement concluded in January 1958 we had reciprocal visits of delegations in science, industry, education, sports, music and other performing arts.

Our audiences were glad to be able to welcome the Philadelphia and New York Symphony Orchestras, the Holiday on Ice troupe and the many American soloists who played for us. In exchange Americans heard many of our musicians and crowded the performances given by the Bolshoi ballet and other dance groups. The number of exchange visits in 1958-1959 increased 25 times over compared with 1954 and the number of participants increased 50 times over.

In November of last year a new agreement, signed for the period 1960-1961, provided for still broader exchanges. This academic year 35 Soviet and American students attended the universities of our respective countries, and next year the number of exchange students will be increased to 80.

In accordance with the agreement our scientists will be cooperating in research on the peaceful uses of atomic energy and our medical men will be fighting together against such killing ailments as cancer and heart disease.

Our Moscow Symphony Orchestra and the Georgian Dance Ensemble have already made their American tours and captivated large audiences. Performances of *My Fair Lady* in the Soviet Union, also part of the new exchange agreement, had a most enthusiastic reception.

Exchanges designed to acquaint Soviet and American students and scholars with the history, geography and industry of our respective countries are well under way, to be followed by reciprocal visits of scientists, historians, economists, philosophers and people in other fields of study.

All of this helps us to build and develop mutual understanding and thus promote better relations between our nations. We Soviet people are engaged in peaceful construction and we wholeheartedly want to live in peace and friendship with the American people and all other nations of the world.

A group of 27 Soviet exchange students spent this last academic year at various American universities. Leonid and Nelli Gulyev (at the left), shown with librarian Frederic Anderson, a specialist in Mark Twain, did graduate work in American literature at the University of California.

Soviet Students at the University of California

YOU CAN UNDERSTAND how excited we were when our jet TU-104 took off last September and headed westward. Good-by Moscow, so long everybody for a year! A short stop in Brussels, a change of planes and the Atlantic was beneath us. Our distination was New York.

There were twenty-seven of us, a Soviet exchange group of graduate students and young scientists who came to the United States last fall. New York received us with the familiar noises and the bustle of a huge city and with an unfamiliar heat wave—95 degrees! The combination of unaccustomed heat and humidity left us wilted and made sightseeing impossible. Nevertheless we managed to pay our respects to all the drugstores on Broadway so we could "be sociable" and "have a Pepsi."

The next morning seven of us were on a plane again and in five hours we landed at the San Francisco International Airport. We were in California, beautiful California of which we had read and heard so much. Our alma mater for one academic year was to be the University of California at Berkeley.

Did we find it hard to adjust to this new country and to new people? We must confess that we did not find it easy.

We were grateful to the Chancellor, to the Foreign Student Adviser, to the Deans and Faculty Advisers for their help and guidance in our study and research problems. But we were confronted with a thousand and one other small everyday problems connected with meals, shopping, transportation and the like. And there our new student friends came to our aid. We were pleased to find that some of them had studied Russian.

A word about our language difficulties. We learned our English at home, as the reader may gather from this effort. Here in the United States we listened to the radio and TV commercials and for a while the English spoken puzzled us. We learned which cold drink "is so much more *refreshable*," and what tobacco "tastes good *like* a cigarette should."

This was not the English we had studied at school. But we had to admit that our school English tended toward the British rather than the American, and we were inclined to agree with our English instructor at Berkeley when he said that the American English must be accepted in its own right with all its divergencies in grammar, pronunciation and spelling. We were therefore glad to hear of the contemplated exchange of language teachers between our countries.

Most Americans we met accepted us as people, though we did meet a few who tried hard to find something unusual about us, something characteristic of persons specially chosen to engage in propaganda work. We hope they weren't too disappointed to find that we were very much like themselves, that we brought nothing more with us than the friendly feelings of our people toward Americans, and the earnest wish to live in peace and to have as much interchange in science and culture as possible.

"Learn from Each Other"

We were glad to find out that most American young people shared our point of view. The relationship we had with them is best expressed by the motto "Learn from each other," which is becoming more and more characteristic in relations between our peoples as we proceed with the exchange program. That is how we all functioned.

We were often asked what we were getting from our stay in the United States.

The members of our group have quite a lot in common since we all were born and grew up in the same country. But, since we come from various parts of the Soviet Union and are different people, we have different tastes and interests and follow different specialties. We are just about as different, let us say, as New Yorkers are from San Francis-

cans. As it happens, the youngest of us is a happy father of two children and the oldest—a confirmed bachelor. Mikhail Bulanin did research in infrared absorption spectroscopy. The days were never long enough for him so he stretched them through the night. But busy as he was, he took time to share his findings with American students.

Our humanities couple, Nelli and Leonid Gulyev, demonstrated with their studies in literature that friendly ties between Americans and Russians date from an early period—that Mark Twain was the first major American writer to visit Russia and write in his heartwarming way of the Russian people.

Alexander Maslennikov studied American types of digital computers as applied to structural engineering problems. Soviet housing and industrial construction plans, he said, to a great degree depended upon the rapid solution of these problems.

Vladimir Karelin, a hydraulic engineer, appreciated the opportunity to study American hydropower facilities at the excellent Engineering Library at Berkeley. Yuri Tairov researched for new semiconductor materials. Nikolai Ilyinsky worked on the application of semiconductor devices in industry.

Thus, all seven of us found our year at the university valuable. We hope that our experiences will justify very much more scientific and cultural contacts between our countries.

What Americans Said

What was the feeling of Americans we met about student exchanges? One of the university officials who welcomed us soon after we arrived, said: "I wish I were your age and could go to your country to study, the same as you are doing here. This exchange is a wonderful thing."

A young lady who was majoring in Russian literature, when she received word that she had been approved as an exchange student for the coming academic year, exclaimed: "How happy I am to go to Moscow. Now even your cold winter does not frighten me."

A history teacher we met who hoped to go to the Soviet Union as an exchange student to finish his Ph.D. dissertation in Russian history, expressed his regret that a colleague of his now studying in Leningrad was applying for a second year stay. "If he gets it, it's the end of my dream. I hoped to study in the Soviet Union but I wanted even more to see how you live and work."

At a meeting of the World Affairs Council of Northern California in San Francisco we participated in a discussion of the Soviet educational system. Such formal discussions were frequently arranged by student and public organizations. But informal discussions arose spontaneously in auditoriums, laboratories, cafeterias or swimming pools. They touched not only on education but on problems of peace and disarmament, politics and history, art and literature, marriage and family life.

We considered these discussions another important value of student exchange. In spite of our differences in ideology, in spite of the fact that the discussions often ended in heated arguments, they contributed a great deal to better understanding and mutual respect.

Our residence in Berkeley was at International House, the university dormitory designated principally for foreign students. Situated on the slope of a green hill it has a magnificent view of the Golden Gate and the San Francisco Bay area. It is a perfect place for study and relaxation.

The Soviet students at Berkeley made many friends at the University and outside. They were guests at American homes and made guided tours of farms and factories. Here they visit the IBM plant.

Through International House we often were invited to be guests of American families and in this way we made many new friends outside the university. We always felt that Americans were very friendly to Soviet people, that they were deeply interested in our country and its achievements in industry, science and culture. Our talks usually ended on this note: "Our two great nations must live like good neighbors."

Sometimes these invitations included trips to industries and farms in the Bay Area and other parts of California. We visited the Frank J. Dutra Company and the Cloverleaf Farms in eastern California and were taken on guided tours of the Shasta Dam, the Ralph Smith Lumber Company and the Mountain Copper Company in northern California, the IBM plant in San Jose and Standard Oil in Richmond.

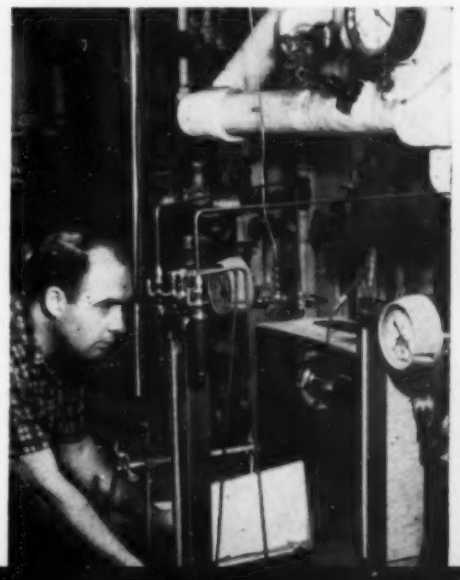
We met businessmen, engineers, farmers and factory workers and talked over such questions as private and public ownership of the means of production, the mechanization of production processes, and the distribution of income. Although our positions on some of these matters did not altogether coincide, there was no disagreement with the idea that trade and cooperation would be profitable for both sides.

Sometimes the Soviet-American exchange program is called the bridge between our countries bringing our peoples closer to each other. We crossed this bridge and saw that it is well designed. It is still narrow now, but it can become a wide turnpike—the road of peace, friendship and cooperation in all spheres of life between our two great nations.

Now that we are about to leave the United States we are happy to be able to say that we have many more friends than when we came. Our grateful thanks to the American students and all the American people we met for their hospitality.

Soviet Exchange Students at
the University of California
Mikhail Bulanin
Nelli and Leonid Gulyev
Nikolai Ilyinsky
Vladimir Karelin
Alexander Maslennikov
Yuri Tairov

Vladimir Karelin, a graduate hydraulic engineer, studied American electric power facilities.



Mikhail Bulanin (at the right) worked on infrared absorption spectroscopy studies at Berkeley.

My Fair Lady in the Soviet Union

After the much-encored first night performance in Moscow the American cast and the Soviet stagehands at an impromptu banquet.

The actors spent the time between shows seeing the sights. They visited factories, clubs and theaters. Here they are at the Kremlin.

By Grigori Yaron

People's Artist of the Russian Federation

NOT FOR A MOMENT as I was watching *My Fair Lady* staged by our American guests did I lose the sense of charming freshness of the show. I know that the musical has been running since 1956 and that it could very well have "dried up" during this time, but it obviously has not. The entire talented cast has managed somehow to preserve that very exciting first night feeling.

Operetta composers have tried more than once to put Shaw's plays to music. Oscar Straus wrote *The Chocolate Soldier* based on *Arms and the Man* at the turn of the century, and in the twenties Leo Fall did *The Street Fairy* based on the famous *Pygmalion*. Both these operettas, however, suffered from the same fault. The composers had simply stuck in musical numbers, and this, far from advancing or enriching the action, only retarded it.

Librettist Gabriel Pascal and lyricist Alan Jay Lerner worked along different lines with *My Fair Lady*, and unquestionably the right lines. By introducing new scenes—ones that Shaw's play did not have—they were able to exploit the very human theme, the satirical possibilities and the peculiar flavor of *Pygmalion*.

Their play is intended for music. It gives the composer the chance not only to write numbers but to develop situations musically—the kind of requirement the classics of opera and operetta demanded from their librettists. And Frederick Loewe made fine use of the opportunities. His music is melodious and high spirited. It bubbles with gayety and wit and throbs with warm lyricism. It is built up of interesting sharp rhythms, ingeniously harmonized and very effectively arranged for the orchestra.

Moss Hart's staging is in excellent taste, evident throughout in the *mise en scene* and in the simple dignity of the acting. In spite of the sheer theatricalism of the show and the conventionality of a number of its painted stage settings, it is a highly credible, highly realistic performance. It has the feel of truth, even more important in operetta than in other kinds of theater.

Oliver Smith has done excellent sets, getting very splendid effects through very simple means. His decor has a very diverse character, and this without resorting to clashing styles or cheap gaudiness. The

The company gave performances in Moscow, Kiev and Leningrad. The tenor of the newspaper reviews was unanimous: "They gave us a superb evening of theater."

impression we get is of an integral wholeness about the show. Cecil Beaton's costumes are very colorful. The dances are most ingeniously choreographed by Hanya Holm.

All actors in the company, without exception, move easily and naturally from speech to song and from song to dance. They sing musically and they obviously have learned the not-too-common art of reciting to musical accompaniment. None of them steps out of character to produce high notes, each of the actors keeps his stage portrait intact, and the show moves along at a good rhythmic tempo. Part of the credit goes to conductor Franz Allers. Under his baton the orchestra provides an excellently timed accompaniment.

Lola Fisher deserves the clamorous applause she always gets for playing so convincingly all the gradations of Liza Doolittle's metamorphosis—from the East End flower girl with her atrocious Cockney accent to the fair lady with her gracefully musical speech. She handles this very difficult role with humor and warmth, particularly in the "dreamy" number "I Could Have Danced All Night."

It is very difficult to play the role of Alfred Doolittle for a foreign audience that will inevitably miss many of the lines, but comedian Charles Victor does a most expressive job. His dress, mimicry, changes of voice, dances and fine touches of acting are all so naturally and convincingly funny that every one of his gestures brings a laugh. "With a Little Bit of Luck," one of the best numbers in the show that he sang with Charles Penman and Eric Braserson, evoked calls for an encore at the performance I attended.

Other actors—Edward Mulhare as Professor Higgins, Robert Coot as Colonel Pickering, Reed Shelton as Freddy Einsford-Hill, Margaret Bennerman as Mrs. Higgins—also deserve high praise for the characters they create in this delightful show.

My Fair Lady was performed in Moscow, Leningrad and Kiev. The audiences were invariably enthusiastic, and the press comments were most favorable.

Anatole Heller, manager of the company's European tour, had this to say at a press conference: "The Soviet tour of *My Fair Lady* has shown again how important and useful the program of cultural exchange is. Without the aid and cooperation of the Soviet and American governments this tour would not have been possible." The star Lola Fisher said: "We were received everywhere with exceptional cordiality and friendliness. This is my first trip to Europe and it has made a deep and lasting impression on me. I hope I shall be able to come to Moscow again in the future."

Life must be shown in process of continuous revolutionary development if it is to be shown truthfully

—says SERGEI GERASIMOV, Motion Picture Director

REALISM and the SOVIET FILM

THE MOTION PICTURE, like literature, speaks to millions simultaneously, to their hearts and minds both. Our art belongs to the people, and this vests us with great responsibility. We Soviet film workers are always aware that we are part of our people, people who have only recently emerged from the darkness of czarist oppression and who are starved for enlightenment. We feel it is our artistic and civic duty to help our emancipated people to fulfill their quest for knowledge. Our films serve the noble cause of aesthetic education, disclosing all the riches of the national genius. We contribute to the country's advances, portraying new features in our life which are coming into being as we move along the road of progress.

Our ideological opponents are inclined to complain that we are not free in our art, that our approach is purely functional, that we look on art as nothing more than a political function geared to the political functions of the state.

It is hardly necessary to show how prejudiced this view is. There is this qualification, however—our people are building a communist society, and, being part of our people, we film workers are also active builders of communism. We are deeply concerned with the influence our work will have in moving people toward our common goals.

We are always conscious of our children to be reared with a passion for justice, with respect for man, his labor and his ideals. We are always conscious of the new generation in its formative years whose beliefs and credos are taking shape before our eyes. We are always conscious of the great potentials of the arts, especially the motion picture art. While the perverse metaphysics of the extremists in painting, literature and music is usually confined to the privacy of the fashionable salons, a moral or artistic obscenity on the screen will have a destructive impact on millions.

Our Approach to the Arts

Our approach to the arts is based on socialist realism, which is the resolution of many years of debate and controversy by artists of opposing trends. Our theory and practice are the very antithesis of nihilism which in its essence is a denial of everything regardless of cause and effect, a denial for the sake of denial.

Nihilism likes to use different names to mark one or another anti-realistic trend. It is much inclined to speak of its own progressive role and to negate realism as an outworn and outdated mode of reflecting life in art. It will often point to the seven-league strides of science and technology and claim that this progress allegedly refutes the very nature of man.

What nihilism forgets, however, is that man remains himself, that he keeps his original likeness, his original means of perception. Friendship is still sealed with a handclasp and love still hungers for consummation and children are still born as they were millions of years ago. And what is more important, men continue to grope for mutual understanding, keep trying to unite the creative forces for good—more than they ever did before.

We do not deny anyone the right to experiment. But, by the same token, we cannot deny an adult's right to grab at the hand of a little "experimeter" banging away at an unexploded bomb with a hammer. Certainly any reasonably sane person in such circumstances will at least try to warn the curious little "experimeter" of the consequences and if he doesn't listen, stop him.

This may seem like an exaggerated comparison but when I look at some of the currently fashionable films draped in craftily suggestive novelties designed to touch off smutty giggles, I feel as though I were looking at something as threatening as an unexploded bomb in a child's hands.

There are some motion picture people who do not seem to be aware that life and art both act on each other. Art not only reflects life but at the same time helps to shape it. Think of the film which dredges only in life's polluted and filthy water. With its hundred-fold amplification, it can serve up a very dirty brew indeed to its audiences. More than once have film makers perpetrated this moral crime with no pangs of conscience whatsoever.

Italian Neo-Realism

Real originality in art means to show the truth of the world as it is. The truth has keen sight and subtle hearing. It perceives the bright and the sublime but it also perceives the gross and the sordid. It never confuses the two, never mistakes the one for the other, or the purpose of each.

The truth measures all of life's phenomena by the yardstick of conscience, the conscience of the people. This is also the criterion and the developmental focus for realistic art. Only realism has the virility to probe into the profound processes that go on within human society, the strivings of man for happiness and fulfillment. To cite an example I can refer to the influence which Italian neo-realism has had for some years now on the film. The movement has won supporters in many countries besides Italy, which attests to its vitality.

Certain principles of Italian neo-realism are very much part of the modern trend in film making—exploration of character, detailed background, a narrative that develops naturally out of character and background. These are all elements typical of any realistic trend and therefore to be found in the realistic schools of countries that are widely variant.

Continued on page 60


THE HEIGHTS
THE UNMANAGEABLE

REALISM and the SOVIET FILM

But it must be kept in mind, in spite of these common factors, that Italian neo-realism is in large measure a national phenomenon, inseparable from the history, the social and political life of the country and the development of the national culture. Essentially, it is a portrayal of Italian life with its many-sided content.

Most of the followers of neo-realism in other countries, however, have done no more than adopt its secondary features—its emphasis on natural dialogue and its selection of the everyday and the commonplace for filming. But these are only the external attributes of the neo-realistic film.

Some attempts were made to use the neo-realistic approach in Soviet films, too, but they met with an adverse critical reception. The argument was that we cannot ignore the most basic of social, economic and political fundamentals that differentiate the Soviet citizen from his Italian counterpart no matter whether he is worker, farmer or intellectual. This difference in background makes the life of people altogether different. Only naïveté and immaturity, it was argued, could account for the neo-realistic tendencies of some Soviet screen writers and directors.

In some cases neo-realism took rather curious turns. A young film director was shooting a picture on a modern theme drawn from the lives of Soviet railroad men. The railroad where the action was to be laid had switched from steam to electric power. The locomotive engineers were neatly dressed and their locker rooms were bright and clean and new looking—they had been built not long before.

This didn't suit the director who was bent on giving his material a "romantic" twist. He insisted that an old type of steam locomotive be rolled out. He smudged up both the engine driver and the dispatcher's office, spread all sorts of "elegant" trash around the locker rooms and put up some lines to hang wash on—the traditional wash lines of the poor section of Naples borrowed for his film. These were the alterations he made to "adjust" real life to his conception of life to be depicted in the film.

Socialist Realism

We definitely reject such an "adjustment." Does this imply that we are to depict only the bright and pleasant aspects of life? Nothing of the sort! We have been taught by the Communist Party not to hide our shortcomings. This is what gives our socialist system its strength. This is what has helped us to evolve our creative method in the arts—socialist realism.

Our method can be defined briefly by this phrase: to give a true picture of life in process of continuous revolutionary development. But the conception of truth may be interpreted very widely. Our truth is in the way people live and labor, in the relation of man to his society. Our truth predicates a society of individuals joined in a collective whose guiding law is "man is a friend to man"—not "eat or be eaten."

When we speak of the "true picture of life" we mean the courageous and objective depiction of various conflicts that may arise between the individual, with all the peculiarities of his nature, and the surrounding life which shapes his character and behavior.

We say that life must be shown "in process of continuous revolutionary development" if it is to be shown truthfully. Revolutionary development of mankind's life is a fact of history, whether we like it or not. If we want to see truth in history, we must regard it as a process of unceasing, active and revolutionary struggle by mankind for a better society.

The major difference between our method of socialist realism and that of critical realism is the strongly affirmative character of socialist realism. Critical realism with its great artistic range has given us profound insight into human nature. At its best it is a most valuable instrument for probing life's painful sores. But socialist realism has gone further. It has cleared the land plowed up by critical realism and seeded it with the humanistic ideals for which mankind has suffered so much and shed so much blood.

Who will say this is not a great and noble work? Who will say this denies in any sense the motivating force that actuates all progressive artists—to lighten man's burden through art and to bring him within closer reach of happiness?

What Is Happiness?

And what, in the final analysis, is this happiness that we strive for through our art? Does it consist only in the limited achievement of the individual? In better food, better clothing, better housing?

True enough, we strive to acquire these things for every man. But we believe that the greatest happiness of anyone who is growing spiritually derives from his free creative labor, his active participation in the surrounding world so full of mysteries and riddles waiting to be solved, the contributions he makes to the general prosperity and happiness.

But, some people may question, aren't you losing sight of the hard realities, the truth of life you speak of? Isn't this romanticizing—at a time when more than half of mankind still suffers from hunger, cold and lack of shelter?

Not at all! The latest products of our film studios show clearly enough that we are not star gazing. Such excellent films as *The Fate of a Man*, *The Cranes Are Flying*, *The House I Live In* and *The Ballad about a Soldier* set in the period of World War II demonstrates that we have attained to a deeper understanding of realism and of character motivation. So do films like *The Communist* and *Tales of Lenin* set in the earliest years of Soviet power; the best screen adaptations of Soviet and prerevolutionary Russian literature; and such excellent portrayals of the present-day life in our country as *Poem of the Sea*, *The Heights* and *My Dear Man*.

The heroes in these film have one characteristic in common—they are always aware of a new epoch dawning, an epoch in which people are losing their fears and suspicions, are proffering hands to each other in friendship.

Life is changing before our eyes. Here are new circumstances that create new rhythms. Here are new machines, new wonders of science and technology, all aimed to make life easier and better. And all of this in its composite inter-relationships cannot help but influence our aesthetic perceptions and prompt fresh aesthetic forms and solutions. The stream of life is ever flowing, ever regenerating, and the realism that reflects this living stream is itself developed and enriched in process.

New Young Talent

A heartening phenomenon in Soviet film art during the past two or three years has been the advent of a large group of young and talented screen writers, directors and cameramen. Most of them are graduates of Moscow's Institute of Cinematography and are 30 to 35 years old. The older among them are veterans of World War II and bring the grim experiences of those years to the studios.

Valentin Yezhov, one of the most mature men in this group, distinguished himself as the author of *The Ballad about a Soldier*. The film is based on episodes from the war and was produced by director Grigori Chukhrai, well known for his film *The Forty-First*.

Script writer Budimir Metalnikov and director Lev Kulidzhanov were responsible for the film *My Father's House*. Daniil Khrabrovitsky wrote the script for *Everything Begins with the Road*, a picture directed by Vilen Azarov. Writer Tatyana Sytina made her screen debut with the sparkling comedy *The Unmanageable*.

Scores of other young film workers could be listed with the same spontaneous and wide-ranging talent. They move about the country a great deal and visit remote districts in their search for interesting material. They quickly find a common language with the people they meet and do not hesitate to make their decisions. In short, they are endowed with all the fine qualities which youth gives man.

The successes won by Soviet films in these past years were achieved by realistic portrayals that foreshadow the developing Soviet man. Films like *The Communist*, *The Cranes Are Flying*, *Spring on Zarechnaya Street* moved great audiences with their characterizations of men and women with dignity, strength and high moral purpose.

The thousands upon thousands of letters sent to film writers, actors, cameramen and directors, the film fan conferences and film festivals held in all parts of the country—all show what great influence Soviet films exert in shaping the views of the new generation, in building new social relations. Accompanying this great influence is a great responsibility, and of this Soviet film makers are ever conscious.

Galina Yegorova, USSR Champion in the 100-meter butterfly with 1:12.2.

Valentin Kuzmin, USSR Champion in the 200-meter butterfly with 2:23.0.

Leonid Barbier chalked up 1:04.0 in the backstroke event at the 1959 Spartakiada.

Vide Daniunaite, 15-year-old hopeful, clocks 3:12.5 in the 200-meter breaststroke event.

Albert Antonyan has a physical checkup after winning the 200-meter breaststroke event at the 1959 Spartakiada.

Vyacheslav Borodchak at 15 is a junior national record-holder.

sharply in the two or three weeks before an important competition. Nothing g o o d can come out of this "method."

Compare the training schedules of leading Soviet swimmers and the Australians, the winners of the Sixteenth Olympics. Soviet swimmers almost never carry the kind of load that the Australian Murray Rose, for example, regularly does in his training sessions—ten 400-meter heats and each in 4 minutes 50 seconds with only a 5-minute interval between the heats. Maybe that's the answer to the question about showing record-breaking time in competition.

Now for Soviet prospects for the Seventeenth Olympics in Rome. The world's best-ten lists for 1959 include Soviet men swimmers in almost all Olympic distances. Many capable youngsters have come to the fore, especially from among the women.

Much is expected from Larisa Viktorova, 16-year-old Leningrader who is closer than all other Soviet swimmers to world record marks in the 100- and 200-meter backstroke. She won the gold medal at the last Spartakiada with an excellent 1:12.4 in the 100-meter.

In the men's backstroke Leonid Barbier of Kiev will be fighting for a prize-winning place. He shows consistent international class form. He chalked up 1:04.0 in the Spartakiada.

In the men's butterfly Valentin Kuzmin of Moscow stands well up with the world's best. He won the national title and bettered Soviet records in the 100- and 200-meter by a sizable margin.

The men breaststroke swimmers make up the largest and best balanced group for possible Olympic honors. In the group are European champion Leonid Kolesnikov of Moscow, Albert Antonyan of Batumi, Estonian Heldur Laurits and Vitali Goncharenko of Nikolayev.

We pin our greatest hopes on the 4 × 200-meter freestyle relay. Our swimmers placed third in that event in previous Olympics.

But in spite of the handicaps I mentioned —perhaps overmentioned—the showing of Soviet swimmers in Rome is likely to be better than it was at Melbourne four years ago.

A GOOD CATCH

—See page 36 for story on Summer Vacation