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NORTHERN NEIGHBORS

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Peace — Work — Freedom — Equality — Friendship — Health & Happiness for all Peoples!



Recognize anyone? In center photo is Anatoly Tarasov, world-famed coach of USSR National Hockey Team, with his daughter Tatyana, who was with her dad on the ice of 1972 Olympics. She was then a skating star. But she abruptly left sports herself to become a skating coach. Her pupils have cleaned up, especially in ice-dancing. At left: Tatyana with World Junior Champion Gennadi Kaskov. Present Senior World Champs are also pupils of Tatyana. And she's director of All Stars ice-dancing company. Her husband, Vladimir Krainev, is a well-known concert pianist, and he also arranges music which Tatyana uses for her dancing teams.

Knock Out Star Wars?

Radiation Can be Good

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Facing What Went Sour In Their Powerful Communist Party
PAGE 18

NORTHERN NEIGHBORS

The Magazine of Socialism in Action

GRAVENHURST — ONTARIO — CANADA

Canada's authoritative, independent magazine, reporting the U.S.S.R.

This is our 38th year publishing reliable, exclusive news of Soviet developments.

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OUR EXCLUSIVE BARGAIN IN SPACE

Not many papers (or any?) can offer you the "deal" you're getting in this 'NN'.

First, on Page 8, there's a fact-packed summary of what Socialism has in mind up in orbit. Then, Page 9, you see a factual run-down (no joke intended) of what USA has in the way of Space-problems.

Much research went into these condensations. When I was finished, something struck me. If you were able to buy single copies of the science-technical-economics journals on which Pages 8-and-9 are based, you'd have to pay many times the 10-months Sub price of NN!

Haven't checked, but maybe every month there's one or another page here that would cost more than your Sub, to prepare.

WOULD YOU LIKE TO DO ME A FAVOR?

It's not really my idea. You'll find it in "K.I.s" letter on our Readers'

page.
Very simple. Just pick up your phone and call your local library. Tell the librarian you'd like to read Dyson Carter's latest novel, "This Story Fierce and Tender." But it's around \$26 and you don't feel you can afford it. So if the Library would get it, you and many others could enjoy it. They can order it from Northern Book House or from their usual supply company.

Now, if you'd do that, maybe you'd be good enough to write and tell me what reaction you got. Would help us in planning.

Incidentally, the Pacific Tribune carried a wonderful review of that book, written by Ben Swankey. In their April 8 issue.

FUNNY THING ABOUT FLYING SAUCERS

Right over on the page facing you here you'll find a report of a real "flying saucer" seen by thousands of Soviet people.

Yes, there was an explanation for it: not a visitor from space but a laser "gun" for farmers.

But you've probably guessed that nobody, but *nobody*, believed the explanation for a long time, even after many repeat "visits" by the plane that looked like a saucer.

The whole story is very interesting, so see for yourself.

WHY NOT JOIN OUR EXCLUSIVE GROUP?

For once we're repeating an NN Tour advertisement. See back cover of this magazine.

You can still get in on this Group if you act fast. Even though it leaves in September (lower air-fares) you'll have to reserve a place right now.

Remember: only 35 people can be accommodated on this unique "Four Socialist Countries" trip.

People are flocking to the USSR. A travel-agents' conference in Moscow drew a record number of over 700 companies!

NN's Quote-of-the-Month: "The times when the imperialist USA used to run things in this country are gone forever. We made the correct decision. We worked hard over these 27 years. That is why our country has grown stronger, our economy steadier, our experience vaster, our Party more militant and our people more mature and close-knit, more confident, more revolutionary." (Fidel Castro, at the Congress of the Communist Party of Cuba.)

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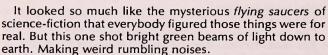


You can help NN gain new Readers. No real effort on your part, and no cost to you. Simply send us names and addresses of likely subscribers.

You'd be surprised to find how many intelligent people "react" well to NN if they see it. We'll mail them copies if you'll send us their names. But, if you prefer, our "Four People Plan" still works. Send us four names-and-addresses, plus Five Dollars, and we'll send those people NN not just once, but three times, three issues.

Farming with a Flying Saucer

People out in Tashkent (capital of Uzbekistan) saw this thing at night. Heard it. Couldn't guess what it was.



This flying saucer didn't come from Space. No enemy sent it. Dr. Dmitry Vlasov, a physicist, tells us that the disturbing "aircraft" has a name: Chaika.

Actually the thing is an aircraft, a Soviet AN-30. It carries a laser ray gun. This is what shoots those frightening green beams down to earth.

But the "flashes" that people see are from the cells of plants. When the laser rays hit growing things, they send out light beams. Those beams reveal how things are going with living things out in the farm fields.

Reading the "print-out" on board the plane, scientists can tell whether a plant is too hot or cool; short of moisture; harmed by salty irrigation water. This vital information then goes to the farm management.

Big advantage: the laser can tell what's going wrong long before crops suffer damage.

Chaika has been tested out in Kazakhstan's vast grain prairies. It can instantly report on the fertilizer situation: too little or too much. It will also detect early damage to grain

Cotton fields, in the Ferghana Valley, likewise are being "monitored" for growth and health.

The device can be set to detect almost any kind of plant damage or disease, long before those problems would be noted by inspection on the ground. And the cost, per acre, is almost negligible.



Very similar "flying saucers" are roaming the oceans today. The laser beams can pick up, with extreme sensitivity, all kinds of pollution in the water. "Pollution maps" are already in use, warning of troubles ahead.

Oil on the sea surface has a distinctive pattern, in the laser's "eyes". Oil from a leaky tanker is different from petroleum seeping up out of an oil field.

USSR's Oil and Gas Institute can now discover oil and gas deposits no matter how deep they are, by detecting (with the laser) the very faintest seepage coming up to the ocean's surface.

And now similar equipment has proved to work on land. Even when geologists report no chance whatever, of an oil reserve, the "flying saucer" sometimes records strong evidence of very deep rich deposits.

And not only oil. Some big metal ore bodies have been discovered this way. Also medicinal hot springs.

Chaika and its lasers have also been put to work measuring, very accurately, the depths of seas and oceans. The laser ray can do this even in "impossible" situations; like when the ocean is covered with a very thick ice layer.

None of this is scientific "theorising." All over the USSR the atmosphere (especially in cities) is constantly "monitored" by laser patrols; some working on the ground, others mounted on planes.

The future of this work is almost unlimited. Mainly because reflected laser rays can be adjusted to record *single molecules* of a substance, *among billions*.

Now these monitors are working up there in orbit.

Some people turn green with fright at the very mention of radiation. Truth is that radio-biology is a science that uses radiation to suppress some living things (germs, cancer cells) and to stimulate both plants and animals.

Right now, special radiation devices are stimulating the growth of valuable food crops. Changing the heredity of plants and farm animals (for the better). Producing new valuable plants.

In USSR grain yields increase 10 to 15 percent after seeds are radiated. Vegetables are up 30 percent. The most valuable food crops are ripening earlier than ever.

Best of all: radiated crops have far superior nutritional value; more proteins, fats, vitamins.

Latest work by the Institute of Biophysics in Moscow and biochemists in Tashkent show that radiation of hen's eggs can produce excellent results: especially by increasing the egg-laying ability of treated chicks.

As a rule, heavy doses of rays are harmful, but very small (controlled) radiation "prescriptions" are giving really valuable results (especially nutritionally).

Even stronger radiation is paying off big in farming. As far back as 1925 the Soviet geneticists Nadson and Fillipov showed how some rays can change the heredity of plant cells in beneficial ways. And the truth is that today no less than 50 major crop varieties, grown in USSR were created by doses of radiation.

In world agriculture the total now exceeds 300.

Perhaps the most spectacular success was scored by geneticists at the Siberian Institute of Crop Selection. They produced the now famous Novosibirskaya-67 Spring Wheat. Now grown on over **five million acres** this wheat has high yields plus highest quality.

Radiation literally saved the grape industry in Soviet Moldavia. Hundreds of millions of saplings are now "rescued" from formerly deadly pests. Their "Kvant-1" equipment, unequalled anywhere else, handles five to seven million graft-plants per year. Controlled radiation does what no other methods achieve.

Latest: highly-poisonous industrial water-discharges (pollutants) can be radiated to give quality fertilizer.

Truth-of-the-Month

Lucky are we to live in this stormy age

The greatest of Revolutions is transforming our world today

The Socialist Revolution that took place 70 years ago was a very distant thing for most people. Indeed, only many years later did the events of 1917 begin to get into the news, and in a distorted way.

Today, Socialism's tremendous strength is being mobilized in a new revolutionary way: to liberate that system from trends and problems which are foreign to it.

This will directly influence the entire world, our world of Capitalism included. We're fortunate to be alive right in the storm that's going to sweep our planet.

The Soviet people tell you candidly what they're up

They produce more steel and fuel than anybody else; but they use it wastefully.

They are near the top in grain production; yet they have to buy millions of tons to feed their livestock

They have free health care and more doctors than anywhere else; yet their medical services are often inferior.

They lead the scientific world in space exploration; yet their simple home appliances are rejected by buyers.

The stark truth is that none of these failings can be blamed

The cure is revolutionary

Many progressives are asking: "Won't they damage the reputation of the Socialist system if they go on exposing all these faults and problems?"

This attitude overlooks what is happening in USSR.

They are re-making their system productively, speeding its advance with the science-and-technology they have.

They are sweeping their political system clean of all its bureaucracy and conservatism that's alien to Socialism.

They are liberating their artists, scientists and all creative

workers from stifling "decisions at the top".

They are mobilizing tens of millions of working people to carry through this "re-structuring" of Socialism, eliminating the weaknesses that developed gradually in the USSR over some 25 years.

These changes are revolutionary because they are being carried through consciously by the entire people, bringing an astonishing rise in public determination to make their system live up to its limitless potentialities.

And already we see this happening right before our eyes.

Is "revolution" too strong a term?

Everyone knows that back in 1917 the Soviet Revolution featured many great changes. In this upheaval the system of Capitalism was overthrown. Impartial observers today regard this as the most profound revolution in human history. Then how do we speak of another revolution in the same country now?

First, see what it is not.

Today's Soviet Revolution is not restoring Capitalism, not giving to wealthy individuals the enormous property now owned and operated by Socialism, the people.

This is a fundamental truth of the situation in USSR now. Indeed, this truth is what inspires 280,000,000 Soviet people to revolutionize the use and development of their economic, social, political system, which they and they alone

They're making revolution on a revolutionary base.

It's never happened before on this Earth.

Another unique feature of Soviet "re-structuring" is that, unlike their first Revolution, which could not be "mapped out on paper" before it happened — no people had ever before liberated themselves from capitalist rule — the great changes they are now undertaking are being planned in greatest detail by their most capable people, notably the Soviet working-class.

Can they do it?

Can they revolutionize their revolution?

The main fact overlooked by sceptics and ill-wishers is something familiar to readers of this magazine ...

The system built by the Soviet people in the past 70 years possesses altogether tremendous powers. On this "background" their new Revolution is unfolding.

Millions of individuals "taking over"

The true nature of Socialist Democracy is now becoming apparent, for the first time, to millions.

Their press, radio and TV continually remind them that they own Socialism.

They are their system!

One of the main faults they now must overcome is failure to work and behave in general as owners should and must.

Private owners, capitalists, bosses, know full well how to "exercise their democratic rights". Power over the people. Hire and fire and pile the billions.

Owners of Socialism have long failed to make anything like full use of their unique direct democracy. For many years they relied on leaders and managers who replaced democracy by decrees.

All that's disappearing now into the past.

In every corner of the USSR people are learning how to stand up to everything and everyone they don't like.

You can't repeat this too often: it has never before happened. And we're living on the same planet where it is happening right now.

Actually this is happening to the world

Intelligent people are aware of the existence of many Socialist countries, allies of the Soviet Union. Something revolutionary is happening there, too.

These allies are joining together in a new way. No longer is there one "leader" and many "followers". All Socialism's peoples are becoming equal.

This is already producing marked changes in economic relations. From now on the "law" is going to be founded on mutual advantage and mutual aid.

It's clear that this is going to work one way: to the marked advantage of Socialism in all the allied countries.

Above all, revolutionary Socialism requires that the most advanced countries assist those who are catching up. This will be fascinating because quite a few of these countries excel all others in some respects; so their high levels will be available to all.

Especially in high-technology fields.

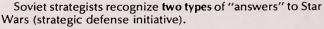
While the "rival" nations in Capitalism go from one savage attack to another, the allies in Socialism will be linking for revolutionary new advances.

Thank your stars, or whatever, that we're going to live inside revolutions coming in every direction.

Could the Soviets wipe out

STAR WARS?

Millions of people in the West have wondered if the Soviet Union might have any "answers" to USA's science-fiction armaments. No doubt. "NN" consulted their technical journal "Energy: Economics, Technology, Ecology" for a factual picture of the situation.



Active methods include destruction of Star War units out in space, above the Earth, or ground-based. Also, new missile systems to penetrate (evade) such units. And eliminating USA's elaborate electronic control systems.

Passive methods include all kinds of "decoys" to draw away USA attack-systems. Plus "reinforced" missiles capable of getting past any of the assault systems without being damaged.

At present, destroying Star Wars "units" is considered to be the most effective counter-measure, designed to remove or sharply reduce USA's "defense" systems, especially those sent up into space.

USA scientists estimate that 320 "orbiting stations" would be required to make Star Wars work. This would need hundreds of "Shuttle" flights (to launch the stations). Simply not possible for many tens-of-years, because those stations must be heavy enough to be equipped with huge laser ray devices.

Destruction of control stations (in space or on Earth) would effectively wipe out orbiting assault stations of whatever type, and this does not require any devices not known already.

Science-fiction varieties of weapons include "energy rays" capable (in theory) of wiping out anything USSR might send up. It's clear that all such weapons will require extremely elaborate control systems. These could be disabled with no great difficulty, using systems that are now better understood than those "energy rays" which are still on paper.

One of the favorite "energy" guns is a super-powerful X-ray laser. To make this laser-ray work, a "small" nuclear blast is required. So the system would have to orbit hundreds of nuclear bombs waiting to be set off by Washington's firing-button.

To counter-act such a threat USSR would simply orbit, side-by-side with those X-ray bomb craft, simple cosmic "mines" ready to wipe out any or all of the bombs.

There is also a simpler version of this "protective" spacemine network. It wouldn't be launched into space at all, but would just as effectively keep those X-ray stations in the sights of powerful laser guns. Based on the ground, these guns would be easier to mount and as big (powerful) as required.

Obviously they would not be susceptible to counterattack since they'd be "securely" based on Earth.

One very interesting system that attracts attention in USSR military circles is the use of clouds of small objects, put up into space, and orbited at high speed. One such object, the size of a coin, at a speed of 15 KM per second, can easily penetrate very heavy armor-steel.



Soviet strategists have even considered the menace to the Earth, if hundreds of nuclear-powered USA X-ray units were destroyed by **blowing them up**. Other means of putting them out of action (lasers producing "impulses" but not explosions) would avoid this extremely serious menace.

However, most of the counter-weapons being studied in the Soviet Union are rated lower than the many ways of wiping out Star Wars control units. By its very nature Star Wars will require extremely "concentrated" electronic control centers. "Communications" on Earth and between offensive objects in space will be highly susceptible to interference.

Already USSR has developed "jamming" systems which can put out of action not only radio but also radar, optical channels, infra-red and laser beams.

Since the weapons-systems being developed by Washington for waging Star Wars are intended to deliver catastrophic blows against USSR, then it's quite clear that Soviet strategists must plan for adequate counter-measures. They foresee new strategic nuclear forces that will enable them to deliver devastating retaliatory strikes, making a mockery of the USA's Hollywoodish schemes for "eliminating" Soviet military systems.

One little-publicised Star War strike force is based on a fleet of X-ray laser units. They would be launched into orbit just moments before Washington hurled an all-out extermination attack on USSR. The X-ray units would be launched from submarines kept cruising around the coasts of USSR. To Soviet authorities, it would be quite easy to track such subs continually and wipe them out when the critical "launch time" was approaching.

As you may have noted, the media have cooled towards Star Wars recently. One of its prominent pushers is Anthony Battista. But he told Congress that a big danger in building up Star Wars is "the prospects of committing suicide by its early deployment".

Indéed, both USA and its allies are very uneasy about pushing Star Wars now. Shultz had to go on TV promising that everybody concerned would be "consulted" before the system is deployed.

The plans have all been "put on hold" perhaps?

Possibly Washington has given some thought to the Soviet verdict about the dollar costs of preparing Star Wars. Moscow has publicised Mr. Gorbachov's assurance that the expense of such programs would not bankrupt Socialism. But as for Capitalism. . . .

First, the Star Wars offensive strategy is many, many times more costly than the retaliatory defensive measures which the USSR would carry out.

The difference could well be 50-to-1.

The key threat may turn out to be economic, not military.



Badly wounded in the war, Saodatkhon worked for years in the notorious Krupp coal mine death-camp at Baguniya, and survived. He decided to stay in Germany at war's end.

After 30 long years of Separation

Mr. and Mrs. Saodatkhon Agzamov at their Golden Wedding Anniversary, re-united with their family.



In 1951 he went to USA. After 20 years he wrote home and his wife invited him back. He was the first Uzbek "defector" to return to his native land.



Now he is curator of a museum in his native town of Kokokand. His Golden Wedding coincided with the birth of their eighth granddaughter.



Granddaughter Iroda likes to have him show his knowledge of English. He corresponds with Uzbeks all over the Western world, invites them to return.



They've made movies of him and he's been on TV and everyone can see that he's happy.

Socialist Democracy – it's not the same as ours

Our media tell us that the Soviet people are "waking up" to the advantages of democracy. Really? Let's not argue. Just get down to cases.

In the year just past slightly more than 10,000 officials (what we'd call executives) in Soviet enterprises were fired by decision of trade unions.

The "company" didn't fire them, union membership did. The Engineering and Instrument Workers Union tells us that firing is "the last resort". Other means of discipline are always tried first. Such as fines. For violating safety rules or other vital Socialist labor laws.

In the EIW Union alone workers tried everything, but 76 executives didn't "reform", so the Union applied to have them fired. In the end, six officials got "another chance" but 70 lost their jobs. All the Union's members took part in this action, voting at quite a few meetings.

In one case the trouble wasn't at plant level. Unions at two plants (Centrolit Foundry and Hydroapparat) traced serious production upsets to one individual quite high up. Unions went up to the Ministry itself, documented the case, and the official was given the bounce. Interestingly, besides his poor work, this character was severely criticized for his undemocratic attitude to the workers.

The Vorgashorskaya Coal Mine is up in the Far North. Came the time when the retiring manager had to be replaced. As happens more and more often now, the "appointment" of a successor was put up to a general meeting of 400 delegates representing all the miners.

Rank-and-file had proposed **two men** for the job. Engineer Bobrov, whose section had long been producing over a million tons of coal per year. And Chief Engineer Igolkin, who had kept the entire mine up near the top in productivity, for years

The meeting heard speeches by 19 miners and engineers.

Both Igolkin and Bobrov received high praise. Neither of

them came in for criticism.

Oddly enough, the "opposing" speeches were all heartily applauded by the entire audience of 400 delegates.

In the end they took a secret ballot.

Bobrov 191 to Ígolkin 165.

Out in Azerbaijan a big logging-lumbering enterprise installed new equipment that made one man's job unnecessary. The manager, Yusif Mamedov, assigned the displaced worker (Khangusein Bairamon) to a lower-paid position.

You can't do that in USSR without the agreement of the worker and his local Trade Union. When reminded of that, Mamedov refused to change his decision.

The Union took the case up with its top Azerbaijan committee, which promptly asked the Logging Industry Ministry

to dismiss the manager. It happened, quickly.

The Azerbaijan Trades Union Council is chaired by a woman worker, Lydia Rasulova. She tells NN "Our unions are quite tough in their reaction to any unfair play by manager."

She adds drily: "The number of infringements has appreciably declined in recent times."



"People's Control" can't be compared with anything we have in our system. Today, it involves 4,600 Control Committees, sponsored by local Soviets (Councils). These committees are operated by more than 10,000,000 people.

They are into just about anything you name, from consumers' goods prices; transportation services; carrying out decisions made by the (elected) Soviets; any and every variety of red-tape and bureaucracy.

The big change lately is that the papers print many letters by people who demand that People's Control tighten up its work, and report back on how they handle beefs.

When a new Co-Op called *Novinka* opened in Yerevan (Armenia) a display by 10 women brought orders totalling \$470,000 in just 30 minutes. The display was an assortment of children's outdoor clothing. Everything was made from parachute cloth: parachutes "retired" from use in military planes, and formerly worth almost nothing.

Some 20 other "associations" were there. Pensioners selling metal badges and labels, made from old cans. Some retired computer specialists offered quail which they're raising on a small farm. An electronics expert with his father and brother grows super-quality mushrooms.

In Armenia alone there are now some 500,000 pensioners who want to work (and make money). Many are supplying wanted goods and foods which the big enterprises can't be bothered with. It's part of the new re-structuring efforts in USSR, making use of tremendous "reserves" of the system without burdening the national economy.

People (mostly seniors but some students also) decide on what to do, and do it themselves, with only a minimum of formal registering at local Soviets.

In Socialism people running for election don't make campaign promises; they are given **instructions** or **demands** by the voters.

Like: a planned subway in Tbilisi is no longer years away because the voters told candidates to the local Soviet to get with it now. They did.

After it was elected, the Supreme Soviet got over 8,000 requests for action, most of them being taken up.

All elected people must regularly report back to their voters and account for their actions.

If the people don't like what some member is doing, he or she can be **put out of office** on the spot. And a replacementelection is called.

Mankind's Future up into Space



You haven't heard much lately about the USA's efforts to get into Space. But scientists are puzzled. No matter how many billions Washington spends, they don't seem to have any program that can get off the ground.

If you watch the inside pages of the papers, sometimes you see that the Soviets are very successfully getting up there. And they seem to have some remarkable goals.

NN went through a lot of technical stuff to extract these latest facts.

Aviation Week & Space Technology, rated as the best journal in the field (USA) puts it bluntly.

"The Soviet space program has taken the lead over U.S. manned flight operations."

And more. The editors warn that unmanned Soviet flights threaten to "overcome the West's technological lead in space" (whatever that means, after Challenger.).

You can translate that for yourself, from the numbers involved. Last year USSR sent up 91 space missions, carrying 114 payloads, which was more than 90 percent of all the world's space operations. How's that?

The other 10 percent was split between Europe, China, Japan and ... yes, the USA.

However, what worries the Pentagon and White House is the astonishing success of Soviet manned space flights.

Want numbers? Think, and you have them. Last people to take off from USA's earth were the victims of the Challenger tragedy. So, your calculator will tell you that in 1986 USSR had 100 percent of all manned flights.

Remember Reagan and his "space station"? Since 1971 the Soviets have sent up, utilized fully, and brought back, no less than seven Salyut space stations.

And now the USSR's program calls for a large, permanently manned "Mir" station (significantly named Peace).

Plus (don't look now) Moscow openly talks about a station much bigger than Mir carrying a large crew.

Don't think we're prejudiced. Washington reports that several nations are clamoring for places on the coming Soviet orbiting stations, while no one is trying to get into the USA's act. Where to find it?

But there's more to the USSR's planned stations than merely work-places for men. Latest designs show that these ships-in-orbit accept huge "modules" which can be loaded with whatever the researchers require: from TV-relaying centers to factory shops for making hitherto unavailable products (in vacuum and weightlessness not found on Earth).

Already they have enough customers, for space out in space, to keep Glavkosmos busy. That's the Soviet "orbital landlord" catering to capitalist clients. It's modelled on the very successful Interkosmos, handling space business with Socialist countries.

Experts at big-time planning, the Soviet space dealers will coordinate the wide variety of space activity which foreign "tenants" want to carry out on stations.

If you turn to purely scientific expeditions into space, you see at once why research people round the capitalist world are seriously disturbed about the situation USA-vs-USSR. Sooner or later all mention the magnificent USA "Spacelab" equipment, which is rusting away at Kennedy Space Center. It can't go up because there's nothing like Challenger to take it.

Meanwhile, USSR is readying no less than 10 space research complexes, including two amazing missions to Mars (the "Phobos" project, detailed on next page).

To astronomers, what's most fascinating is the Soviet 40,000-pound X-ray telescope. So complex that three West Europe countries are pooling new equipment with USSR, to put this monster into action. It will explore the heavens as nothing ever before has done.

Similar in size, for operation on a Soviet "station", is a gigantic camera that will take pictures of Earth (land and waters) in radically new ways, aimed at spotting every kind of "resource" that's needed for our civilization in the years to come.

Such orbiting cameras have lens-eyes that pick up sights never before seen, then "process" them to give photos that can be worth billions.

So vital are these scientific station-units that Soviet authorities have commissioned for them the new superpowerful Astron spacecraft.

However, this isn't a complete list, even for just the next year or two. France is spending plenty (with USSR) on four radically new research ships. These will be used in pairs, put into different orbits, mainly for exploring Earth's magnetic "atmosphere" as never before possible.

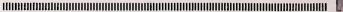
Although it doesn't sound exciting, Soviet space scientists are now working with colleagues in the European Space Agency, to send up "Radio Astron". This orbiting observatory, when it reaches its planned position in space, will unfold a radio-wave-beaming device 33 feet in diameter. It will be sensitive enough to reach out tremendously farther than has been possible so far, and all fans of "extra-terrestial intelligence" will be waiting for what that instrument detects on the other side of other universes.

These developments you should think about in relation to the "regular" elaborate Soviet space programs, which are continually going forward.

-or out to kill?

For all the publicity, and voting of billions in Congress, the USA's plan to fight USSR up in space has a strangely unreal appearance when related to actual events, equipment, pro-

Originally the "space station" (to be built and serviced by ships like Challenger) was the main craft of the Star Wars program. But after the tragedy of that "shuttle" it became necessary to re-think the whole concept of a huge station from which all sorts of orbiting weapons would take off.





What would the station cost, in terms of what it couldn't do? Thus, the giant Hubble Space Telescope is lying there at the Lockheed center, stored for a parking fee of some \$7,000,000 per month.

- They haven't yet "bent one piece of framework" for the station, but already its cost-budget exceeds 8 billion dollars.
- Hence the official recommendation that the station be "delayed" (even in plans). Some authorities now favor the Soviet method of launching steadily more advanced craft rather than aiming for "giant leaps".
- But other space scientists would like to postpone all varieties of manned craft, indefinitely.
- Meanwhile, Free Enterprise is fuming: where are the streams of billiondollar orders for the station and its shuttles? Is the Pentagon going to wipe this out?
- The business community faces the unmentionable possibility that space weapons, without shuttles or stations, will use up all the voted billions (and profits).
- Once USA could put men on the Moon, but today NASA can't even launch small-satellite booster rockets.
- And obviously if they do get a reliable booster it's going to the Pentagon, and not to any scientific orbital program.
- Blushing with shame, NASA has reserved three satellite launchings in China, where "Long March" rockets are being offered to all buyers.
- In this very depressing situation the famed astronomer Carl Sagan is campaigning for USA to head the exploration of Mars. This would "re-energize" the USA's space efforts, under the slogan "in Peace for all Mankind."
- But this patriotic idea cannot bypass the fact that USSR is already on the way to Mars, so even if NASA took up Sagan's inspiring project it would, with better luck than Challenger, come in Second.

What you'll be hearing about PHOBOS

In July 1988 two space-ships will take

off from USSR, headed for the Martian moon called Phobos. One will follow the other by a few seconds. In 200 days they'll be orbiting Mars, gradually zeroing in on Phobos.

You'll probably see it all because both ships will have powerful TV viewing cameras.

For starters, these ships will check heat factors on Mars: soil, permafrost, internal heat if any.

Meanwhile other instruments will "analyze" Mars, its rocks and soil cover. Especially the radio-active elements there (uranium, thorium, potassium).

Many devices will get the facts on Martian atmosphere and its surrounding ionized belt. Along with water vapor, ozone, oxygen, dust.

It's vital to see exactly what Mars has in the way of water reserves, and how they move.

What about those mysterious "red dust storms" raging on Mars? The Soviet space-craft will settle that question once and for all.

Does Mars have a magnetic field? It's thousands of times weaker than Earth's field (if it exists at all).

The Soviet ships will do some fancy maneuvering. They'll cruise over Phobos just 150 feet above that "moon". At a speed of about five miles per hour. Color photos will let everybody on Earth see what Phobos is really like, picking out objects down to matchbox size.

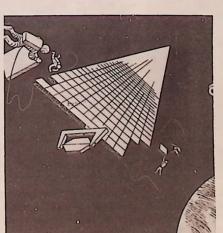
Then, a laser-ray-gun will fire a blast at Phobos, to get a chemical picture of the satellite (from the dust that will be picked up).

(Sorry, we lack space to give all the

other "exploration" activity).
Yes, they will "land" a probe on Phobos. It will become a durable automatic observing station, mostly studying the Sun. TV will let you look at it in action.

Astronomers are excited about getting Solar information from several Earth stations, the Sun itself, and the "eye" out there on Phobos. They'll get a new multi-dimensional picture of our

USA won't be on board, but the Soviet Phobos ships will have equipment from Austria, Hungary, East Germany, Finland, Greece, West Germany, Sweden, Czechoslovakia, Poland, Switzerland and the European Space Agency.



Future Soviet Space Plans?

- Many more ships observing everything on our Earth.
- · Factories in Space, near our planet, making radically new products including medicines.
- · Lighting parts of Earth with sunlight reflected in Space.
- Super-power stations out in Space bringing us electricity from the Sun's radiation.
- · Controlling Earth's weather with super-solar energy directed by "screens".
- Mining unlimited resources from Moon and asteroids, for use by Earth industries.

Cameras never forget

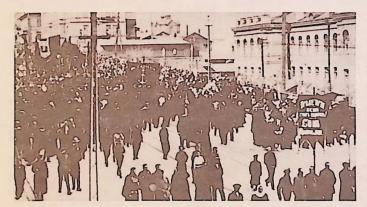
For 70 years photos have kept alive the Soviet people who made history long ago in 1917.



For many millions, the Revolution meant above all the end of bloody World War One. These Russian troops hailed the end of Czarism and war on the Western Front.

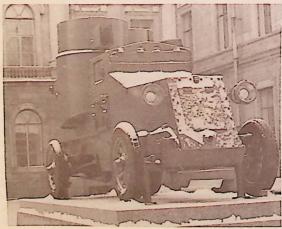
At right: no revolution in history had ever seen such great political demonstrations by women. Here the women and girls of Petrograd are demanding full equality with their men.







The speed with which the Revolution spread across the vast Czarist Empire astonished even its strongest supporters. At first, few people grasped that they were overthrowing the capitalist system, it was enough to rid themselves of the unbearably oppressive imperialist regime. At left, above, the workers of Vladivostok were out in the streets constantly. At right you see the great demonstration in Kiev, when the Ukrainian people welcomed the coming of the Red Army.



What the camera sees today is what it saw 70 years ago, when the revolutionary troops used this armored car to protect Lenin when he arrived from Finland. Tourists have taken millions of photos here . . . most pictured armament in history.



Many people earned historical fame in the Soviet Revolution. Do you recognize these men? Left to right: Timoshenko, the great commander; Budyenny, legendary cavalry leader; Voroshilov, organizer of the Red Army. All lived into recent times.

CREATION by RADIATION?



At the very word 'radiation' the Greenies head for the hills. To them radiation is totally evil: even X-rays that have saved millions of lives. So now you can enjoy a real shock. Have fun shocking others with this Soviet discovery.

A noted Soviet geo-chemist, Dr. Sergei Neruchev, explains the evolution of living things by the doses of radiation our Earth has received through the ages.

Recent research has proved that quite a few times our planet received "uranium pollution" hundreds of times

greater than was regarded as normal.

Checking these periods against forms of life existing at the same time, shows that massive radiation produced tremendous changes in living organisms. Sometimes, wiping out thousands of species. Or, at the same time, "creating" thousands of new living things, many of them very superior to others.

Note two facts. These evolutionary changes took place very suddenly (not in the Darwinian "gradual" way). And

changes go on right now, thanks to radiation.

Incidentally, Dr. Neruchev is no armchair theorist. His discovery came from examining oil and gas deposits, dating from now right back millions of years. Oil and gas reserves accumulated when living things multiplied enormously: that is, when radiation levels were very abnormally high.

Many living things couldn't take it. That's how those "fittest" giants, the dinosaurs, were wiped out. Not by inability to compete with lesser animals, but by fatal radiation doses

from uranium.

Along with them 75 other species of "important" vertebrate animals disappeared off the face of our planet. Microscopic one-cell algae were exterminated with 50-ton dinosaurs.

Dr. Neruchev says the dinosaur massacre, some 60 million years ago, was not a mysterious one-time thing. His studies of rocks and fossils show that in the past 600 million years life on Earth has been violently shook up 20 times.

The fundamental happening in these cases appears to be the accumulation of uranium, mainly in the seas. And the resulting heavy radiation greatly **stimulated** the growth of most plants and animals, along with the appearance of thousands of "superior" species.

Far from being constant since Earth began, the amount of uranium on our planet has varied greatly. Thus, our Rocky Mountains contain five times more uranium now than you find in the world's oceans.

The fact that is going to shock the "anti-radiation" people is being studied in detail by scientists everywhere. The big advances in living things, once explained by gradual evolution from lower-to-higher forms, actually came about in very short periods of time (from the geological point of view). These evolutionary advances were caused solely by the genetic changes that are brought about by radiation.

Very suddenly. Radiation acts on living things instantaneously. So in one period you had hordes of dinosaurs ruling the animal world, and in a few years all their genes were destroyed, from radiation pouring into them.

But at the same time, radiation changed the genes of

thousands of other animals in such a way that their offspring were the finest produced by nature up to that time.

This discovery has led to some other conclusions. Thus, it's no accident that tremendous deposits of organic material are found with deposits of uranium. In ages past (and also going on right now) living things, far from being wiped out by uranium (and its powerful radiation) actually lived in "peaceful coexistence." Some living things accumulate uranium, thriving on it.

Scientists recently found that blue-green algae likewise accumulate radio-active minerals on an enormous scale. Dr. Neruchev says this is only natural: the microscopic plants inherited this property ages ago, in times of uranium

"invasions" of life on Earth.

The Soviet biochemist believes that ancient plants served as "cleaners" for our planet. They removed uranium from the surface, where its radiation could do most damage, and buried it in very deep layers. This required several million years, and that is the time Earth was subjected to heaviest radiation.

Yes, but where did the "invading" uranium come from? Most likely theory is that it came up from the great depths of our planet, during periods of violent upheavals. Records in the rocks show that this took place about every 30 to 32 million years. This agrees with other geological evidence concerning "rifts" of minerals from the abyssal depths.

Interestingly, the first vertebrates on Earth arrived during periods of heavy radiation. So did the first quadrupeds. So

did the first birds.

These radically new (advanced) animals, and thousands of higher plants, could hardly have "evolved" by the slow processes of evolution; they appeared suddenly, as a result of radical changes in their genes.

Consider reptiles. All of a sudden they acquired the ability to fly. First they developed an extremely long fourth "finger". Leather flaps developed on these fingers, forming rudimentary wings. But these radical changes took place all of a sudden, as Earth's lifetime goes.

Other reptiles, with different genetic reactions, changed their scales into feathers, and thus became fliers.

Soviet scientists believe that the effect of radiation on the genes of plants and animals explains many mysteries that have defied explanation by the slow processes of evolution.

As you know, Darwin "explained" modern animals and plants by his theory of "survival of the fittest". This simply turned a blind eye to the fact that thousands of "fittest" species were exterminated long ago, and thousands of unfit creatures thrive on Earth today.

For a long time reactionaries just loved Darwinism, which "justified" the savage competitive struggles of Capitalism as being "nature's way to improve the species". But now it turns out that radiation-influencing-genes is nature's big secret of success. And today Man is becoming capable of using this revolutionary approach to "evolution."

oms with their Sys



Many oil tankers are idle in Capitalism's ports but this brand new 'Yeniseisk' is only one of a fleet kept busy by Soviet oil-field workers.



The 'Mukran' is a ferry of a new kind, actually serving as a kind of rail line across the Baltic Sea. One of a fleet being built. These cargo ships are high speed, and carry fully loaded freight trains from Socialist Germany to Soviet port at Klaipeda, and back. Return trip is 48 hours: 40 hours at sea, 4 hours at each dock.



Here's another view of the 'Mukran' ferry, docked at the Courland Lagoon in Klaipeda. Freight train cars are clearly visible. Advanced engineering is needed to get these full trains off and on board the ferry within 4 hours. Computers and automatic control systems play a large part in the efficient operation. The ferries have sharply cut shipping costs.

Water transport is the most economical way of moving freight. Economists of the West are deeply concerned over the slump in shipping. One of Canada's finest shipyards (at Collingwood) has been shut for good. But over in Socialism they can't build ships fast enough. Draw your own conclusions from these latest photos.



Docks at Riga (Soviet Latvia) are nearly always filled with modern roll-on, roll-off freighters.



Here's the latest addition to the USSR's family of high-speed "flying ships" (airfoils). This is the 'Voskhod', used on inland rivers and lakes of USSR.



Scientific ship 'Rift' does deep-water research, and mapped the submerged mountain 'Amper' in the sea west of Gibraltar, looking for 'Atlantis'.

What's it like to be a star in Socialism?

Millions of people in our system eagerly read about the life and work of entertainment stars. NN got the help of the leading Soviet theatre observer Tsypin in forming this view of Yelena Obraztsova, famed for her voice and acting.

Many fans think Yelena "had it made." Cultured family, finest teachers, won top musical competitions, early into the

best stages of the USSR.

"I think only my teachers and family knew how much I worked," she tells us. "I did nothing but attend classes and work hard. No diversions whatever."

Even after she won fame on the international scene?

"Things got more difficult then. I didn't make the world stage early, but rather late. Had to make up for lost time." Doesn't never-ending work exhaust her emotionally?

"Of course I get very tired sometimes. Feel that my emotional reserves will hardly be enough for the performances. And there are lots of other things that tax an artist's strength. I mean travelling, airports, train stations, hotels, new countries, cities, stages, people.

"An artist must guard against emotional exhaustion. I catch myself thinking I should take an interest in things other than my profession. I should stop and catch my breath. Find

time for reading, and art."

Obraztsova doesn't like to talk about how she works on a particular part. Her mood on the stage, her emotions when performances begin, are very important to her. That's why her relations with opera directors are sometimes strained.

"Most directors insist on fixed stage acting. The artist should stand or sit in a given place. But I like to improvise,

anything fixed is alien to my nature.

"Most of all I like to obey impulses that arise in a given moment of the action. And act accordingly. That's when the character I'm playing appears natural and convincing to the audience. I feel that."

Herbert von Karajan, the noted conductor, said "This Russian woman has a unique voice. It is like a voice out of a myth. She is all naturalness and intelligence. Expresses everything in her own natural voice."

Like all great stars Yelena keeps developing all the time. Despite her femininity and charm she is a person of strong will. She has performed when she was ill, injured.

"There is no one to take my place on the stage. Once I had to sing with my leg in a cast. Sometimes you feel you can't make one step. But you must do it for the audience."

Does she ever feel satisfied with her performances? "Better for the artist to think of what she could do."

Constantly dissatisfied with herself?

"That is the way it usually is with me."

"What about criticisms?

"I take serious criticism very seriously. Though I am my own best critic. Once I was very sensitive to criticism, but now I take it differently. I'm more tolerant, sensible, attentive. Criticism puts me on my guard, whether I agree with it or not."



Obraztsova's stardom reached a new high level recently, when she accepted the position of director, of a new opera version of *Werther*. And at the Bolshoi, too.

It was risky. But she felt that no artist of her standing had any right to fail.

She didn't. The production was a great success.

"Working on Werther brought me a lot of joy. I never thought directors had so many complicated and fascinating problems. I felt that an opera director should give artists the right to selfexpression and their own opinion of the creative process.

"I believe that directors make a mistake when they try to regiment an opera singer." "My chief aim in producing Werther was to set the overall artistic concept of the production, find the right psychological tone, develop the right characterizations for the singers. The public has decided whether I succeeded or not."

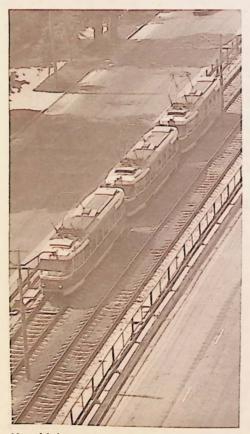
Obraztsova not only directed this new opera but also sang the female lead in it, that of Charlotte. It was her role, no doubt whatever: strong character, intense passions, tense situations, expressive "speech" enabling the singer to bring out the most in her talent.

Those who've seen this star in action on the stage know that she radiates emotional forces into the hall. It's impossible not to feel her power. A rare phenomenon that comes only with the highest talent.

"Variety is the spice of life!" Tha



Giant new press designed by staff of Voronezh plant, can turn out huge machine parts needed to cope with USSR's ever-rising production.



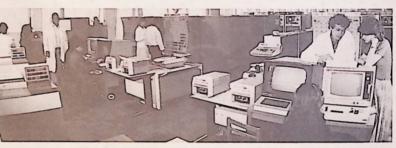
Very high speed "street cars" are proving popular in USSR. Much cheaper to build than subways. All units powered (electric). This is one of several in Kiev.



Socialist Germany's best horse-breeding farm sent these two beautiful pie-balds to the Gagarin Stud Farm in Estonia, as a gift to youngsters.



The two farms have co ponies were chosen be nature, very important youngest children are the favorite animal wit



In Ukrainian Academy of Sciences they're working on a "unit" of the most advanced computer ever made. Project is so difficult that several research centers are being pooled to tackle it. So far, only rival in this work is a project in Japan.



Moscow-Leningrad super-speed electric train is not so fast as some in Japan, but has big advantage: can be operated on standard tracks accommodating other trains.



This is all that shows of the deepest "hole" in the Earth, the Kola super-deep bore-hole. Down past seven miles! Enormous reserves already discovered.



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The menace of everengineers of Soviet T proved very successi shelter-belts to prote of plants can be used

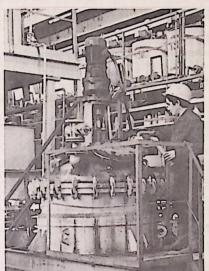
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t sure is true of life in Socialism



perated for many years. The gift cause of their quiet affectionate t the Gagarin farm, where the rught to ride. Horses are becoming Soviet young people.

ight: in a lead-zinc plant that was prious for pollution, they now extract It from air and chemically treat it to get ttly metals, at very big profit.





chrated "bone growth" hospital in Kurgan, with radically new sinow being used world-wide, is still advancing. Here young their bones supported by external steel rods, learn exercises eim into shape. They were born with a variety of serious bone



painding deserts threatens many countries today. Here ktmenia are training students from abroad. The new system, Ith. Soviet Central Asia, uses new kinds of mechanical farm lands. Once the sands or solls are checked, many kinds a attop desert permanently.



"Friendship Tree" in Sochi is only one of its kind in world. Famous visitors are asked to "graft" on to it a fruit twig of their choice. Single tree bears many kinds of fruits, mainly citrus. It requires a lot of expert biological attention.



Latest model of the "Aurochs," trade name of truck plant in Minsk which makes dump trucks bigger and better every year. An auroch is an ancient variety of buffalo, now restored in Byelorussian forests. But its mechanical name-sake is used to carry ores from open pits. This one takes a 180-ton load and weighs over 300 tons when filled. Main power is from a huge diesel, but that generates electrical power going to all wheels (plus steering, brakes, etc.). Very easy to control. Its air-conditioning system copes with any climate. Now in big demand in the huge Siberian coal fields.

Everyone feels better with these

Why spend time on a book if it doesn't give you a lift? In the pages we offer this month you'll find many kinds of reading pleasure. They take you away from the problems of life that depress you.

Brass Hats in the Labs

Everyone realizes that Reagan's "Star Wars" plan depends almost entirely on mobilizing the brains of scientists all over the Capitalist world.

Devoted to Science? Out to gain fame in research? Or sweating for another "cause"? Money.

You'll feel good reading this because it's packed with facts you don't get in the media. Real people, discoveries, weapons, profits.

"Militarism and Science"
by Soviet expert Viktor Borisov — \$3.10

"Farewell, dear Colonel!"

You're going to love this love story about SPIES. Especially because (though names are hidden) it's about REAL spies.

Different, because the main character defects from Capitalism over to the USSR.

No "small stuff" here. The top spy was a Colonel in the NATO secret service.

What made him go over to Socialism? His wife and two children, that's who.

You'll be lending this to others to enjoy.

"Farewell My Dear Colonel!"

True spy-love — \$2.25

One for someone young, someone you love very much

But let's straighten this right here. No matter how much you like to read to some young person close to you, you could well be the one who'll love this book.

The author is unknown here. He's Arkady Gaidar. No "kremlinologists" ever heard of him. But everybody in the Kremlin has read Gaidar!

We mean it. Millions upon millions of Soviet people know Gaidar's stories like he was their father or brother. That's exactly what he is to them!

First time we've ever had all his famous stories in one big book. Yes, it's BIG. Over 300 pages. Beautifully illustrated. Big print, so you can use this to help someone get started at reading.

Next time you are reluctant to "baby sit" with a school-age youngster, you'll have a wonderful time if you take along this book.

Arkady Gaidar's SELECTED STORIES—the finest—big—\$10.45 postage free

Trip into another world

Does Mameluke hit your memory? How about Khorassan? Or, somewhere you recall Deccan and the Moguls?

This has to be the most unusual and fascinating book about the rise of Imperialism, in India.

And your guide through the centuries is none other than Karl Marx. Yes, Marx studied India's past. But not in the way the professors used to present it.

Who conquered India? The mighty East India Company! Mainly in The Great Maratha War.

Frankly, this reads like an adventure story. "Marx on Indian History" — \$2.35

Okay, so you know it all

You can count an awful lot of progressive people, who stand for Socialism vs. Capitalism, and they all know what *Political Economy* means.

It's like, well, you have an economic system, see, and politics gets messed up in it.

Revolutions. Wars. Professors writing 909 books to explain it. And then came Marx and Engels.

They didn't write this book, but their discoveries made it possible. Goes right back to the "economy" of beads and trading. Right up to Socialism and the griefs we have in our system, Capitalism.

"What is Political Economy" — \$2.40

These help you find your way in today's world

No question, your parents had an easier time to keep up with events. Progressives have it especially tough nowadays. Science, politics and people are all changing swiftly. But what's new can be enjoyable!

Want a free apartment?

Housing was always a problem in Capitalism, but today it's becoming weird. From two extremes of homeless in the streets to young couples paying \$350,000 for a house-and-mortgage.

Friends of the Soviet people all too often forget that in Socialism you get housing free.

They're building new housing for millions of families now. No down payment or monthly payment. Housing fees don't even cover full servicing.

But make sure you have the facts straight.

"I Hereby Apply for an Apartment"

Very latest, with photos — \$1.85

You know it? Or guessing?

We'd be willing to bet that 99-readers-in-100 can't name Marx's greatest discovery.

(Yes, we failed, and had to read the book!).

Something queer about this. Almost every professor in the phone book tells us that "Marx is now out of date". So here's your chance. Go through this book (clearly written by three top-Soviet authorities) and then you'll be armed with the scientific facts proving Marx was right, period.

Indeed, you'll see that he's even more right than he was when Capitalism was young.

"Karl Marx's Great Discovery"

384 pages, cloth, indexed, \$6.45

We suggest you think TWICE before buying this new book

But maybe you'll think we are very wrong, when you learn that this book has already appeared in 11 languages other than the original Russian.

We won't argue. Better to try to tell you what's in it.

In brief, this book is everything you've wanted to know about the science and practice of

computers (cybernetics) and didn't know where to look.

What's in this? Because computers are being used in practically every field of life and work, there you have it: the book covers every field of life and work as it goes on today. Especially in Socialism. To ease your way along the authors have used illustrations everywhere.

Especially inspiring as you see how often the USA is behind the USSR.

For sure, you won't get through this book between meals. Try it!

"Cybernetic Medley"—Big—400 pages—hard cover—\$7.96

Where did you come from?

Not so long ago, scientists could tell you exactly where all human beings came from. Through the complex processes of evolution.

But now? Better be polite. So many contradictory facts have turned up that the old picture of Man rising above the apes is, well, filed away.

Hardly a book in the library that isn't out-dated. But not this one! The author has been all over the world tracing the life-andwork of primitive Man. Women, of course.

But no feature of our Past turns out to be what we used to think it was.

"Origin of the Human Race" - 356 pp-\$6.75

By this time you think you know

What is Socialism? The man got so many confused answers that he wrote this book. With a woman political scientist to give her views. Then what, really, is Socialism?

So you won't be tempted to give any ten-word answer, the authors take you right back to the times when "that word" was invented. To fit a system which meant 99 things to 100 people.

Economics. Politics. The State. Most vital, the Individual.

Answers here that you may never have seen before.

"What is Socialism?"—New—\$2.20

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You should see how they're tackling their PARTY

Millions of Communists round the world are wondering if changes in USSR are going to influence them.

Remember, all the sweeping changes in Soviet life today 'originated" in the 1986 Congress of their Communist Party.

At first, anti-Soviet observers predicted drastic negative effects on the Communist Party of the Soviet Union. Now they are silent. Very big changes have come, but they are all directed towards strengthening the Socialist system.

This is natural, because all the achievements of the Soviet people, since their Revolution 70 years ago, in economics, science, culture, living-standards, all were planned and carried out with Communist leadership.

Indeed, their Communist Party, the only Party in USSR, the Party of the revolutionary working-class, is unique in human history because it has planned and carried through, scientifically and consciously, the task of changing the world for the benefit of all humanity.

From its origin, the Soviet Communist Party attracted and promoted the best elements in the working-class.



As Socialism developed, besides the workers, farmers and intellectuals also came into the Party in large numbers, so that today the CPSU accommodates the interests of all classes and groups, and through them can mobilize the enormous energies of Socialism.

However, not everything went "according to plan."

The main problem was that in many respects the Party did not rise to the demands of rapidly growing Soviet society. As pointed out earlier here in NN the Soviet people are

As pointed out earlier here in NN the Soviet people are now in the course of "a second revolution." It's vital to note that their Communist Party planned and is carrying through that Revolution.

Obviously, this places very heavy responsibilities on their Party, its membership. The tasks they face have never before been tackled, anywhere, at any time.

In the day-to-day work of carrying this out, every kind of weakness was exposed, discussed openly before the people.

- For quite a few years, leadership of the Party failed to see that developments were out-pacing the Party's program and efforts. All kinds of "conservative" attitudes shockingly slowed up the nation.
- The very "theories" and plans of the 1930's and 1940's remained unchanged, and this greatly retarded the rise of modern developed Socialism. Anything that didn't fit into the past was discarded as anti-Party.
- All kinds of antiquated notions were frozen into dogmas which left no room for advancing the new ideas urgently required by Socialism. The economics of Socialism especially were ignored under the heavy hand of Party bureaucracy.
- Many grave problems were "swept under the rug," especially those relating to management, incentives, cooperation, worker and trade union relations, distribution, the new demands of the Soviet public.
- Actually, the tremendous advantages of Socialism were ignored. Planning was replaced by directives from "above". Leadership was buried under mountains of red-tape-paper.
- Disastrous levelling of incomes corroded Socialism's great incentives for individuals (including millions of workers and farmers). In turn this led to grave slackening of discipline in production and rise of grafting, bribery, serious crimes even within the Party.
- Party leaders and members began to ignore failure to achieve plans. In three 5-Year Plans the targets were not met. Production began to slip. Grimly out-dated goods were produced. Even scientific progress was retarded.
- All this worked up to a crisis in the 1970's and 1980's. Even at the top, Party leaders failed to see what was happening before their eyes. All forms of criticism were rejected. The situation led to wide Party demands for a major Congress.
- Actually, the CPSU had grown. Its multi-million membership had enormous opportunities for correcting all the ailments that had developed. But right down to the "grass roots" the membership failed to speak up.

The Soviet people then responded to the new call of the Party Congress with immense determination. They've taken up the challenge of doubling national income in 15 years, while doubling production.

Millions are discussing plans to change over to a hightechnology society. These revolutionary advances are to pay off for all Soviet people, at work and in their family life, starting immediately.

Central to all this is a profound shake-up in the Soviet Communist Party. Mainly this is a change-over from "directives" to democratic initiatives taken by the membership.

At the same time their Party is vigorously leading a drive to involve tens of millions of workers and farmers in management of production and the work of governing the country.

This drive towards Socialist self-government is of tremendous historic importance, if only because Socialism is now the dominant system on Earth. The making of vital decisions and drawing up of Plans is becoming public activity carried out in full public view.

This has already "revolutionized" the Soviet press. Whole sections are given over to views and criticisms and proposals of "the man in the street," with strong emphasis on carrying out the decisions taken.

For the world, it's important to note that the Communist Party of USSR is now paying much more attention to the development of Socialism in other lands.

The CPSU now is "working tirelessly for peace, against aggression, against the arms race, against a nuclear catastrophe," and the results you can see in our media.

You've got

HYPOCAPNIA?

It means you don't have enough carbon-dioxide gas in your bloodstream and body organs.

Several years ago you saw here in 'NN' a strange medical report on the danger of over-breathing. But haven't we been told countless times that most people should deep-breathe? To get the body loaded with life-giving oxygen.

That cuts down your carbon-dioxide. Causing a whole catalog of illnesses... hypocapnia. We're reporting this again because of many new discoveries. A most unusual medical story!

This time our basic facts come from Dr. Vladimir Davidenko, in the Institute of Experimental Medicine of Siberia's Academy of Sciences.

He gives full credit to the discovery made by Dr. Konstantin Buteiko, of Novosibirsk. You'll see that changes have come in Soviet medical science, when you learn that Buteiko's important work, reported back in 1962, was kept in the bottom drawer for 21 years and recognized only in 1983.

Essentially, what the medical establishment didn't like was the treatment Buteiko and his associates were using.

 The patient uses willpower to keep muscles of chest, diaphragm and stomach relaxed.

• Aim is to reduce depth of breathing, not an easy thing to do.

• When you feel shortness of breath you have to resist the temptation to do what we've always been told to do: take a deep breath.

After several months of practice you should be able to get by all the time on shallow breathing.

Or, holding your breath longer, in between inhalations.

The discovery involved here has, in fact, been noticed by sports trainers for many a year. For example: you take an athlete in top form, and get him to flex all his major muscles fast, like crazy. He won't do it for long because he'll faint.

Weight-lifters often experience such fainting-fits. Because they're trained to breathe very deeply.

Over-breathing saturates the body with oxygen. But the trouble is that oxygen "replaces" carbon-dioxide, vital to normal body functions.

Too little dioxide: you've got hypocapnia.

Never mind athletes. In USSR today thousands of average people (young and old) have been cured of a wide variety of ailments, by controlled shallow breathing.

Lack of sufficient carbon-dioxide (hypocapnia) is now believed to be one of the main causes of bronchial asthma, bronchitis, and even some cases of heart-pain (angina) and high blood pressure.

However, the "complete list" of ailments that can be traced to hypocapnia is as long as your arm. That's because the air we breathe contains ten times more oxygen than is needed for our vital organs.

And right there you have the reason why people live longer and feel better up in the mountains, where they breathe far less oxygen.

Here's a handy check: while you are at rest, see how long you can comfortably hold your breath.

If under 15-30 seconds, you are probably sick with hypocapnia.

If in good health you should be able to go without breathing for a full minute.

With will-power-training you can do that, but it takes months.

Within that time many people feel a real improvement in health.

Now, if shallow breathing works such wonders why wasn't it discovered before the 'sixties?

But it was! Thousands of years ago. It is the basis of another kind of "yoga", long practiced in India: Kundalini Yoga. Almost unknown in the West.

Are they making up for this long "suppression" of methods for treating hypocapnia, in the USSR?



What they're doing is popularizing the treatment among doctors.

You may already have suspected that some people, "going all out" to practice shallow breathing, can do themselves real damage.

In Siberia the Academy of Medicine has set up a broad department solely to introduce controlled breathing as safe treatment for hypocapnia.

Dr. Davidenko is heading this work. Research is being carried out by a new center: Institute of Physiology and Pathology of Breathing.

Already the USSR Ministry of Public Health has approved this treatment for children with bronchial asthma.

As for adults, naturally they recommend that the treatment of hypocapnia should be started only after a doctor's approval.

In popular articles Soviet specialists stress three points.

 Never try any breathing treatment using the mouth. Nose only.

 Never take a deep breath just because you feel a "shortness of breath".
 That's the time to control breathing, making it shallow.

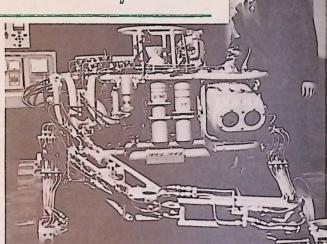
 Never try controlled breathing if you are ill.

Many NN Readers will be interested to know that the unquestionably good results obtained by treating hypocapnia, when it was opposed by "official" Soviet medicine, has led to the establishment of a National Center of Alternative Medicine.

Quite a few specialists in USSR feel that this Center is destined to play a big part in the advance of public health in Socialism, by eliminating harmful conservation

Now their youth can put ideas into action Can you guess what's shown here in our photo?

It has become a tradition in USSR that each winter the nation's young inventors show what they've got that's new, at the big Economic Achievements Exhibition in Moscow. But this year was different. Not merely showing off their inventions but actually selling them. You'll see why there were plenty of customers. From some of the nation's top industries.



Western visitors to USSR often turn down a visit to the youth inventors' show, figuring that it will be a collection of gadgets and gimmicks of no particular interest or practical value.

But this year (and for some years past, too) youthful exhibitors showed advanced electronic equipment, factory robots, precision machine tools, automobiles, motorcycles, even aircraft (that fly).

The show was crowded with potential buyers, eager to snap up what the smartest youth can make.

Formerly, to get one of these youth inventions working in an industry, miles of red tape had to be untangled. Every deal had to be cleared up at "the top". Now the inventors and their customers both can draw up and sign contracts on their own, independently.

Quite a few of the inventions were surprisingly advanced.

For example: the "Bars-IM" weather control system.

Control the weather? Actually this invention (created by several young people in the Central Aerological Observatory for Environmental Control) is an electronic wizard that is flown over the area where weather can cause severe problems.

Like over Moscow. Heavy snowfalls are extremely costly in the Soviet capital. Today it's possible to dose clouds with chemicals that will make snow fall. But make it fall somewhere else!

Bars-IM is a kind of artificial intelligence that controls a plane, plus its chemicals, in response to hundreds of vital weather factors. The snow comes down but not on Moscow streets.

Savings could be tremendous.

But Bars-IM has already been making money. Farmers hired it last summer.

They had a grim drought in the Stavropol region. But when a plane loaded with rain-making dusts followed directions of Bars-IM, the "dry" clouds really let go with the rain they held. Many large crop areas were saved for harvesting.

Did you try guessing what young Leonid Barsukov shows in our photo?

Better give up.

It's a submarine.

Not your usual underwater craft but a **robot**, with no crew.

It can travel on its own, down as far as a thousand feet; with modifications it will dive (and work) miles under the surface.

Barsukov's sub has on-board TV to report continuously on what it's observing and doing. Picks up anything wanted for study. Its "hands" can work independently or as instructed by human operators up on the surface.

Advantages? Costs only a small fraction of a manned sub. No "life-support" equipment needed. Works in hazardous situations.

The new and efficient (and very sturdy) construction of this strange sub makes it a prospect for under-sea mining, so buyers are lined up. Three young designers (Matveyev, Mironov, Shabalov) have exhibited a fire-fighting invention that won everyone's admiration.

Using a very sensitive electronic detector, this outfit will "see" anything whatever that approaches the temperature of fire. It will sound the alarm within one-tenth of a second!

That's just half. This "fireman" won't wait for anybody to respond to its alarm, but will immediately let fly with a fire-extinguishing blast (effective for the place being "patrolled").

Two youthful engineers, Lutsyan and Smirnov, got the edge over many inventors, with a kind of "all jobs" robot

You might call it a manipulator. But it can replace a human operator in many heavy machines: presses, hammers,

forges.

The big deal here is that this one super-robot can work accurately, rapidly, continuously, even in high-temperature conditions (past human limits). And where there is dense harmful dust. And where the vibration would knock out the toughest worker.

Can replace highest skilled labor.

At left you see the very youngest exhibitor. In fact, he's just representing his Inventor's Club in city of Baku.

What's he got there?

It's an accurate model of the most advanced space-robot ever made. You can read the details in this NN (pages on Space)

The machine is one of two that will head for the Martian Moon, Phobos, where they will send back to us earthlings the mysteries of Mars, unveiled for the first time.

Children made that thing.



BALUCHISTANIS in USSR?





Now struggling for freedom from Pakistan, the Baluchi people already have a large "homeland" inside USSR, in Mary Region of Sovlet Turkmenia. Thirteen thousand of them enjoy their own language, customs, dress, music. Here they're having a traditional wedding, with the best man carrying the bridegroom.

in the USSR?

Obelisque you see below is in Soviet Tuva and marks the exact center of Asia, in city of Kyzl, capital of this autonomous republic.



Unusual wedding dance with the men swinging sticks, for what reason we weren't able to find





Few westerners know that the Asian republic of Tuva is a most beautiful place, renowned for its landscapes and Few westerners know that the Asiah republic USSR in 1944. Since then their agricultural output has tremendously increased, and they have many industries. Education has greatly expanded and so has the Tuvinian culture. Inter-marriage is widespread, population is growing, and now totals over 270,000 people.

Why can't Johnny read? Write? Count?

Higher education (college, university) is a field of many problems today, here in our capitalist system. But in USSR, also, the swiftly changing needs of Socialism have brought difficulties no one foresaw.

Revolution in Education

Just as in industry, which concentrated on producing more and more of everything, with little regard for quality, so in education Soviet planners in this field long took great satisfaction from "output". In the early 80s hundreds of thousands of young men and women won degrees and took jobs as specialists.

The number of college grads rose 400 percent!

And today their universities have 5,000,000 students.

At last they're facing this situation: many, many youth with degrees aren't doing work that they're trained for.

Hundreds of thousands of qualified people are not doing the work in agriculture for which they're qualified. At the same time they have a serious shortage of trained school teachers. They can't find enough science-engineering grads to do the urgent work of overhauling Soviet production.

And the problem is worse than it appears. In Socialism, unlike our system, planners today require that all educated workers continually get re-education, to keep pace with the advance of the science-technology revolution.

They've found that this can be done only if all college grads have a broad base of knowledge, and not simply a store of some narrowly specialized information.

Unfortunately, this wasn't grasped soon enough, so many young men and women find it difficult to cope with the stormy speed of advance sweeping them along.

Now the educational authorities are really digging into this problem. Many leading experts agree, frankly, with the sharp criticism levelled at them.

Where did they go wrong? They tried to cram into Soviet kids "everything" in the way of learning. They mistook this book-learning for true knowledge.

Inevitably, many valuable subjects were reduced simply to memorizing endless facts, on which all exams were based.

They're now really shaking up the classrooms, right from primary grades through university. The drive now is to get young people to apply everything they learn. In their own lives. As individual people.

It's not easy for us, in our system, to appreciate what a problem their teachers face. For many years they tried to push Socialism into classrooms. Everything had to be done "collectively". As if a school was a collective farm!

In science classes, for example, a dozen boys and girls would do "collective" experiments. *Individually*, the kids learned little from that kind of "practice."

Complicating this were the Soviet text-books (not very different from ours). You had only to read and remember and give the right answers at exams.

Today the new text-books ask the students questions!

You get it: questions not answered in their books.

In that way only can young people learn to think.

And Socialism today has unlimited demands for people who can think.

More important: people who can say outright what they think, not just what's "in the book."



They find that one vital way to get young people to use their education is to get them into production while they're still in school or college. Nothing makes people think as clearly as a job "on the line."

Not only "lines" in factories, but the teaching-line in school-rooms, the line out on construction jobs, the line in clinics and hospitals.

This is practical for them because, unlike our situation, in Socialism there is *fullest employment for youth* at all levels of experience.

This is working for them now. But it's not a push-button system. In the Soviet press there is plenty of dissatisfaction with the slow rate of reform in education.

For whatever reason (probably our education bosses don't like this) our media are silent about a remarkable change in Soviet higher education. Not only are students being pushed to think for themselves, but the teaching staff is told to do their job as they think best!

Colleges and universities are now allowed to remove or add courses as they see fit.

The main aim is to give students more time to think about the projects assigned to them in their classes.

Already in many universities thousands of young men and women spend most of one year out on the jobs which they want to get when they graduate.

No doubt you can grasp another problem they've come up against. With so much reliance on text-book learning (in the past) they let their educational equipment (like laboratories) become badly out-dated and ineffective.

Radically improving the situation is proving to be costly. But it's begun, and they have the money to do it.

Money? Who pays?

Not the students or their parents. In all the tremendous volume of discussion and argument about education over there, nobody is raising the central problem of higher education in our system: its extortionate cost.

From Parliament down to the local high school, here in Free Enterprise the debate centers on *money-money*.

A typical college course in USA now costs the parents ten thousand dollars per year!

One "solution" is to lend parents and students those tens of thousands, to pay college bills, hoping to get it back when grads get big-paying jobs.

Climbing educational expenses in Socialism are being met by the rapidly increasing productivity of their economic system, profits of which go to the nation and thus to all its educational facilities.

Education is a "battle-ground" of the two world systems. The faster science and culture develop, the sharper the competition between the two educational systems.

Here's how to make one letter reach thousands

Many people read this page before any other in the magazine. Because we all like to be sociable?

"I recall when Stalin signed a non-aggression pact with Hitler and gave the Soviet Union two more years to prepare their defence; they knew that Hitler would attack any time. When he did the Soviet Union was ready. Some left-wingers were at that time angry at the Soviet Union. They were proved to be wrong. Today some left-wingers have not studied the dangerous situation the whole world is in facing nuclear war. I believe the Soviet Union has made it easier for the capitalist world to accept genuine disarmament." R.T.

"I'm an old timer. Have observed many changes and can see how perilous we are at present. Never in world history has there been such change as in the Soviet Union. And this was all accomplished by everyone being involved. Now we, in the West, are about one-third working, one-third playing (most sports is playing) and the other third in jail, fed and housed by the working third." J.H.R. (MD)

"With profound gratitude for your noble services to mankind in the form of public enlightenment, I most sincerely thank 'NN'. My friends and colleagues in this part of the world use 'NN' as one of the most useful sources of information and basis for discussing international affairs. 'NN' is entertaining, it mirrors life in socialist countries in comparison with USA and other capitalist nations. In my view, the important thing is the 'survival of mankind'. Peace is a vital key to survival of socialism and capitalism. No single nation can go it alone in these times of scientific break-through. Please keep it up for peace and progress." P.N. (Nigeria)

"You asked readers a delicate question.
'You get doubts now and then?' No, never.
Please quote me: No, never." P.J.B.

Please quote me: No, never." P.J.B.
"NN reported that 'AIDS' raises very serious economic problems. You should see *Business Week* (March 23). They confirm your views with a mass of facts." D.S.

"This contribution is for subs to three friends listed here; the 3-volume set of Marx and Engels; plus the balance for NN. I wish some enterprising mogul would produce an inspirational film based on Dyson Carter's book 'This Story Fierce and Tender'. Had a phone call from Czechoslovakia requesting an article on the movie 'Amerika'. F.F.

"After reading 'This Story Fierce and Tender' I understand the importance of 'Maggie the Cat' at NN." H.B.W.

"You ask how our belief in Socialism is holding out. Mine is 100 percent. But I see nothing for us here except a gradual worsening for a long time. I've wished a thousand times I could be just like other people, but more than a thousand times I've been proud, pleased and thankful that I know the truth." F.M.

"Do you notice a trend in business papers lately, pessimistic and full of long-term gloomy news which doesn't add up to prosperity tomorrow?" K.R.

"Like others you mention, I believe the Chernobyl accident was no accident at all. Just a couple weeks before it happened, a Ukrainian paper stated that the Chernobyl plant was the safest of all. And then 'puff' it blew up." W.O.

"Your 'call to arms' should bring results. Like what you'll find enclosed. NN does the good work that deserves all the help we can give it." H.B.

From NN: This Reader certainly gave NN really substantial help.

"This letter appeared in our local paper: 'I think whoever is running our country (USA) should be drug tested and this should be done as soon as we find out who is running it.'" S.J.

"I'm keeping well but very, very busy all the time looking after sick people. But here are a couple of new subscribers for NN. I get two copies of NN and give one away." A.I.T.

"I really appreciate NN, a magazine of great hope and also much pleasure. This is our donation and I'll send a book order soon." B.S.

"Surprised to learn that your magazine comes to my local library for over six years. I've never seen a copy on the magazine rack. I enquired. Next time I came in they handed me NN sealed in an envelope. I learned that the 'area library board' told the librarian that NN was to be kept out of sight. She had been putting it straight into the garbage. I find it difficult to accept that the library board would suppress a legal Canadian publication. I don't wish to drop this matter but I'm not sure how to proceed. How many other magazines are being suppressed? Please tell me how I can press this issue further." K.I. From NN: We congratulate K.I. for these views and ask all our Readers to send in their proposals for tackling this violation of 'freedom of the press'.

"I've been in several demonstrations and 'picket lines' supporting various peace groups. Sometimes when I talk to others (strangers) I give them copies of your 'Last Snowflake' card. I find it gets a very good reaction." L.V.

From NN: Several Readers tell us the same thing. This card offends no one and at our price of 10 cards (in envelopes) for \$2, 25 for \$5, it's really affordable.

"I enjoy NN so much that I'm glad to send this donation to help get more Readers." M.O.

"I'm sure NN has dealt with the statistics on infant mortality in USSR. Some papers have quoted U.N. statistics to show that more infants die in USSR than in USA. Is this so?" R.K.

Reply: No "U.N. statistics" come from Soviet sources. We have never had the figures from USSR. Comparing infant deaths in USA to those anywhere else can be misleading, since deaths are very much higher for black babies than white. The former are sometimes "omitted" from USA statistics. Now a complicating factor: due to big advances in preparing Soviet mothers for birth, there is a rise in the number of pregnancies and defective babies born (formerly they died at birth). The old story: "figures don't lie but liars surely can figure."

"Here's my donation. Send NN to any people you can think of. If I can do anything to help the movement for peace and socialism, I will." E.H.S.

"I consider NN to be one of my Good Friends. You are a well-wisher for all of Mankind and certainly worthy of support. I enclose \$100, of which \$27.40 is for books." J.A.P.

"Please comment on this item in the Victoria daily, which states that genocide (mass killings) took place in USSR, China and Cambodia, on a scale much worse than Hitler's killings."

Reply: The item is partly correct, partly false propaganda. First USSR. Millions died of starvation in the early years of the civil war, when a record drought hit much of Russia and Ukraine. Lately, anti-Soviet Ukrainians have been claiming that these deaths were caused by Stalin. That's not true. Many organizations in the West sent food to the stricken areas, and all knew that the causes of the tragedy were natural, plus the ruination of vast territories by war. But it is true that millions died in China during the 'cultural revolution' (when Mao broke with Socialism). And in Cambodia, when pro-China forces carried out terrible massacres. We're suspicious of the purpose of that item, which tends to play down Hitler's crimes.

Soviet people enjoy making their own rules

New Socialist spirit reflected in their news

00000000000000000

Increasing heart disease, especially in younger people, may be due to chemical poisons in our modern environment. Dr. Dmitri Zerbino of Lvov Medical Institute finds lead is especially suspect. Young victims of heart attacks include those who work with leaded gasoline, welders, machinists using complex alloy metals. Treatment? Cleanse metals from blood with "sorbents". Dr. Zerbino predicts that this will become as routine as brushing your teeth.

On-the-job training courses are paying off big. Last year boys and girls doing "practical" work in Soviet factories actually produced 2,800 million dollars worth of saleable items. Plans call for raising this to 4,500 million dollars in 1990.

Famous Kara-Kum Canal, for irrigating desert of that name, turns out to be highly productive for fishing coops. Not unusual now to take in fish weighing 250 pounds. Sheat, amur and carp all thrive. In the first 30 canal-reservoirs to be fished commercially the annual take is now over eight million pounds. Scientists credit the abundant natural (plant) food and sunlight.

Soviet youth bought 5,000,000 more copies of their newspapers in past year. Explained by increase in handling "personal" news and problems, especially marriage, love, recreation. But youth are also using their press to speed Socialism's growth: one "hot-line" in papers brought response from 30,000 youth who wanted to go to work in modern farm-countryside.

New service starting for seniors, disabled. In Moscow they're dividing the city into 30 areas. Each will be "staffed" by paid service-people who will shop for those who can't, cook meals, write letters, or just visit with lonely men and women. Mostly these visitors will be youngerretirees, high school students, housewives. They'll find "customers" among the 2,000,000 Moscow residents on pensions. National security service will pay the bills.

Complete sea-ports are being built of ice, in Soviet Arctic. Ice blocks are laid like bricks, then "cemented" with hot water. Strong enough to handle big ships, cranes. Last 9 months, long enough to make them economic. They're very cheap compared to permanent dockings. Expected to speed development of Siberia's resources.

USSR is behind in computer production. But youth group found that the "works" for personal computers can be turned out by millions. Problem: no plants or skilled workers to do "assembly". Young ham radio operators agreed to send out an appeal: they are capable of doing the computer assembly-work. Millions of them. Made a fast deal: supply the components to hams, they'll turn over to the Socialist system 99-out-of-100 sets they make, keeping one for personal use or sale. This year alone they'll finish 100,000 personal computers! Big contribution to the Plan's figure.

Facts our media ignore: Washington's new subway system has its tracks welded by Soviet equipment. USA surgeons use Soviet laser "guns" for quick, safe operations. By 1990 75 percent of all steel made in USA will come from Soviet continuous-casting installations.

Up in orbit since 1983, the Soviet spacecraft named Astron, with observatory equipment of Soviet and French design, has made many space "finds" in its 500 contacts with Earth. Latest: an enormous cosmic body, with temperature lower than Sun's, now exists where a super-nova exploded in March. Also: some stars have exceptionally high level of heavy metals in their "atmosphere". Astron is unique because it makes observations from 120,000 miles (!) above Earth's surface.

New attack on loneliness of seniors: Gorky auto works set up over 100 "fitness" groups for pensioners, and soon discovered that health was only a part of the payoff. Best result was that people in all these groups got to know each other during exercise sessions and also at meetings. Roza Mints tells it: she started work at the plant in 1934, long a lonely pensioner, but now "We're all more cheerful and sociable, have many interests in common, and meet often."

"Rotary production lines" are replacing straight-line systems in USSR. One plant in Ukraine is turning out 140 lines this year. Rotaries take up much less space and increase worker output 20 times over. Hundreds of thousands of workers will be "released" (for other jobs). At a rate nobody previously thought possible.

"Folk craft artists" are laughing again. For years their beautiful creations were copied by machine-production centers. Gradually, both tourists and Soviet people quit buying the inferior mass-produced items. When tens of millions remained unsold, big co-ops acted. Result: a rebirth of genuine folk-craft, plus clamp-down on fake production. Artists are now recognized for their talents, paid accordingly, and production can't keep up with demand.

Coldest spot on Earth is in the Antarctic, not Siberia. Latest Soviet research shows that snow-ice of that region is a mirror that reflects away from Earth 90 percent of Sun's rays. Enormous flows of very cold air circulate down and around Earth. In several dozen years Earth's entire atmosphere is chilled by the gigantic freezer.

Newspapers are changing fast in Socialism. Leading role of workers is shown by fact that "Trud" (labor daily) is now biggest-selling paper in all USSR...and the world. 18,200,000 copies of Trud are snapped up every day. Closest competition? From Soviet youth paper Komsomolskaya Pravda, with sale of over 17,000,000 daily.

This past (very cold) winter boosted ice-cream sales in USSR. But they always sell as much each month year-round. Sales now top 280,000 pounds per day. Going up, since anti-drinking campaign started. You can get 50 different varieties of ice-cream in Soviet Union now. Big drive to get more factories built, more "ice-cream cafes" open. They use no synthetic ingredients or flavors.

In an unusually boastful spirit, USSR Academy of Sciences summarized its plans very simply. "The be-all and end-all of our changes and plans is to establish the world lead of Soviet sciences in all major fields." No empty boast. They already lead in several branches of research. But they have too many old scientists in leading jobs. Younger people will replace them at congresses using secret ballots.

Our media implied that USSR is publishing a super fashion magazine. Real situation is very different. The famous German fashion mag, called *Burda*, is coming out in a Russian-language edition (of 100,000 copies to start with). *Burda Moden* (full name) not only covers fashions but also sewing, knitting, cosmetics, hair-dressing, cooking. It's being distributed through the new Soviet "Women's Councils" but in time will aim for 2,000,000 circulation, and general sale. Significantly, the German firm took on this venture because of wonderful response in USSR to their fashion exhibits, conferences.

World Women's Congress opens in Moscow June 23. Some 2,000 women from 130 countries will participate. Motto: "Rid the world of nuclear weapons by the year 2000". United Nations will be represented.

Prices in Soviet stores have risen one-half of one percent per year since 1970. The rise is in luxury goods, jewelry, alcohol. No change (since 1962) in price of bread, sugar, eggs. Milk and meat prices are heavily subsidized by the Socialist economy (from profits).

Artificial sapphire is an excellent substitute for bone. Surgeons and chemists in Kharkov (Ukraine) are repairing damaged spines with several materials of a ceramic nature. They're lighter than metals, as hard as diamond, and aren't "rejected" by the body. Used mostly for restoring bone destroyed by cancer.

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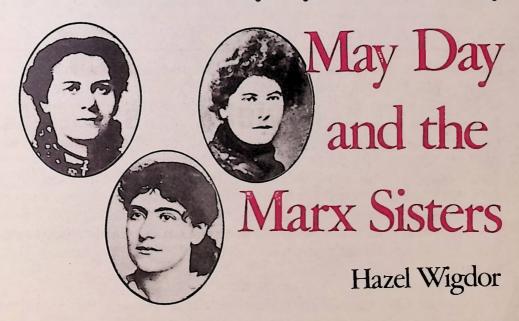
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