INI SN9/88

DATE 30 January 1989

COPY 024

DEPARTMENT OF

EXTERNAL AFFAIRS

OTTAWA,

CANADA

EXTRACTS FROM THE SOVIET PRESS ON THE SOVIET NORTH AND THE ANTARCTIC SEPTEMBER - 1988

Comments or queries regarding this publication should be directed to

Department of External Affairs, INI
A-2 Lester B. Pearson Building
125 Sussex Drive
Ottawa, Ontario
K1A OG2

TABLE OF CONTENTS

Page No.

Page No.

SOCIOLOGICAL ISSUES

TRANSPORT AIR

TRANSPORT RAIL

TRANSPORT WATER

MISCELLANEOUS

ANTARCTIC

"An Experiment in Antarctica"

The Alasheev Bay in the Kosmonaut Sea... The Soviet main scientific Centre "Molodezhnaya" is one of the largest on the White Continent. Working here at present is a group comprising a large number of scientists and specialists from the winter staff of the 33rd Soviet Antarctic Expedition.

Day after day, as part of national and international programs, we carry out integrated and thorough research of natural processes and phenomena taking place in Antarctica. We carry out year-round observations and a series of experiments in the areas of aerometeorology, geophysics, glaciology, geodesy, hydrology, medicine, the state of the environment... We collect information about the weather not only from our permanent stations, but also on the southern hemisphere together with specialists at the Australian main base Mouson ^{3}.

Methods of constructing moorages out of blocks of sea or fresh-water ice are being worked out at the experimental site under the direction of L. Savatyugin, Candidate of Geographical Sciences. A device for high-speed ice cutting by means of hot water and steam is being tested. The so-called hydro-thermocutter has displayed high effectiveness. A block of two cubic metres in volume is sawed out of the ice and delivered by tractor to the place of construction of the "moorage". The speed of cutting reaches one metre a minute. Serial home-industry equipment is being employed in the capacity of hot water or steam generators.

The engineering-glaciological investigations are being continued on the snow-and-ice aerodromes built earlier in the regions of the Molodezhnaya Centre and the Novolazarevskaya Station. Here, take-off and landing strips, radio navigation equipment, and technical supplies are being

prepared. Soon, at the height of southern polar spring, the aerodromes will be once again receive heavy passenger aircraft such as Il-18D and Il-76TD. Aeroflot aircraft will transfer from the Soviet Union to Antarctica the first landing parties of participants in the next, the 34th, Soviet Antarctic Expedition.

Vodnyi Transport
24 September 1988
Page 4 (full text)

ARCTIC

Thaw in the Arctic

A threat hangs over the Arctic, the world's "weather kitchen." Another sign of the danger are recent data that show that the ozone layer above the Arctic has deteriorated 6 percent in the last 15 years--years of intense development by man in the high latitudes. The alarm is being sounded not just by scientists and the public, but also by political activists in various countries.

What is the arctic? This is not an idle question since there are no universally accepted geographic boundaries, and interest in the north's riches is also constantly growing in such countries as the FRG, England and Japan--countries which no one could call "arctic." The first question gives rise to others. Who should enjoy preferential rights in the arctic? Which countries are responsible for protecting its fragile ecological balance and natural resources.

There is still no universal agreement as to whether the arctic begins at the tree line or at the arctic circle. The fact that five countries, the USSR, USA, Canada, Norway and Denmark, are "arctic" is beyond question. Countries that are considered to be within the arctic region include Sweden, Finland and Iceland, which have territories situated above the arctic circle and conduct economic and scientific activities at high latitudes.

Northern countries have always been more "ecologically aware". It is no accident that the head of the International Commission on the

Environment and Development (which proposes to examine ecological problems not in isolation, but in terms of their relationship to problems of war and peace, disarmament and development) is the Prime-Minister of Norway, Gor Harlem Brundtland.

Perestroika has forced us here in the Soviet Union not only to face the problems of environmental protection, but to become a leader in the field. The ecological ignorance and thoughtless attitudes towards nature that have prevailed in our country in previous years have forced us into a difficult situation. To stop the process of environmental destruction and restore what has not yet been lost, enormous resources and international cooperation are needed, since contamination knows no boundaries. The Soviet Union holds the view that ecological problems are just as important as the problems of war and peace, since the fate of humanity depends on whether or not they are solved.

It is still too early to speak about concrete results from collaboration on environmental protection among countries in the arctic region. The fact that a legal basis for such interaction is being actively created is cause for hope. An example of this is the signing of an agreement with Sweden and Norway during the visit of N.I. Ryzhkov to those countries in January of this year, and plans for the creation of an International Arctic Sciences Committee to coordinate scientific and ecological collaboration among the countries that have interests in the region. The idea of expanding bilateral and multilateral contacts in the arctic gained support at the USA-USSR summit in Moscow.

The importance of these steps lies in the fact that northern countries are no longer blaming each other for contaminating the environment, but

jointly striving to find ways out of the dead end into which the arctic has all but been pushed by economic and military development within he last twenty years. In the arctic Ocean alone, according to the American weekly "Newsweek," the leakage of harmful wastes from 4,000 oil wells and 9,000 km of pipeline has reached 30,000 tonnes a year.

It is an interesting fact, and one that is characteristic of the times, that at the end of June Norway's minister of the environment, Sissel Roenbeck, visited the city of Nikel' (Murmansk Region). The minister discussed with Soviet specialists, regional leaders and representatives of Goskompriroda (the vice-chairman of Goskompriroda, V. Kostin, took part in the discussion) ways in which the dumping of harmful industrial wastes in the arctic could be reduced. According to the Norwegian press, the Soviet Union promised to reduce dumping on the Kola Peninsula by 47 percent by 1993. This would significantly exceed the requirements of the international convention, which call for 30 percent reductions.

So that such steps are not isolated and yield tangible results, a collaboration mechanism is needed that is capable of uniting the efforts of the various states, a mechanism based on a well-constructed concept of international ecological security. Such a proposal was put forth by the member nations of the Warsaw Pact at the last meeting of the Political Consultative Committee in July of this year. The Soviet Union is preparing to introduce concrete proposals for protecting the environment at the next session of the UN General Assembly.

The interrelation between ecology and disarmament in the arctic is a very urgent one. The region is heavily militarized, and military activity in the arctic is far from decreasing. Of the eight countries in the arctic region, five are members of NATO. The five NATO countries show no particular desire to meet the USSR's initiative (outlined by M.S. Gorbachev last autumn in Murmansk) half way. Nor do they wish to reduce their military naval activities in the region. And yet the "contribution" made by military vessels to the tens of millions of tonnes of refuse that are dumped into the waters surrounding northern Europe each years, is enormous.

It is unlikely that anyone today would risk denying that the arms race and military activity are detrimental to nature. It isn't just a question of the diversion of enormous resources, but also one of contamination and the unpredictable consequences that the accumulation of chemical and nuclear weapons may bring about. Why is it that the "ecologically aware" northern member-nations of NATO are so suspicious of the concept of a nuclear-free northern Europe?

One of the reasons is that military detente might result in a shift in the "balance of power" in favour of the Soviet Union, which, owing to its size and potential, would become the dominant force in Europe. If those who believe in this scenario were to examine the concept of the "common European home" proposed by the USSR more closely, they would see the anachronism of their arguments. Mutually convenient cooperation with equal rights--that is our goal, not domination.

We can agree with the fact that there must be balance--but of interests, not forces, of ecology, not weapons.

All the countries in the arctic region are calling for an expansion of international cooperation in the arctic. Doctor O. Rogne, director of the Norwegian Polar Institute, and his Canadian and Danish colleagues in the working group examining the future prospects of collaboration in the high latitudes, have listed at least a dozen basic problems that can only be solved jointly. Some of the more important problems include: the creation of new technologies and their consequences; the development of industry in the north; the use of labour and material resources; acid rain; radioactive and pesticide fallout; ultra long-range transfer of contaminants; and changes in the climate.

The conclusion of the scientists are in line with the views of political activists: immediate joint action is required. This action demands careful organization and concrete, solidly financed programs. The Soviet Union took an important step when it created a special committee to coordinate scientific and economic activity within the Soviet sector, and to organize and bring about scientific and technical cooperation with other states within the arctic region.

The new approach is blazing a trail through the icy hummocks of mistrust that prevail throughout the world. The arctic is also on the threshold of a thaw. All that remains is to step over it...

Sotsialisticheskaya Industriya
7 September 1988
(full text)

"At Her Native Moorings"

The nuclear ice-breaker "Sibir" has returned to Murmansk from the Arctic. Its voyage was not ordinary -- the giant ice-breaker travelled to the 85th parallel, to the polar region, in order to meet with a drifting island on which polar explorers of the station "Severnyi Polyus - 29" [The North Pole - 29] worked for a little over a year.

And now the polar explorers have returned to the Mainland on board the nuclear-powered ship. Having drifted over 1.5 thousand kilometres in the Arctic Ocean, they have carried out a wide range of scientific investigations in oceanology, meteorology, hydro-chemistry, the physics of ice, and other disciplines.

Sovetskaya Rossiya
2 September 1988
Page 2 (abridged)

CONSTRUCTION

How To Speed Up New Housing

The first nine-storey apartment buildings here, in the very centre of the Arctic settlement of Murmashi, appeared three years ago. Their new tenants were pilots, engineers, technicians and workers from other services of the Murmansk Aviation Establishment. And this year three nine and ten-storey buildings have appeared next door. A third of the development, which was erected by the co-operative method, once again belongs to the Murmansk aviators. Our correspondent comments on the ways in which the housing problem is being solved here.

It is difficult, very difficult, to erect apartment buildings beyond the Arctic Circle, where every square metre costs approximately 400 rubles. But the aviation establishment, regardless of serious difficulties, is finding ways to tackle the housing problem. In addition to the five new buildings put into use in recent years, there are also other which were built earlier.

An eye is also being kept on the old housing stock. Restorations were recently carried out here; heat has been supplied to each building. Several coal-fired boilers have been replaced by a single, central oil-fired boiler. The Murmansk Aviation Establishment's immediate plans call for the construction of another 72-unit apartment building. The establishment would have preferred to carry out its construction not on a co-operative basis, but by using its own financial resources. According to the experts, Murmansk aviators could erect such a

building in only nine months. This was attested to not only by the establishment's own interest, but above all by the noticeable support of Party and government bodies, as well as by the possibility of concluding an owner-contractor agreement with the local construction organization.

Experience speaks of the possibilities for building rapidly and qualitatively. For example, in 1984-1985, in only one and a half years, the Murmansk Aviation Establisment managed to erect two nine-storey apartment buildings simultaneously, having fulfilled three annual plans for opening new residential buildings for occupancy, for a sum total of 1,200,000 rubles.

Murmansk aviators have no shortage of initiative, energy and enterprise, yet it is nevertheless difficult for them to solve the housing problem. Primarily because of limited resources. The aviation establishment is unprofitable for the time being. 185,000 rubles is annually allocated here to the social development fund, while the 72-unit apartment building, which the collective needs so much, costs 1,300,000 rubles.

It is worthwhile to keep in mind that a whole series of aviation establishments are not making full use of financial resources allocated by the USSR Ministry of Civil Aviation for capital construction, year after year failing to deal with the housing problem. Individuals, families and the industry all suffer. The reasons are many: the contractor is not strong everywhere; very often the customer himself does not display proper interest, drive or persistence. An so why not invest money where it will be better used, where a serious housing need makes it necessary to search for and find rapid

construction methods and thereby accelerate the resolution of a most urgent problem for the aviation industry: that of providing each family with their own apartment.

But how, we may well ask, did Murmansk aviators build before; what funds did this unprofitable establishment use to solve the housing problem? It's no secret. Housing was built on a decentralized basis at the expense of the local budget. Funds were allocated thanks to the constant care and attention paid to aviators' needs on the part of Party and government bodies in Murmansk and Murmansk Province. Now, under new conditions of economic management, there is no real need to rely on the local budget. Moreover, a major portion of the budget goes toward the development of airports serving local routes, to their renovation allowing them to accommodate AN-28 aircraft (which the Kola Peninsula is so much in need of), and to the many localities which can only be reached airplane.

Already there is a firm belief at the Murmansk Aviation Establishment that, despite serious difficulties, by the year 2000 or maybe even somewhat earlier, each aviator's family in this area will be provided with their own apartment. There are real grounds for this confidence.

"At the present time," says Yu. Solodilov, commander of the Murmansk Aviation Establishment, "the overwhelming number of our employees live in separate apartments. No more families live in privately-owned apartments. But there can be no grounds for complacency and placidity. There are still many who, although separately accommodated, live in quarters lacking amenities, including barrack-type accomodation. It's very crowded even in our dormitory.

"Such a state of affairs cannot, of course, suit the collective. 300 employees of the establishment were on the waiting list before the new buildings were put into use. Yet although the number of people on the list will get somewhat smaller once the buildings are occupied, the housing problem will still be far from resolved.

"Incidentally," adds Yuryi Ivanovich, "in the course of erecting apartment buildings, aviators rendered continuous assistance to builders, participated in subsidiary work, the provision of amenities, and the supply of materials and machinery, which, naturally, effected economies in resources and time during construction ."

V. Klyuchenok, chairman of the trade-union committee of the Murmansk Aviation Establishment, joins our conversation: "At a conference of the work collective, it was decided to give veterans first preference for new housing, having earned this right by dint of their many years of exemplary service. This is just, in my estimation. Apartments were apportioned in an open manner.

"In allocating living space," continues V. Klyuchenok, "we necessarily took into consideration not only the person's job, but also how well disciplined he was at his job and in his everyday life. And so A. Shulyapin, a worker with the lighting-equipment support service, who was third on the waiting list for housing and consequently virtually assured of a new apartment, forfeited his chance for at least one year as a result of landing in a "sobering-up" station."

...The North is the North, and the housing problem here is especially acute due to the constant migration of the population. Often a veteran who is

retiring on a pension and leaving for the midsection of the country will exchange his Murmansk apartment or else leave it to his children. But sometimes the children have absolutely nothing to do with the aviation establishment, which has invested its resources in the construction of this apartment. In this case, no existing laws have been broken. But the aviation establishment's housing problem is nevertheless becoming more acute. People are rightfully outraged by the fact that their apartments are going to outside people.

A really hopeless situation, at first glance. In this connection, for example, one might recall something that took place three years ago. After obtaining a beautiful three-room apartment in a a new building, a veteran aircraft mechanic, who half a year later retired on a pension and left for the midsection of the country, left his unit to his daughter, who did not work for the aviation establishment. What is more, she lives there by herself.

In this case, the train, as the saying goes, has already left. All the same, those at the Murmansk Aviation Establishment feel that similar problems can and must be solved, and to the mutual benefit of the veteran and the establishment.

It's no secret that many pensioners would gladly leave to take up permanent residence in the midsection of the country, vacating their apartments in Murmansk. But it is very difficult for them to do this on their own. The directors of the establishment undertook to resolve the matter by entering into a sharing arrangement with one of the organizations in Murmansk Province having a contract limit in the cities of Belorussia, 300,000 of their

own rubles being allocated for this purpose. Such an opportunity proved to be to the liking of many veteran aviators. Nearly 30 applications from those working in the veteran's contingent have already been handed in to the trade-union committee. In the next one and a half years they should receive individual well-appointed apartments 40 km from the city of Minsk, the vacated dwellings (as provided for by the terms of the agreement) remaining at the full disposal of the aviation establishment.

Cooperative construction is also taking shape here; a proportion of families belong to Murmansk city housing cooperatives. And recently something new has appeared: young specialists acquiring accommodation on long term credits from the aviation establishment. This represents yet another step towards resolving the housing problem.

Vozdushnyi Transport
15 September 1988
Page 2 (Slightly abridged)

Cheque System Pleases Boss

As of February 1, 1988, our entire trust switched to a cheque system of expenditure control. Its one purpose is to force regular personnel, team-leaders and workers to show careful regard for the expenditure of stocks of materials and capital equipment, and of labour.

I remember when during a lecture on concrete economics the audience was asked the cost of a cubic metre of a one inch plank, or a ton of "small size coal," or a machine-hour. Nobody knew! It wasn't

their money. And so I dream of a time when it will be possible to build namely for money. And so the cheque system is, in my opinion, that first step in that direction.

Of course, all our masters have now started to count their expenses. Write-offs for expenditures on motor transport and machinery have been eliminated. Direct participants and organizers of construction may now be held specifically accountable for the non-fulfillment of plan assignments. Many contradictory questions came up regarding the cost of labour. For example, according to the wage rate, a "DT-75" bulldozer driver receives 28 rubles 96 kopecks for eight hours of work. But if on top of this he fulfills the output quota, his pay will be 37 rubles. Why? Such questions crop up often.

We began counting, and the results already began appearing towards the end of the first month under the cheque system. Profitability in February exceeded that of January by a factor of more than two. Not unexpected too was the sharp decline in profitability in the months that followed: our subcontractors (suppliers, transport people, mechanization specialists) had not adopted the cheque system. Our cheques are disregarded at enterprises. A driver with a cheque is to be avoided: what's that paper in his hand? The "circulation" of cheques must not be limited only to intra-trust subdivisions. Otherwise the result will not be savings, but just a game.

We became convinced that it was much more complicated and difficult to switch to a cheque system than to collective contracts. We decided to study the experience of other trusts in Vladimir and Daugavpils. We came to the conclusion that the

cheque system must be introduced without fail. But in such a manner that the cheque becomes a form of payment at any bank, a unified wage document everywhere and for everyone. All participants in the construction conveyor must switch to the use of cheques.

We are carefully studying this system both at our trust and in the Executive Committee. Effective August 1st we abolished overheads on goods and transport; payments for supplies, transport and machinery will be made by cheque on a daily basis at our projects; we will relieve a considerable number of tallymen and accountants of their jobs.

I believe that the cheque system is the most important facet of our work under the new conditions of full-scale cost accounting. Once this system is adopted in practice, we will then be able to move to the second model of cost accounting.

Stroitel'naya Gazeta
10 September 1988
Page (extract)

Pace of Construction Improves in Pechora

A residential building of 129 apartments for river navigation workers was the latest project completed in residential construction at Pechora.

The problem of long-term construction was solved, and the realization of the city's housing program accelerated, with the help of a unified client agency established under the auspices of the Executive Committee of the Soviet of People's Deputies.

The functions of this agency were assumed by the Division of Capital Construction of the City's Executive committee, headed by O. Asodchii. In a short time it managed to increase the limit of design work, to implement continuity, and to stabilize construction flow. Builders, installation workers, decorators, and plumbers move from site to site without delays, without having to wait for the project next in line. This has made it possible to rent out apartments not simply on schedule but ahead of time.

There is another advantage to the unified client agency -- construction in residential neighbourhoods is now well balanced. In a new residential area where workers of the Pechorskaya State Regional Electric Power Plant live, and where until recently only apartment buildings were going up, now a House of Personal Services is under construction, and designs are being prepared for a grocery store, a bath and laundry facility, and a large club with a gym.

Stroitel'naya Gazeta
4 September 1988
Page 1 (slightly abridged)

FOOD & AGRICULTURE

General Harvest - Tyumen'

Machine operators on most of the farms in the Zavodoukovskiy Region in the District of Tyumen' are now completing the cereal harvest. No more than 100,000 hectares remain to be harvested. Each hectare is yielding an average of just over two centners of grain more than last year. Over 600 leased collectives are taking part in the harvest. This has made it possible for the first time to reduce the number of city dwellers participating in the harvest by half, and to avoid taking students away from their studies.

Ekonomicheskaya Gazeta
(Economic Gazette),
No. 37, September, 1988
(USSR) Page 19 (full text)

"What has 'the Mirror' Reflected?"

Weather reports are like a mirror reflecting both disorder in heaven [literally, rain torrents from heaven]* and one's own disorganization. Half of all crops in the farms of the Territory have crumpled. Their ripening was delayed by two weeks. In the meantime, the Sayany mountains are already threatening September snowfall. Last year more than a hundred thousand hectares of grain disappeared under snow. The present situation is no better: there was practically no summer, it was as though

immediately after the sowing campaign a dank autumn had set in. Yet harvesting has only just begun.

So, is putting the blame on the weather, as in the olden days, the thing to do? Is seeking forgiveness the thing to do, or is it finally time to start viewing this foul Siberian weather as an ordinary phenomenon?

The answer in known. If here, as the song goes, "bad weather lasts half a year," then for the remaining half different words must be made up. Since there are rains, hay should be dried and grain turned. And it should be done not with shovels and pitchforks, but with modern machinery. However, the daily output of all grain dryers in the Krasnoyarskii Territory is at best 120 thousand tons. Yet on a fine day two hundred thousand tons are taken off the fields.

The agricultural industry is begging the industrial giants to give it reliable machinery. However, where there is an able manager, affairs are arranged accordingly. The Yenisei Directors A. Veprev, P. Mikov, Yu. Tolstikov have made a long-standing "adjustment" for bad weather in the form of automated grain dryers.

There is one more unfortunate problem. A combine is not a cross-country vehicle. Heavy soggy grain, damp straw, and dirt under the wheels damage the equipment. In addition, a combine is made of a metal which is like that of an automobile: it bends if you just press on it with your hand. A new machine has been prepared at the Krasnoyarskii Combine Plant in just a few months. It is lighter, stronger, and more reliable than the old "Sibiryaks" and "Yeniseis". It is rumoured that it was going to

be given the name "Gavrilov" -- after the head designer. But he refused: why name the machine, when even for the prototype it was difficult to scrape together the needed materials.

In the meantime, the present steppe machine needs to "eat" and "drink" more often than the others. But, it turns out, there is nothing to feed it.

"First, the quotas for the production of spare parts for combines have been averaged," says A. Korobkin, Section Head of the Department of Agricultural Industry of the Krasnoyarskii Territory. "They are the same for the southern arid winds and for the northern foul weather. And secondly, these quotas were calculated for the yield of the 50's and 60's, that is, by today's standards, for crop failure."

Answers to the questions regarding Siberian fields must also be sought from the engineering industry workers.

"Because the Krasnoyarskii Territory has its own plant nearby, it lives, I would say, better than the others," says V. Kolosov, Plant director. "We give out spare parts to our neighbours even at the expense of other regions. They have such a good life that they have forgotten how to repair equipment properly. We've damaged a reaper -- let us throw it out and get a new one at the plant, they can't help giving it to us. In the end, we are forced to rob not only machine-operators who are 'not from the neighbourhood', but also our own worker collective which is deprived of incentives because deliveries are not carried out."

So, as we see, there are two approaches, two positions, born not only of the heavenly but also of the quite earthly "foul weather conditions". It can be demanded, perhaps, that the antiquated quotas of spare parts expenditure be rejuvenated. But the question must be considered also of how best to utilize the machinery, to wrest the crops from foul weather.

Pravda
5 September 1988
Page 1 (Slightly abridged)

Efforts to Improve Food Production

Many tens of thousand of tonnes of food products are transported into our northern Republic every year. However, even this does not solve the problem: the counters of our stores are by no means crammed with food. It is obviously necessary to organize the local production of foodstuffs. This task is now top priority, and that means that people's inspectors have started to help save it. In the first half of the year, our state farms and subsidiary farms attached to factories have sold over ten thousand tonnes of fresh vegetables.

Our patrols have established strict control over the production of foodstuffs in the cities and worker settlements by means of developing subsidiary farms attached to enterprises and associations.

Last year, subsidiary farms of the Republic produced around ten kilograms of meat per city dweller. This is three times as much as for the RSFSR [1] as a whole. Due to the persistence of Party

Committees and people's inspectors, enterprises have invested 40 million rubles in the development of their farming shops in only two years of the current Five year Plan. Subsidiary farms produce 23 per cent of meat and 26 per cent of milk.

But even this, as we see, is not the limit. Recently, for example, an analysis of the state of affairs in the association "Severgazprom" [Northern Natural Gas Industry] revealed that last year the subsidiary shops of its enterprises did not fulfil even the obviously reduced targets for meat production, and in some of them, production decreased by 1.5 or 2 times. At the Vuktyl'skoe Association of Main Gas Pipelines, only two kilograms per worker were produced, while at the Gas Compressor Station #11 it did not even come up to a kilogram per person. The reason is that in the subsidiary farms of gas industry workers the amount of farm land is being reduced.

Recently, the People's Inspection Committee of the Republic checked what the heads of enterprises were doing to improve food supplies for workers and office employees. It turned out that far from everyone has renounced dependence. Railway workers count mainly on obtaining funds for food from the state. In four out of six railway divisions, even such large enterprises as the locomotive depot and the car depot did not have their own agricultural shops.

At the meeting of the Committee, an evaluation based on principle was given to all these facts.

Sotsialisticheskaya Industriya
28 September 1988
Page 2 (abridged)

GAS & OIL

Testing of Gas Pipeline

Testing has begun on the Tyumen'-Omsk gas pipeline. The length of the section to Omsk is almost 700 km. Branch lines are now being built to regional centres.

Ekonomicheskaya Gazeta
No. 37
September, 1988
Page 19 (full text)

Gas Mains For The Nonchernozem Zone

As already reported, the Politburo of the CPSU Central Committee at its September 1 session examined a government-approved, state-managed program for supplying gas to the rural areas of the nonchernozem zone of the RSFSR. We asked G.I. Shmal', USSR First Deputy Minister of Building Enterprises of the Oil and Gas Industry of the USSR, to comment on the main directions of this important program.

The requirements of the rural population of the RSFSR nonchernozem zone for natural gas are to be met for the most part by the year 1995.

This does not mean that we will only be starting work on the gas supply program in the next five-year plan. We have sufficient capacities to immediately start on its fulfillment. A total of 700 kilometres of pipeline will be laid before the end of

the year alone. This will make it possible to fully supply gas to 24 localities in the Mordvinian Autonomous Republic and in Smolensk, Vologda and Tula Provinces. Next year the pace will accelerate; work will proceed simultaneously in my regions. But we would like to be aware on those areas where gas is most needed.

In the course of implementing the program, 4,500 kilometres of pipes will be laid in the nonchernozem zone.

Is this a large or a small amount? For the sake of comparison I'll say that this is several times more than the amount laid in the preceding five-year plan throughout the RSFSR. I must confess that the current supply of gas to rural settlements in the RSFSR is most unsatisfactory in comparison with other Union Republics. A large amount of work therefore remains to be done. And the work will be completed on schedule. But it cannot be managed without a whole series of important organizational and technical measures. What is needed above all is a detailed program for supplying gas to remote rural settlements in the RSFSR, a program that is moreover drawn up in terms of an overall gas supply program in Russia. Success will depend on the clear allocation of responsibilities among interested organizations. Designers, mechanical engineers and metallurgists must all work together. What we have now is our country producing more pipes world-wide, yet, as before, experiencing a pipe shortage...
Incidentally, thick-walled pipes designed for high pressure are not needed for rural pipelines. So it is unlikely that it will be possible to do without plastic pipes. But we are still having bad luck with these pipes. Although the "Plastik" Scientific and Production Association is coming up with many

interesting developments. I'll add that to lay pipe is still not everything. This is why another serious question that arises is that of equipment needed for small gas-fired boilers. In one word, the successful implementation of the program will, to a large extent, depend on how fast and, most importantly, how effectively we are able to move from the construction of cross-country gas pipelines to local gas "lines" with the help of the USSR Ministry of the Chemical Industry and the machine-building departments.

Yamal gas will bring warmth and comfort to rural dwellers. It will flow through the Yamal-Nechernozem'e [Nonchernozem Zone] gas main, the construction of which has already begun.

There has been much debate as to whether or not this gas pipeline should be built. The Politburo of the CPSU Central Committee made the decision - it must be constructed. We have already started preliminary work, in addition to laying approach lines. Housing in Yamal is being readied for gas workers; it's now up to the designers to come up with all the engineering specifications for the new gas pipeline. We are also requesting that the client, the USSR Ministry of the Gas Industry, assign at least a further 300 million rubles for the construction of the Yamal-Nechernozem'e branch, thereby assuring the commissioning of the pipeline by 1991.

A grand program has been charted and there is no time for equivocation. We must get down to work. The Russion nonchernozem zone awaits change. And gas is the best agitator for the full-blooded future of the nonchernozem village. Gas workers have only to arrive in any utterly hopeless village and drive a single peg into the ground for people to be

instantly filled with hope for tomorrow. There's no doubt that gas mains will bring life to the nonchernozem countryside. Farmers' dreams of having the blue fuel in their homes must become reality in the next few years.

Sovetskaya Rossiya
4 September 1988
Page 1 (full text)

POWER GENERATING STATIONS

"Energy Thrown To the Winds"

How is the program of the Republic for utilizing non-traditional sources of energy in the national economy working? This was a subject of discussion at the Session of the Permanent Commission on Power Engineering of the Supreme Soviet of the RSFSR. Information about the work of the Commission was published on September 9.

Today we offer notes from the Session which were prepared by special correspondents of Sovetskaya Rossiya.

Let us recall how attentively we followed the energy crisis that broke out in the mid-seventies in Western Europe. It aroused a feeling of pride in us -- to us, this crisis was no threat at all. We produce more coal, natural gas, and oil than practically anyone else; newly built nuclear power plants stride powerfully across the map of the country; dams cut across the largest water arteries... We hold second place worldwide in electric power production. Our prospects appeared even more grand.

But...Isn't the air in Krivoi Rog and Kemerovo as full of toxic wastes as can be? As for the dammed channels of Volga, Dnepr, Yenisei -- aren't the flora and fauna of these great rivers adversely affected? And we also had Chernobyl'! Many Departments shyly omit to mention that the USSR holds only 67th (!) place worldwide in production of ecologically clean energy. The time has come for

industrial agencies to answer for wasting natural resources and neglecting to protect the natural environment.

So far as was noted at the Session of the Permanent Commission, wind energy is practically not used in the Republic.

The winds blow overhead, unused by anyone, over the North-Western, West-Siberian, Siberian, Far-Eastern, Ural, and North-Caucasian Economic Regions, over the shores of the Arctic and Pacific Oceans, where 2.5 million tons of diesel fuel are used annually to supply electricity to autonomous consumers (small settlements). The barrels alone, in which this fuel is delivered, use up over a quarter of a million tons of sheet steel (a product in short supply), at the cost of over 60 million rubles. But there is no need to go so far as the eastern and northern ocean shores in order to find examples of mismanagement.

At the Session of the Commission, an example was cited of how "windmills" built outside of Moscow brought back to life a number of villages previously without prospects. According to the experts, using wind powered generators in small settlements to supply dwellings with heat, water, and light would allow for an annual saving of 20 thousand rubles per generator. However while thousands of them could be made to operate throughout the Republic, today only seven operate in the Stavropol Territory, and practically none in the Khabarovsk Territory and Kamchatka. And the prospects for the development of wind powered engineering are also none too bright. In considering the draft plan for 1988, the State Committee for Science and Technology of the USSR did not make sufficient budget allocations for research

on accelerating the development of wind power engineering. The Ministry of Power Engineering Industry and Power Machinery Manufacturing of the USSR did not organize the production of generating equipment, and the State Planning Committee of the USSR did not initiate special-purpose financing.

Another important source of energy left practically without consideration is the deep heat of the Earth. Just the thermal hydrogeological resources discovered so far could alone replace 40 million tons of reference fuel annually. Most of these resources are also found on the territory of the Russian Federation. However, even the minimal tasks delineated by the program for the Republic are not being accomplished. For instance, 275 thousand tons of reference fuel were saved last year due to the use of geothermal energy. This constituted only 83 per cent of the planned amount.

Things are seriously hindered by a narrowly bureaucratic approach and lack of economic incentives. For many years now, the Ministry of Fisheries of the USSR and the Ministry of the Natural Gas Industry of the USSR have not solved the problem of constructing a heatline from the Pauzhet thermal water field to the Ozernovskii Fish Canning Industrial Group on Kamchatka, which would eliminate the need to deliver expensive coal to the enterprise. In the meantime, the Pauzhet Geothermal Electric Power Plant works at half capacity, and the condensate formed in the process is dumped into water reservoirs at a temperature of about 100°C. In contrast, in other countries, not only has the conversion been accomplished to exploiting fields by means of intensive technology on the basis of geothermal circulation systems, but in addition, many minerals are being successfully extracted from the ground waters.

The possibilities of utilizing the deep energy of the Earth are illustrated by the following example. By exploiting the three goethermal fields already explored, the city of Groznyi could be converted to a geothermal power supply, thus ridding the city of its smoke-stacks and expanding its hot-house industry. In addition, the cost price of geothermal heat would be lower than that of boiler houses using organic fuel.

It is known that ecologically clean types of energy are most effective with integrated use. The sun, the wind, and the water in one harness can substantially influence the economic development of any region.

In the Dagestansk ASSR, solar power generators heat settlements, sanatoriums, campgrounds. In the Stavropol' Territory they heat apartment buildings, in he Rostovsk Region -- agricultural complexes. But so far these examples are rare, even though a resolution of the Council of Ministers of the RSFSR [1] has designated 13 Territories to save on organic fuel by means of solar energy. It was noted at the session that the councils of Ministers of the Kabardino-Balkarskaya, Kalmytskaya, and North Osetinskaya ASSRs and the Executive Committees of the Soviets of People's Deputies of the Altaisk, Primorsk, and Khabarovsk Territories have not even begun to implement this program.

At the same time, extensive use of solar energy is also hindered by the low quality and poor design of solar batteries produced in the RSFSR solely by the Bratsk Factory of Heating Equipment under the Ministry of Building Materials of the USSR. In addition, a paradoxical situation has arisen, where the equipment for sunshine regions is produced in Siberia and transported across the entire country.

What, then, is the root of the problems with non-traditional power engineering? As many deputies noted, it is time to re-evaluate its economic significance. The opinion is common among many industrial executives that production of electrical power from non-traditional sources is unprofitable, or at least cannot compete with thermo-electric or hydro-electric power plants. But let us look at the economic prospects of organic fuel extraction. If, say, a decade and a half ago developing a new field to extract one ton of oil cost the state 46 rubles, in 1985 the amount was 88 rubles, and by 1990 expenditures will be already 129 rubles. The same increase in expenses is also characteristic of the "blue fuel" -- natural gas. The situation with coal is better. But if it is taken into account that in the last few years it has been necessary to mine coal with considerable mixture of sulphur and other harmful substances and that this seriously increased the cost of exhaust gas purification, then expenditures for thermo-electric power plants will only increase with time.

We should also adopt a critical attitude towards our notion that, once a hydro-electric power plant is built, the energy costs nothing. As a rule, the man-made lake that forms after a hydro-electric power plant is constructed floods the best agricultural land and water meadows (millions of hectares of such land have been flooded in the RSFSR alone). Because of this, the agro-industrial complex annually loses billion or rubles. And what is most surprising is that our bureaucratic compartmentalization allows power engineers not to take these losses into account in any way. They think that "hydrokilowatts" still cost pennies.

The cost of electric power produced by atomic power plants is also rising. After the accident at the Chernobyl' Nuclear Power Plant we had to create effective means of electronic protection and to work on designing safer reactors. All this required additional funds.

Such economically objective analysis leads to an understanding of the fact that expenditures invested in ecologically clean energy are already today comparable with the costs of traditional energy, and in the future the wind and solar energy will be even cheaper.

During the Session of the Permanent Commission of the Supreme Soviet of the RSFSR[1] attention was paid to the fact that the work of developing alternative energy sources is seriously hindered by bureaucratic lack of unity. In particular, the tasks of ensuring the saving of organic fuel are given to the local Soviets, while the work is performed by organizations of the central Ministries, each of which implements first and foremost its own policy, giving secondary status to the interests of territories. it is obvious that the central Ministry responsible for the use of geothermal waters, namely, the Ministry of Natural Gas Industry, has more of a headache over the production of gas than over the introduction of new technologies into power engineering. The situation is the same regarding the energy of the Sun. Solar power generators are produced by both the Ministry of Non-Ferrous Metallurgy of the USSR and the Ministry of Building Materials of the USSR. And for everyone this technology is "an illegitimate child".

Sovetskaya Rossiya has already reported several times on the problems of the Research-

Industrial Branch "Vetroen" [Wind Energy], the head organization for design of wind power generators. It was noted that the Ministry of Water Management of the USSR, within whose framework "Vetroen" operates, is at present incapable of implementing the state policy of development of wind power engineering, for after all, this Ministry has different goals.

The inter-departmental confusion also puts constraints on utilizing domestic wastes. In this case, it is the Ministry of Power Engineering and Electrification, the State Committee for Agricultural Industry of the USSR, and the Ministry of Public Housing of the RSFSR[1] that cannot come to an agreement.

The analysis performed by the Deputies has shown that the Russian Federation [RSFSR] needs a central management agency, which would coordinate the entire series of operations related to alternative sources of energy, guided in its efforts by the ultimate aim -- to save organic fuel. Through its local branches, this agency should have the right of priority to insist on implementation of those works and with those deadlines which are in accord with the interests of territories. In the opinion of the Deputies, it is advisable to create such an agency under the auspices of the Council of Ministers or the State Planning Committee of the RSFSR. Moreover, it is necessary to include the targets for utilizing non-traditional sources of energy (and of saving organic fuel by this means) into the quotas of the State Plan for the Economic and Social Development of the RSFSR, and to establish statistical accountability.

At the Session of the Permanent Commission, Ministries and Departments were assigned concrete

tasks directed at extending the use of ecological power engineering in the Republic.

Sovetskaya Rossiya
14 September 1988
Page 2 (slightly abridged)

"The Arguments of Hydro-Electric Power Engineering: Isn't it Time to Reassess Their Significance for the National Economy"

An article by a Krasnoyarsk correspondent V. Komorijn, which was published on August 27 and thereby started a new column in this paper, subjected to critical analysis the feasibility study and the cost benefit study of a new project in Siberia -- the Turukhanskaya Hydro-Electric Power Plant. Some questions of the policy of hydro-technical construction in general were also touched upon. Today we continue this discussion, offering our readers a different point of view on the present condition and the future prospects for development of this important branch of the economy.

There is a segment in the documentary film "The Dam": a bulldozer is demolishing a dilapidated little house while an old woman's sad eyes appear on the screen. We can understand her. But, in order to make the film more objective, it should have also shown how this woman moves into a new building in which her living conditions are beyond any comparison with old. In other words, we cannot, longing nostalgically for the past, ignore the necessity of socio-economic development. And this development is impossible without power engineering, be it thermal, atomic, or water power.

Let us settle this at the outset: constructing a hydro-electric power plant solves problems involving the flow regulation of rivers, frees people from constant floods, allows the development of irrigational agriculture and -- with the right approach -- of the fishing industry.

Entire regions are set in motion due to hydro-electric power plants. The power they produce is the cheapest. If they are compared with thermal power plants, the following picture emerges. Eleven times fewer people are required, there is no need to develop transportation and fuel resources or to pay for their exploitation. If we were to actualize the entire one hundred per cent of the country's hydro-energy potential, we would save annually 250-300 million tonnes of oil alone. The following fact also speaks for the profitability of hydro-electric power plants: while they produce a little over 14 per cent of all electric power, they bring in almost half of the profits for the Ministry of Power Engineering and Electrification of the USSR. Their profitability has long been recognized in developed capitalist countries. For example, Canada utilizes 40 per cent of its hydro-energy potential, the USA -- 45, Japan -- 60, France -- 90, and Switzerland -- even 99 percent. And what about us? Only one fifth.

It also cannot be ignored that water hydro-electric power plant systems are ideal satellites for nuclear power plants. The latter require constant operating conditions, while the need for electric power varies with the time of the day. So, hydro-electric power plants instantly take the peak loads upon themselves. For example, the aggregate of the Sayano-Shushenskaya Hydro-Electric Power Plant needs only 1 minute 40 seconds to go from

the ideal state to producing rated output. While energy units of thermo-electric power plants need almost 24 hours.

Can all of this be disregarded when considering the problems of hydro-electric power engineering? I think not. Public discussion of projects, competent and non-simplistic criticism would obviously be useful. But what really does happen? The designs for the Turukhanskaya and the Sredne-Yenisei Hydro-Electric Power Plants are already being criticized. But is it reasonable to find fault with designs which...do not exist yet? It would be much more useful to discuss the question of how to build hydro-electric power plants so that we affect the environment as little as possible. For instance, the public is justly insisting that reservoir bottoms be prepared [stripped] beforehand, to prevent their pollution. In flat country, it is possible to avoid excessive reservoir flooding immediately upstream of the dam by dyking the banks, so that fertile soil is not lost. Of course, such hydro-electric power plants would cost more, but it would still be more economical in comparison with other sources of ecologically clean electric power.

There are also other problems demanding general discussion. For example, the reservoir level fluctuation, or the change of temperature conditions downstream from the dam. But to discuss does not mean to reject at the outset the very possibility of building hydro-electric power plants.

Unfortunately, at present we are witnessing a drop in the rate of increase of the overall capacity of the country's hydro-electric power plants. There are many reasons for this. And the foremost reason is that the structure of the

hydro-electric power engineering industry is not understood. For instance, comparison of hydro-electric and thermo-electric power plants with regard to their profitability has always been made on the basis of expenditures of only one agency, namely, the Ministry of Power Engineering and Electrification of the USSR. At the same time, expenditures for the development of fuel resources, transportation, environmental protection, and the need for an inflow of labour resources were ignored or not fully taken into account. As a result of such a one-sided approach, the building of hydro-electric power plants has decelerated, and many construction industry enterprises have lost their hydro-technical specialization.

"Leap-frogging" in the financing of constructions has also had its effect. Thus, during the building of the Sayano-Shushensk Hydro-Electric Power Plant, the plan for construction output was continuously being increased while the construction was using up the allocated financial resources. But as soon as the required momentum was built up, cuts in the plan were made. It seemed that everyone was only concerned that the hydraulic turbines be put into operation, while energy output was an insignificant matter. As a result, power units were put into operation while the dam was not completely built, and with reduced water head, so that the Plant still delivers much less energy than it could.

The same situation is now being repeated on the Kureisk Boguchansk, and Katunsk Hydro-Electric Power Plants, where targets are being exceeded the restrictions on financing continue. This means that the plants will be under construction for a long time -- for up to 25 years. And this means that the use of oil, coal, gas will increase, that labour

resources will be used inefficiently. All this occurs because the planning hydro-electrical power plant systems is done according to the so-called "remainder" method. The needs of the nuclear power industry are satisfied by about 140 per cent, thermal power engineering receives one hundred per cent of what it requires, while we get what remains.

It is time for a real change in attitude to hydro-electric power engineering, it is time to give priority status back to it without, of course, infringing upon the interests of the other branches. This is made possible by the literally inexhaustible reserves of water power. Just the mastering of Yenisei and its tributaries would allow the production of more than 320 billion kilowatt-hours. To compare: at present, all of the country's hydro-electric power plants produce 220 billion kilowatt-hours. It is not difficult to realize that this would radically improve the energy balance of the whole country, and of Siberia especially.

At present, it is quite practicable to reduce the construction period of hydro-electric power plants greatly -- to five or seven years. For this it is necessary to complete preliminary work and to restore hydro-technical specialization of collectives in two to three years.

What is now particularly alarming is the lack of designs for hydro-electric power plants. For this reason, even if the path were completely cleared for hydro-electric power engineering to go ahead, we still would not be able to begin work on any plant. Designs take a long time to make, 30-40 institutes spend years coordinating them and getting them approved. In addition, the only specialized institute, the S.Ya. Zhuk all-Union Planning,

Surveying, and Scientific Research Institute for the Design of Hydro-Technical Constructions has been swamped with requests to design nuclear power plants. It is obvious that, while specialists work in other areas, they lose professional skills in their own.

There is another most serious question -- that of enlisting the services of all relevant Ministries for the building of hydro-electric power plants, since expenditures on non-energy needs are constantly growing. At the Boguchansk Hydro-Electric Power Plant they have reached 40 per cent of the entire cost of the hydro-electric power plant system, at the Sredneyenisei -- more than a half. At present, power engineers are forced to create the infra-structure for the other branches as well, to make multi-faceted decisions on questions of socio-economic development of regions. This naturally slows down the development of power engineering itself, and also results in ecological problems. One of the most critical problems is the presence of trees on reservoir bottoms. For some reason, the Ministry of the Lumber Industry looks on these trees as though they were something disrupting normal activity. And so long as an extra-departmental decision is not made, a decision in which national considerations would predominate, the problem will remain critical, and trees will continue to rot under the reservoir water table or next to it.

The time has come to reassess anew the importance of hydro-electric power engineering in the life of the country, and to solve the problems of its development in an integrated manner.

Stroitel'naya Gazeta
3 September 1988
Page 2 (abridged)

SOCIOLOGICAL ISSUES

Let Him Pay who "Spoiled the Music"

The state invests considerable resources in the health of its citizens, but doesn't always get the appropriate returns on its investment. And it is precisely this unbalanced situation that makes the topic of the article below, written by Olonetskiy Central Regional Hospital Chief Physician M. Tselishchev, so urgent.

Free medicines for children under three, vaccinations, various preventive measures in kindergartens and schools--this is only a partial list of what we as a society invest our resources in, having determined that protection of motherhood and childhood are high priorities if our social welfare system is to develop.

Add to that free in-patient treatment, check-ups and observation in polyclinics, quick medical service, medical certificates covered by the social insurance fund...And these are only isolated parts of the picture. They have been mentioned here to illustrate the main issue: how to increase the returns from investments in health programs.

Let us look at the principal factors that affect health. Medicine has come to the conclusion that a person's health depends 50 percent on the individual's lifestyle (i.e. on himself, traditions and social customs), 20 percent on the condition of his environment, and only 8.5 percent on the level of medicine provided.

As we can see, the chief "factor" affecting an individual's health is the individual himself. Thus, if we were to follow this logic further, the State, having taken upon itself the responsibilities of providing free medical assistance, should provide it to the extent that its citizens make an effort to protect and maintain their own health, and should take into account those factors undermining health that are the fault of the individual himself and his lifestyle. In practice, however everything is different. In reality the notorious "leveller" principle reigns: everyone according to the same prescription, the same standards.

Here's an example. Last year, in one of the sovkhozes in our district, the sick rate went as high as 591 person-days, resulting in an economic loss of 49,000 rubles. The economy lost 15,000 rubles in production which was not-made up. The bulk of the expenses for treatment came from the state budget and the social insurance fund, though a fair share of the worktime losses resulted from people's careless attitudes to their own health. And in my view the costs of treatment could have been born by the "victims" themselves.

A callous attitude toward the environment results in a significant, or more precisely, an uncalculated deterioration in health. Contamination of the air, unpurified industrial effluents, ignorant use of herbicides, fertilizers and medicines lead to a dangerous deterioration of man's internal micro-environment. In our view, it is the businesses and organizations that contaminate the environment who should bear the costs of providing preventive medical services and rehabilitation in such cases.

The third factor affecting the condition of an individual's health is the level of medical protection provided. Let us look at two aspects of this issue: the material capacity of the local health protection system, and the professional level of medical workers.

Of course, the funds that have been allocated are still not sufficient. But neither does the cost estimate structure promote the development of the health protection system either. Thus around 58 percent of all expenditures are taken up by medical workers' wages and salaries, 7.5 percent pays for medicines, 6.5 percent goes to feeding patients, and only 1.8 percent goes toward the so-called "hardware" inventory, i.e. medical and technical equipment, ambulance transport, etc. In our region, this amounts to around 20,000 rubles a year. If we consider that an RAF vehicle cost 5,732 rubles, and a fibrogastroscope cost 8,800 rubles, then to re-equip a health-care institution to bring it up to current standards is out of the question for the immediate future. True, it is now possible to transfer funds "from item to item," and even to redirect economized amounts toward satisfying the social needs of the doctors themselves.

But under the existing circumstances, these are no more than fine words. The health protection budget must be increased significantly. Moreover, the budget should not be planned according to "what has been achieved," the residual principle, or "indexes of consumption" (bed-days, number of visits, etc.), but according to a scientifically developed norm for one resident, and separately for each region.

It should be noted here that the State did recently increase its allocations to health

protection significantly. For this reason it would be unrealistic to ask for more funds at this point. What is the solution? In the first place, what we already have should be used efficiently. In addition, in my view, we should also be looking for non-traditional ways of supplementing the health-protection budget.

Let us return to the question of health. If an individual makes no effort to protect his own health, or worse, if he harms it (in whatever way), then the question logically arises: should the State bear the material costs of his rehabilitation? He should pay who "spoils the music." This also includes parents, kindergartens, schools, and especially industry. By not providing healthy working conditions for its workers, or by disturbing the ecological balance so that the sick rate is increased, work collectives should be obliged to compensate the state health protection institution for any treatment costs incurred. Among other things, not only will this type of approach strengthen the material base of the health protection system, but it will also create conditions in which the sick rate can be reduced. This must not in any way be understood as a shift towards paid medical care, but merely as a restoration of justice.

It would be unjust not to mention at this point one other problem--the quality of medical aid.

It is no secret that professional ignorance among medical workers results in delays in treatment and deterioration of the patient's health. Only economic levers can rectify the situation.

"He wasted it--let him pay for it out of his own pocket!" With this kind of approach the lazy

types, the good-for-nothings, and the people who land in the profession by accident will get out of it faster. The present system for certifying doctors is of little use.

Finally, a word about methods of economizing in the health protection system. Health protection organizers and medical workers' collectives must now search for new forms and methods of working that will make their labour more efficient and increase investment returns.

For example, we analyzed the structure of the patient situation in our hospital and came to the conclusion that around 30 percent of patients do not need round-the-clock hospital care. What is more, around 7 percent are involved in treatment or diagnostic procedures for only 3-4 hours a day. Consequently, a new 15-bed day-hospital was opened in a separate wing of the new polyclinic, where patients undergo a whole series of treatments over the course of 4-5 hours, including daily check-ups by a physician, and are then sent home. The money saved is equivalent to around 40 percent of the money required to pay the salaries of the middle and junior medical personnel serving this group of patients.

We then started a second shift for 10 patients. In this way, 25 patients are treated daily using 15 beds. A third shift is planned. Our experience has shown that industry is not the only sphere in which the resource base can be put to more efficient use.

A second example illustrates the urgent and extremely difficult problem of providing universal clinical examinations. At the present time, where there is no sanitary medical department in the

workplace, clinical examinations are performed at the regional polyclinic. The result is that people are taken away from their work, a whole range of problems are created that make it difficult for the clinics to fulfill their prime function (to provide medical treatment), and the bureaucracy gets worse and worse. Naturally in such circumstances the public's attitude towards this type of preventive care system runs more and more toward mistrust.

We believe that most of the work of preventive care should take place in health centres situated within the workplace itself. Public health centres and out-patient preventive clinics already existing in the workplace could serve as a basis for such a system. For example, in our region there are three public health centres and six out-patient preventive clinics. We have already begun setting up such centres at two of them, and we hope they will prove highly effective.

The health fund that was created in our region can serve as an example of how work collectives can participate in the financing of health protection systems. This is the second year now that local businesses in the region, under an agreement that provides medical services to work collectives, have allocated to us a total of more than 40,000 rubles per year towards the development of the health-care system. This is a substantial contribution to our budget.

In general, it is time we clarified our material responsibility towards the "consumer" of medical services. This is not a departure from the principle of free medical care, but a suggestion that the state only pay for such services from its budget under the condition that the consumer is careful with

his own health. If he has been injured, however, then whoever is to blame (be it the consumer himself or his environment) should be obliged to cover the cost of treatment. All costs of prevention, of course, remain the responsibility of the state. Methods of economizing within the health protection system itself must also be developed, economic levers must be found, and, what is very important, the professional level of medical personnel must be raised; every medical worker should be examined closely to see if he is suited to the position he holds.

Ekonomicheskaya Gazeta #37
September 1988
Page 19 (full text)

The North And Its People: Reflections of a Delegate to the 19th All-Union Party Conference

Stuck in the memory of many people is the address by O.M. Zakharova, operator at No. 12 Concentration Plant, "Yakutalmaz" Industrial and Scientific Association, to the 19th Party conference. This worker spoke sincerely and anxiously about the North's social "sores" and sharply criticized high-ranking officials who had failed to fulfill their promises and who moreover had failed to live up to their responsibilities to the brave workers of this bleak land. The Trud editorial board asked its correspondent, I. Krasikov, to meet with Olga Mikhailovna in order to follow up with this topic, which concerns the lives of hundred of thousands of northerners.

I.K.: Did you succeed in fulfilling the

mandate of fellow countrymen who dispatched you to the conference for the purpose of airing problems of the utmost importance for northerners?

O.Z.: Not completely, I'm afraid to admit. And when I returned, I was reproached by my fellow countrymen for not speaking about the artificial limitation of northern earnings. I'll say right away that there was, of course, absolutely no "censoring" of reports. It was I who, at the last minute, had deleted this question from my address. The conference was tackling major issues; fundamental, global problems were being discussed, and it seemed inappropriate for me to divert delegates' attention on an apparently local, "regional" bureaucratic paradox.

I now think I may have made an error. In the end it is questions such as the North's fall in prestige, the drain of qualified workers, and the fact that there will eventually be nobody to mine our natural resources, which, incidentally, are of strategic importance to the country, that are of national concern. Not long ago, 20 people left our concentration plant to return to the mainland. At least five of them comprised our most valuable specialists, whose replacement will take some time. And how many such people do enterprises in Yakutia lose every year! The reasons for turnover are many, but the primordial one may very well be the wage system. In the days when the administrative style of economic management reigned supreme and when directives establishing various "ceilings" multiplied, the USSR State Committee for Labour and Social Issues made the decision to limit the northerner's direct earnings. This undertaking, rather than effecting "savings" on people, turned to be a loss for the State.

Judge for yourself. Our basic wage "ceiling" is 300 rubles. True, it still amounts to more than 600 rubles with all the territorial "entanglements." At one time, this seemed like "easy money," a complete fortune, On the mainland too it is now possible to earn no less than 600 rubles. But neither working conditions nor even our expenditures can be compared with those of the mainland - the market price of early vegetables reaches 10 rubles per kg; in those rate instances when fruit is available, the price is even steeper. And people take what they can get; no selection here.

Most important though is the fact that the wage "ceiling" restrains growth in output and labour productivity. People work "from here to there" in an effort to fit into the "even" 300 and are not interested in working for anything more. The State is forced to move in extra manpower, which in turn means more housing, hospitals, nursery schools, stores, products... In contrast to other parts of the country, 2.5 times more financial resources are needed in our region to organize cultural and communal facilities for northerners and to create more or less normal living and working conditions for them. And so is it not more sensible - from all standpoints - to give every person the chance to work more productively? This would make it possible to make do with less workers in the North.

I.K.: And this in fact is what is the aim of the current economic reforms and the introduction of cost accounting...

O.Z.: We attach high hopes to cost accounting. However, for the time being it is "spinning around," so to speak. For example, it is believed that the Udachnyi Combine, where I worked

(incidentally, the leading enterprise of the "Yakutalmaz" Production Group), became independent and switched to cost accounting. But the only people to make wage gains have so far been the managers; because of the "ceiling," workers are, as before, not interested in the high end results of work. The profit made by the combine's collective is also in point of fact not left at the combine's disposal: nearly all of it goes to the production group, where the central directorates lay their hands on it. This checks the implementation of our social programs. I am speaking about the material level. But such a deformation of the ideas of the economic system of administration can result in moral damage. People who do not feel themselves to be real masters relate to what is happening in the capacity of observers. Furthermore, the withdrawal of profit from efficiently operating enterprises and the distribution of this profit "in favour of poor enterprises" returns us to the pre-perestroika principles of wage equalization, corrupts those same "poor enterprises" and spawns collective dependence.

I.K.: We will not forget that diamond miners are in a priveleged position in comparison with the representatives of other industries in Yakutia. They have more housing and consumer services are better. As far as Udachnyi is concerned, it was completely planned and built from special designs (incidentally by using financial resources centrally directed here to the detriment, perhaps, of others) as a model city of the future...

O.Z.: ...And nevertheless every third inhabitant of Udachnyi requires better housing. The waiting lists for spots in nursery schools have grown longer and longer. You are mistaken to suggest that I care only about the interests of my fellow

countrymen in Udachnyi. I believe a practice, whereby regions are robbed down to the last kopeck, their profits and produce in excess of plan seized, to be intolerable. Their representatives are then forced to go begging, appear before the "authorities" in the role of petitioners, thankfully accepting their "handouts." You will recall that worker-delegates raised this matter at the Party conference.

The social sphere in Yakutia is in a rudimentary state, worse, in my opinion, than anywhere. Imagine: even a course of medical treatment is prescribed by doctors often on the basis of the availability of required medicine... In my address to the Party conference I tried to speak as authentically as possible about our life in order that the delegates, and first of all the leaders, appreciated and understood the fact that the North has its own specific social problems, which require individual consideration by various Union organs of power and the USSR Council of Ministers.

During free time away from session, in the "corridors," as they say, I met with several leaders on whom depend the solution of issues vital to the lives of Yakut residents. I asked, persuaded, insisted... Incidentally, many delegates from the country emerged as "pushers" - such is the custom... But is this right? Why is it necessary to keep asking for that which has been rightfully earned. The diamond-bearing North and Yakutia contribute directly to the country's currency reserve. And would it not be far more fair for us ourselves to determine what we need (produce, medicines, equipment, special housing) and what we buy in our country and even from abroad?

I.K.: Yes, this is exactly the way the North is developed abroad: everything is brought in from the "mainland." But our northern zones, including Yakutia, are incomparably more densely populated. There are quite a few poorly accessible settlements, with which there are no permanent transportation links. How do we provide these links? On the other hand, summer in Yakutia, although short, is sufficiently warm. In the region of Mirnyi the temperature can go up to 30°C. The first hothouse vegetables ripen in early June, almost like in Moscow...

O.Z.: Our hothouse tomatoes and pickles are indeed "golden" - so unprofitable is their production! Our production group's "Novyi" State Farm produces 4.3 million rubles worth of output, on which it annually incurs losses of 4.5 million rubles. This amount is written off from our profits. Such is the price of a "subsistence economy." No, the food problem must be solved differently.

I.K.: On the whole, is a spirit of change somehow being felt at the enterprise?

O.Z.: Some progress has been made. For example, some people have heightened their interest in social work. Discussions of the most important matters have become commonplace. Whereas before everything was done secretly, now there is more openness; orders, announcements and decisions affecting people are posted on a notice-board. In a recently conducted survey we asked a collective to assess the work of executives. Many of them gave an impartial assessment.

Workers have been drawn toward books. I, for example, feel a dire shortage of economic and political knowledge. We don't need anymore of that "wait until the leaders think of it" stuff. Things are different now... Many of my comrades complain of imperfections in the Party and trade-union education system (despite the fact that they have recently still been "dozing off" at classes or else avoiding them altogether); they independently seek and study essential literature. In short, the process of regenerating social self-awareness has begun, and I consider this to be the most tangible result of economic restructuring.

We are nevertheless restructuring slowly, especially in economics. Bureaucratic traditions are still strong, in addition to an unthinking predisposition to executing decisions and orders, and an unwillingness or fear of assuming initiative and responsibility...

I.K.: What tasks in this situation do you - a conference delegate, a person whose opinion is respected in the collective - personally set before yourself?

O.Z.: To make sure that my comrades are imbued with the basic idea sounded at the conference and later from the rostrum of the Central Committee Plenum: the fate of economic restructuring depends on each one of us, on our civic stand, consciousness, activity, and on our performance at the workplace. I endeavour to set an example in this regard. To what extent I will succeed is not for me to judge.

Trud
11 September 1988
Page 1 (slightly abridged)

Translator's note: In this interview, the initials "O.Z." stand for O.M. Zakharova and "I.K." stand for I. Krasikov.

"How Is Your Health, Northerners? "The Arctic Consultation"

In its recent publications, Sovetskaya Rossiya has more than once touched upon the alarming situation which has arisen in public health care of indigenous northerners. The integrated program "The Health of Northern Peoples for the years 1988-1995", adopted by the Council of Ministers of the RSFSR[4], was called in to change the situation. How can an effective implementation of the program be achieved? This question was discussed at a special meeting in Anadyr', whose participants comprised representatives of Party and economic agencies, physicians, scientists from the Yakutskaya ASSR[1], the Khabarovskii, and Primorskii Territories, and the Magadanskaya, Amurskaya, Sakhalinskaya, and Kamchatskaya Regions. Dozens of specialists visited public health care enterprises and agencies of the region. A Sovetskaya Rossiya correspondent also took part in the meeting.

"Queuing for... an Operation"

It is nearing the end of the shift, but the line-up in the Chukotskaya District Clinic is long. The number of those wishing to see the surgeon V. Bityukov is especially large. Outside his office there is a real babel. The norm requires that six minutes be spent on each patient. But the amount of time actually spent is twice that: examination, treatments, dressings, filling out forms testifying incapacity for work, referrals to the hospital, writing out prescriptions. The number of patients seen is already over forty. Consultation began at eight in the morning and is threatening to last until evening. So, in order to speed up the process, patients are seen into the office two and three at a

time. But the line-up is not getting shorter... Even V.I. Astakhov, Assistant manager of the clinic, could not endure it any longer, and ran into the office in exasperation: "Where did we get so many patients from?"

Editorial Information

General mortality figures among indigenous people of the North are alarming -- the rate is 1.7 times higher than the average for the region's population as a whole (and infant mortality is two times higher). Seventy per cent of the indigenous northerners (this is twice the rate for the RSFSR[4] as a whole) die before the age of 60. High mortality is observed among the Eveny, the Nganasany and the Orochi in the Khabarovsk Territory, the dolgany in the Krasnoyarskii Territory, the Evenki in the Amur and Chitinsk regions, the Sel'kupy of the Tyumen' region, and the Chukchi of the Magadan region.

Indeed: despite decrees adopted in recent years, rich in content and quite constructive, and other documents more or less related to solving social problems of the North, the situation on this most important area of our public health care remains serious... It would seem that a great deal is being done -- the economy is being developed in these regions, mostly by emphasizing local branches of industry, agriculture, and national craftsmanship trades; conditions in towns and rural settlements are being improved. For the decade beginning in 1980, 70 billion rubles are expected to be spent towards these goals. 42 Ministries and Departments of the Union and 36 Ministries and Departments of the Republic are taking part in carrying out the planned programs.

Why is it, then, that the health of the indigenous northerners, who should have been the first to experience the beneficial influence of the changes, still leaves much to be desired?

Describing the present state of affairs in the area of "northern" public health care, N.T. Trubilin, Vice-President of the Council of Ministers of the RSFSR[4], noted:

"The economic and social development of the autonomous districts and other areas of residence of Northern peoples displays a lack of coordination and unity in the actions of many Ministries. Frequently, the specific character of natural and social conditions is not taken into account."

One can but agree with this statement. We were able to meet and talk with many people in the line-up to see the surgeon, a line-up whose giant proportions were also noticed by N.T. Trubilin, who visited the clinic on that same day. Many different reasons made these people come to the doctor. But generally it was their shaken health that led them to see the surgeon: pains in the small of the back, in the legs, constantly feeling unwell....

"People quite often come to us with such ailments," surgeon V. Bityukov told us. "As a rule, there is only one "diagnosis": physical over-exertion, over-cooling of the body."

The patients say the same thing.

A. Prokhorov, steel framework worker at a reinforced concrete products plant

"There is no mechanization of any kind. Sledge-hammer and crow-bar -- that's all our "automation". This is why my fellow workers and I have arms constantly covered with cuts and abcesses. This year I have already seen a doctor twice.

Hard physical labour, poor working and living conditions -- these are perhaps the most harmful "bacteria" which, even today, still substantially undermine the health of the northerners -- construction workers, machine operators, reindeer-breeders, fishermen, and hunters. According to the calculations of experts, the portion of manual labour in the North comprises 96 per cent. Especially heavy is the burden of cattle-breeders, hunters and fishermen. On state farms, only one fifth of all teams has cross-country vehicles; motorized sledges, so essential in the tundra, are by no means used everywhere.

Another circumstance can but cause concern, namely, that reindeer-breeders and members of their families, hunters, and fishermen are still forced to live in primitive mobile dwellings -- chumas, yarangas, and tents. 3,115 families, together number 13,303 persons, lead a nomadic lifestyle with all ensuing consequences. The main bulk of them live in the Tyumen', Arkhangel'sk, and Magadan Regions, the Khabarovskii and Primoriskii Territories, and the Yakutskaya ASSR -- that is, as a rule, in areas where conversion of the indigenous population to a settled lifestyle has been practically left to itself. The organization of labour and the living conditions offered by the local governing bodies to the reindeer-breeders are not acceptable, -- the indigenous inhabitants prefer to live and work in the old way.

In the meantime, in a number of regions of the North, considerable experience has been accumulated in solving these problems -- in particular, the pasturing of reindeer in shifts, as is practiced in the Nenets Autonomous District, keeping them in a fenced area , as is done in the Evenkiisii Autonomous District. But even these smidgens of experience are still awaiting scientific substantiation, generalization, and dissemination into all other areas.

'To the North -- for Diseases?'

We flew to Anadyr' together with my recent acquaintance V. Kutnyakov, head Physician of the Kamchatsk Regional Tuberculosis health Centre. It goes without saying that we broached the subject of his not entirely ordinary address at the previous meeting in Yakutsk, where problems of medical care for indigenous peoples were also examined. (This was discussed in the article "How Is Your Health, Northerners?", Sovetskaya Rossia, 28 July 1988.) The address of the man from Kamchatka stood out from the general critical tone of the discussion, in that it carried in itself a positive charge.

It turned out that even in this severe region considerable experience has been accumulated in the fight against tuberculosis. At its basis lies the active participation in the fight not only of public health care services but also of the Party and Soviet agencies of the region. In the last years alone it has been possible to decrease the incidence of the disease by several times. This information had aroused a certain amount of distrust in those present at that meeting. And this is understand-

able. For the incidence of tuberculosis is one of the most critical of all problems that characterize the state of health of the peoples of the Siberian North.

Editorial Information

The incidence of tuberculosis among the peoples of the North is 7 to 9 times higher than in the RSFSR as a whole. In the Chukotsk Autonomous District the figure is 405.5 per 100 thousand people, in the Khanty-Mansiisk and Yamalo-Nenetsk Autonomous Districts -- from 31.6.5 to 347.9, and in the Taimyr and Nenetsk Autonomous Regions 309.7 and 108.8 respectively.

Where does the reason for such a situation lie? It is believed in the Ministry of Health of the RSFSR[4] that the reason lies first and foremost in the lack of an integrated approach to this problem. As was correctly noted at the meetings both in Yakutsk and an Anadyr', tuberculosis is still viewed locally as a medical problem and little attention is paid to social questions. Yet this serious disease is directly related to people's nutrition and residence. However, in the Yakutsk ASSR[1] and in the Krasnoyarsk Territory more than 60 per cent of contagious patients were not removed in time from dormitories and crowded, shared apartments.

The problem of nutrition is no less grave. The system of food supply for indigenous peoples is beneath all criticism, based as it is on the all-Union quotas, which leads to the piling up and spoilage of some types of products and to a complete absence of other types.

Food products prepared according to special recipes are simply nowhere to be found,. As for the gifts of nature -- the seal meat, whale, and other marine animals, which from the times of old made up a considerable part of the diet of the indigenous northerners -- their absence goes without saying.

In the opinion of the local physicians, the existing standards of nutrition developed for the European North cannot be applied to the indigenous population of the Siberian North and the Far East.

"For many years now our district has received an insufficient amount of fresh vegetables, fruits, potatoes," laments I.A. Ismakaev, Head State Physician of the Chukotsk Autonomous District. "Because conditions for keeping them are absent, reindeer-breeders, hunters, and fishermen in the field conditions are supplied mainly with canned products. It is incomprehensible why the food industry terminated the production of food-stuffs specifically intended for regions of the Far North -- vitaminized and enriched products, iodized salt, products that keep for a long time.

A large share in the structure of mortality belongs to accidents, cases of poisonings, and injuries, most of which are related to alcohol use.

"In order to get rid of withdrawal symptoms, people consume anything they can get their hands on," A.G. Chuiko, Head Physician of the Kamchatskaya Regional Hospital, admits bitterly upon our meeting. "Unfortunately, the majority of medical workers do not have a deep-seated conviction concerning the necessity of personal active participation in the fight against drunkenness and alcoholism."

Recalling the meeting of medical personnel in Yakutsk, statistics were disclosed there which caused great indignation in many people in the audience. It turns out that over forty medical workers are registered with drug addiction clinics, dozens have been in medical "drying out" stations.

While analyzing the data related to the health of the indigenous population, we cannot leave unmentioned the serious ecological situation which still continues in the region. Here the measures to protect the water reservoirs, the soil, and the atmosphere from pollution are still not being implemented in full. For instance, in Noril'sk, Krasnoyarsk, Abakan, and Kansk the concentration of substances harmful to health exceeds the established norms in the atmosphere. In the last few years, dumping them into the atmosphere has increased by 18 per cent...

These facts lead to sad reflections. But first of all one thinks of the following. In the spring of this year, a medical landing party of the Ministry of Health of the RSFSR , the Lenin Soviet Children's Fund, and the editorial board of Sovetskaya Rossiva worked in the Chitinsk Region for a month. Today we can already say with confidence that the most valuable discovery of this action was the fact that the local Party, Soviet, and economic leaders finally became convinced that questions of health care are not simply the prerogative of physicians. They touch each and everybody. As to the Northern region, it seems this understanding has not yet been reached there.

'Chukhotka Calls an Ambulance"

On August 15 at 19:52 local time, an anxious message was received by the air medical service of the Chukotskaya District Hospital from the Anadyr' Sea Port. It said that the captain of the fishing freezer-trawler "Vulkan" [Vulcano], located 60 miles from the Beringovsk settlement, was asking for help. It reported that a sailor on board was in serious condition -- an open forearm fracture and a skull injury.

Judging by the records, at 19:55 this information from the air medical service was directed to the traffic control centre of the airport, and two minutes later to the traffic controller. At 19:59 the medical staff got in touch with the doctors of the Beringovsk region. The meaning of all these negotiations was basically the same: "A rescue group flight is urgently needed!" But the reply from the Beringovsk was: "The airport does not have an equipped helicopter at its disposal." At 20:30, pleading insufficient daylight time, pilots at Anadyr' also refused. An at 21 hours a message was received from aboard the "Vulkan": the 27 year old sailor K.N. Topchyi has died...

Would the physicians have arrived in time to save the patient if they had flown out to the "Vulkan" immediately upon receiving the "SOS" signal? We shall not engage in guess-work. It is important to understand another thing: why did the struggle for a patient's life, which continued on the air for a good hour, finally end in defeat? In the opinion of air medical service workers, that August case exposes the most burning problems in the organization of emergency aid to residents of the North.

As distinct from many other air medical service subdivisions of the country, the Anadyr subdivision, which operates practically year-round in extreme conditions, does not have a helicopter assigned to it. Indeed, there are also no aircraft crews permanently working with physicians, and no special rescue groups. Not one helicopter is equipped for work in aerial ambulance service...

Modern health care is unimaginable without employing effective means of transportation. This is especially true in the North. The problem is that medical aid in areas where the indigenous peoples live, comprising 376 state farms and collective farms and 3382 nomadic farms, still remains relatively inaccessible.

For instance, in the Primorskii Territory, there is one medical institution per three farms. In addition, it must be taken into account that settlements in this and other areas are situated, as a rule, at large distance from each other. The result is that measures intended for the prevention, of disease, discovery, hospitalization, and treatment of the sick are only 60-75 per cent effective.

Editorial Information

During the Eleventh Five year Plan and the first three years of the current one, 7350 ambulance cars were sent to the North, over forty tracked vehicles were allocated. Before the end of the Five Year Plan, the autonomous districts and regions where the peoples of the North reside will receive 68 mobile out-patient clinics and 606 ambulance vehicles of improved rough-terrain performance.

A group headed by N.T. Trubilin, Vice-President of the Council of Ministers of the RSFSR[4], worked intensely for a week in the Chukotsk Autonomous District.

"Medical science has every opportunity to considerably improve the health of the northerners in the next few years," Nikolai Timofeevich [Trubilin] told us. "The Council of Ministers of the RSFSR[4] has approved the main directions of integrated medical and social research in the regions of the North. For these purposes, around 50 million rubles were allocated for the Twelfth Five Year Plan alone. Already in the next three to five years we should receive scientific recommendations regarding the prevention of infectious and other diseases, and the implementation of a set of measures for improving maternity and child protection."

Attention must be paid also to serious shortcomings in supply of drugs and medicines. At present, consumption of medicines supplied to the indigenous population constitutes only 2 rubles and 78 kopecks, which is considerably lower than the average consumption in the RSFSR[4].

The material resources of public health care also demand improvement. Many hospitals are housed in dilapidated and ill-equipped buildings, many are overcrowded. At present, Councils of Ministers of Autonomous Republics, Territorial Executive Committees, and Regional Executive Committees are planning to build during 1988-95 new hospitals for 3896 beds, several out-patient clinics (for 13265 visits per shift), as well as 25 health centres and 59 paramedic-obstetric units. Existing public health care institutions are to be re-equipped. And while today only 70 per cent of medical personnel

requirements are fulfilled, the Council of Ministers of the RSFSR[4] has set a goal to staff all medical institutions fully by 1990. In 1987, 542 physicians were assigned to work in the regions of the North. Beginning in 1989, the Ministry of Health will increase by 15-20 per cent the assignment of specialists with university and college medical education to the regions where the peoples of the North reside.

In the last while, due to the measures of broad socio-economic scope, already implemented, and to the medical measures now in the process of implementation, the demographic situation in the North has started to improve. Beginning in1980, the population of all the 26 peoples has grown by 17.5 thousand and in 1987 reached 173.200. This gives one confidence that the program as a whole will be carried into effect.

Sovetskaya Rossiya
22 September 1988
Page 2 (slightly abridged)

TRANSPORT AIR

Surgut's Hot Summer Left No Complaints - The Busy Flight Season

Summer in Surgut was unusually hot this year. But our topic is not about the weather (even though it cheered up northerners for while), but about the workload which local airport workers were forced to endure. Each day a handful of workers at the air transportation service must handle thousands of passengers, up to 15 flights serviced by Tu-154 aircraft alone.

"Nevertheless, things went smoothly," figures M. Vinogradova, transportation service chief. "Especially R. Aminova's shift. She has been in the lead in all respects for three years now. The shift is harmonious, well-organized and knows its job to a tee."

Northern passengers are not only accustomed to the dirty tricks played by the weather; but, it must be admitted, also to the tricks played by aviators. No such tricks in Aminova's shift. For a long time I stood and observed Galina Levchina at work. Nothing unusual, everything according to technique, yet I could not understand what the secret was. She disclosed it herself.

"People travel for different reasons: joy, misfortune, work. Any journey is not an end in itself, it is only a preface to something. In his thoughts (which are faster than our aircraft) a passenger can also travel far; he may become irritable, flare up without any cause - he must be understood. For one passenger all that may be

required is to show proper behaviour, as regulations instruct, while for another passenger it may be necessary to go beyond the regulations and provide moral support, a kind word, advice perhaps."

Everything that can have an effect on the quality of service remains the responsibility of the transportation service - all concerns, of which there are enough for everyone, all problems. Whether it be at the beginning of the shift or at the end, here passengers are always treated with equal consideration and attention. And the fact that this collective has now managed the mass transportation of passengers without one complaint being registered - is this not the highest appreciation which passengers themselves can give to transportation service workers?

After all, working conditions in Surgut are by no means great. There is barely any small-scale mechanization, and it pains one to see women forced to carry heavy suitcases. There is no place to sit in the crowded waiting rooms, which lack ventilation. It seems one ought to make a complaint to enterprise and administration directors. But no: two or three kind words instantly bring a joint response; already passengers file cheerfully behind the gal in blue. It's as if there had never been a tiring stand in front of the registration counter and in the waiting room.

But has much been accomplished? A very tiny bit. But in this "tiny bit" there is the understanding that there are also people before you and that for the present all is not roses with them.

"It's not all bad," Rakhima Ribkhatovna might correct me. "We are now permitted to accommodate passengers in hotels; we have secured

permanent reservation(s) in our name; the baggage room is now accountable to the transportation service... It might even be a good idea for shift heads to be linked by telephone with transportation service workers at airports with which we have flight connections. Much more effective solutions might have been found for the difficult and urgent problems affecting passengers. Let us suppose that we learn by telegram that someone is flying to Khar'kov. Since we have no direct flight, the passenger is forced to fly via Moscow or Sverdlovsk. It may well be that the transit dispatcher has no seat on those flights, and so our passenger must be shunted off to the nearest transfer point. And you worry: how's he doing over there?"

And I thought: that's their main secret: to try and do that little bit more for the passenger.

Vozdushnyi Transport
13 September 1988
Page 1 (slightly abridged)

Planned Losses - Passenger Travel Using Helicopters

They say there's nothing worse than waiting and catching up. Here in Tazovskii this is nearly always the case. Cross-winds have become a real scourge for AN-2 aircraft, which are primarily used for passenger flights. They are especially exasperating in May-June and August-September, the peak season for passenger traffic. It takes only one non-flying day on our main route (Tazovskii-Novyi Urengoy-Tazovskii) to arouse a storm of protest among tens of hundreds of passengers. The storm reaches the district Party committee and the Excecutive

Committee of the District Soviet of People's Deputies; telephones ring off the hook at the civil aviation directorate in Tyumen.

"If it's impossible by plane, give us a helicopter," people nag inside the enterprise commander's office.

What can one answer? That civil aviation switched to cost accounting effective January 1st? That the collective loses 477 rubles 50 kopecks for every flight hour that the Mi-8 helicopter is used to transport passengers? They just wouldn't understand...

There's no choice but to abandon the plan and cost accounting, remove the Mi-8s from service and use them to fill in the latest gap in passenger service. Fill in, while mentally calculating losses. Last year, for example, the losses amounted to nearly 700,000 rubles, and that' a very rough estimate.

The introduction of a double fare for the transport of passengers via helicopter might help rectify the situation somewhat. But USSR Ministry of Civil Aviation Edict No. 91 of 6 May 1986 permits use of a double fare only if there is no runway or when roads are in bad condition.

I do not wish it to be inferred that I am proposing to correct our problems at the passenger's expense. Even with a double fare, we still lose 215 rubles of potential profit per hour. This is with full seat occupancy in both directions, which rarely occurs in the Polar Regions. So it is unlikely that someone would resort to helicopters if An-2 aircraft were available to transport passengers. This is why

the above-mentioned edict should be supplemented with a paragraph to the effect that:

"Passengers are to be charged a double fare when transported via helicopter. The fare shall, for objective reasons, be recalculated in the even that a helicopter is used to service a flight for which an airplane ticket was purchased.

The passenger in such cases can refuse to pay the double fare and await a conventional flight."

Vozdushnyi Transport
22 September 1988
Page 1 (Slightly abridged)

TRANSPORT RAIL

"A Tram in the Taiga"

A high-speed tram built in the young Siberian town of Ust' - Ilimsk has transported its first passengers. Its route stretches from residential neighbourhoods to the industrial area where a cellulose plant and other enterprises of a large timber industry complex is located.

The creation of a high-speed type of transport in Ust' -Ilimsk was provided for in the general plan of its development. The eleven kilometre route has cut across the forest area separating the town and its industrial zone.

Next year, transportation construction workers will begin building the second phase of high-speed tram. It will make it possible to take workers directly to the entrance-gate posts of the enterprises.

Gudok
20 September 1988
Page 1 (full text)

TRANSPORT WATER

Voyage Completed

The nuclear-powered vessel "Sibir" yesterday returned to its port of registry at Murmansk, after having successfully completed a long arctic voyage. As is known, its crew not only escorted a supply ship with goods for winter workers in the Siberian Far North, but also evacuated drift-ice research unit "Severnyi polyus-29" [North Pole-29] to the mainland. Having fulfilled their assignment with flying colours, the crew of "Sibir" will take a rest.

Sotsialisticheskaya Industriya
2 September 1988
Page 1 (full text)

"By Unified Technology"

The worker collectives of Omsk port and of the local division of the Western Siberian Railway have successfully dealt with the processing of freight, the amount of which was double the norm during the August-September period.

They have implemented unified technology of loading and unloading on the principle "train car--vessel" and utilized new arrangements of distributing trains to loading berths. This has made it possible to process daily 40 train cars more than the norm stipulates. As a result, more than 50

thousand additional tons of freight have been sent along Irtysh to the enterprises of the Omsk Region in the northern areas of Tyumen'.

Vodnyi Transport
24 September 1988
Page 1 (full text)

"A Step Forward Or A Step Back?"

Somehow we have grown to think that if a new vessel is built it is necessarily better than the previous design. How can it be otherwise? One more step forward! Yet it can also be a step down an inclined plane.

That is just what happened with ice-breakers of the type "Captain Evdokimov". They have turned out, in may respects, inferior to the previous design "Captain Chechkin". And the fault here lies not with the Finnish ship-builders of the firm "Vyartsilya", but with the experts from the Central Technical Design Bureau of the Ministry of the River Fleet who approved the design. During the past and present navigation seasons, the following was discovered: there is absolutely no manoeuvrebility either ahead or astern when the ice is thicker than 0.8 metres. In order to turn around in its own channel, the ice-breaker requires 1.5--2 hours! Sometimes it happens that in the time the ice-breaker takes to turn around, the ships being piloted become damaged by the compression of the ice or, when temperatures are below 0°C, have enough time to freeze into the ice.

Severe flexures of the ice-breakers's hull both in the ice and on the water, resulting from a weak longitudinal framing, lead to the formation of cracks in fuel tanks, and diesel fuel flows freely into the tiller compartment or into the ballast tanks which serve as the storage tanks for... drinking water!

The absence of a central control room creates certain difficulties for the person on duty in the engine-room, especially while work in the ice is going on. But not even after he goes off duty and retires to his small and comfortless cabin, aptly nicknamed by someone "dog kennel", can he get any rest -- the abnormally high noise level, plus the shocks from the ice hitting the ship, plus vibration so strong that one cannot hold on to the bed. All this leads to early fatigue of the crew, premature exhaustion and disease, especially given that people live on the ship for 8-10 months continuously, being the first to begin and the last to end the navigation season.

Many other serious flaws could be named, with regard to both the power plant and the sea trials performance of the ice-breaker, but the conclusion is inescapable: the design of ice-breakers of the type "Captain Evodokimov" is unsuccessful; they should work in an aquarium rather than in the extreme conditions north of the Polar Circle, in the Ob' Inlet and the Kara Sea.

During the spring of 1987 and the present navigation season we piloted superblocks to Yamburg in difficult ice conditions by means of three ice-breakers of our project #1191, and came to recognize that the ships are working at full capacity. Yet in the future we are to pilot these

superblocks to a part of the Obskaya Inlet that is even further north -- to Seyakha, where winter ends at the end of July and where the ice is much thicker. One can just imagine what will remain of the ice-breakers after this passage! Repairs will be necessary, but there is no graving dock to speak of. For example,, the propeller shafts of the ice-breaker "Captain Chudinov" were sent to Leningrad, to the Baltiiskii plant, where they were being repaired for almost a year! The time will come when the propeller shafts of the ice-breakers "Captain Evdokimov" and "Captain Moshkin" will need to be repaired, and the problem will arise again.

One would like to think that the suggestions and advice of those living and working on the ice-breakers will be heeded in new ship-building: provide normal living and domestic conditions, return to the classical form of the ice-breaker -- stem and stern post, forecastle deck, three screw propellers, three rudders, and a solid body with a high-capacity (no less than 8--10 mega-watts) power plant. We should not fear a return to the old, if the old is better than the new. Precisely this would be as step forward.

Vodnyi Transport
24 September 1988
Page 2 (Slightly abridged)

"River Transport Workers in the Arctic"

The experimental voyage of the motor ship "Sibirskii-2130" has been concluded. For the first time in the history of arctic navigation, river transport workers under

the command of Captain M. Berdar' have gone by the ice sea-route from Port Zelenyi Mys on Kolyma to Port Pevek. General cargo has been delivered to the consumers in the Upper and Middle Kolyma without trans-shipments. V. Mineev, Head of Lenskoe Associated Steamship Navigation, was on board during the voyage. A Vodnyi Transport correspondent met with him.

"I think that, first of all, the goal of the experiment must be clarified", so Vyacheslav Aleksandrovich [Mineev] begins his story. "The fact is that for many years the method of delivering cargo to this northern river remained unchanged. It required two trans-shipments. First, in Pevek cargo was transferred from large sea transports to small sea ships, then it was moved to Zelenyi Mys, and only there was it transferred to river ships in order to be delivered to points of destination in the Middle and Upper Kolyma. This multi-stage process affected first of all the state of preservation of the cargo. In addition, because of low traffic capacity of Zelenyi Mys, sea and river vessels would stand idle for a long time under processing. Yet this is the Arctic, where not simply a day but an hour is very valuable.

When the fleet of the Lenskoe Steamship Navigation was reinforced with dozens [literally, "tens"] of such powerful river/ocean ships the "Sibirskii", we began to think: could we not alter the method of delivery? We consulted seamen and other specialists and came to the conclusion that it is possible to eliminate two trans-shipments in sea ports. In addition, the process of delivery would be accelerated and complete preservation of perishable and cold-affected general cargo would be assured.

The route that was worked out stretched along the Arctic Kolyma and the East-Siberian Sea, crossing the Malyi Chaunksii Strait. There had been no navigation here previously -- the depth is insufficient for sea ships, while river navigation workers had not yet ventured to confront the unknown.

And then the experimental voyage began, under the leadership of the preceptor of steamship navigation Captain A. Mikheev and the Headquarters for Marine Operations of the Eastern Section of the Arctic. Without assistance, the ballasted "Sibirskii-2130" crossed Kolyma, passed the polar sea and reached the Chaunskaya Bay -- Port Pevek. There, 2800 tons of general cargo were loaded into the holds. For the return passage, the ice-breaker "Ivan Moskvitin" piloted. The weather was not indulgent with us, the thickness of open-pack ice reached the 3-6 mark, sea disturbance was 2-3, and the wind force was 12-14. These are tough conditions for an experiment. And yet it was carried out quite successfully.

On board of "Sibirskii 2130" during the voyage were Yu. Dolzhenko, Head of the Lenskoe Basin Administration of Waterways, M. Spiridonov, Head of Navigational Inspection, and an expedition of scientists from the Moscow State University. Joint analysis demonstrated that the time has come to change the existing arrangement of cargo delivery or to work out a new one. The fact is that coastal navigation across the Malyi Chaunskii Strait makes it possible to begin navigation almost a month earlier than usual. And the effect that "Sibirskii's "can transport cargo in both directions without extra trans-shipments, greatly reduces the cost price of the delivery. In May-June 1989, scientists from the Moscow State University will investigate the

Chaunskii Strait and make recommendations regarding measures to dredge the sea floor along a section of 35-40 kilometres. The Basin Administration of Waterways will be able to carry out this work by means of a suction dredge used in rock excavation. Then it will be practicable to make voyages to Pevek permanent."

Vodnyi Transport
29 September 1988
Page 1 (full text)

"The Arctic Navigation Period is Completed"

Processing the motor ship "Vasilii Burkhanov" ahead of schedule was not an ordinary event for the dockyard workers -- machine operators of the Magadan sea port. It is precisely with this vessel that the shipping of freight for Chukhotka and the Eastern section of the Arctic is completed. The dockyard workers of the team headed by D. Mityushin worked especially diligently: they know that the Arctic does not like to trifle.

Overall, in this navigation season over 7.5 thousand vessel-hours were saved by the port, and 100 thousand tonnes of national industry freight above the planned amount were processed. Not a single vessel reported a complaint against the quality of loading and unloading operations.

Vodnyi Transport
13 September 1988
Page 1 (full text)

"For High Latitudes"

Only after receiving a "go-ahead" from weather forecasters, who predicted favourable wind and water conditions, ship-builders from the S. Ordzhonikidze Baltiiskii Plant began the operations "Tyazhelovesy" [Heavyweights]. It was concluded on the nuclear powered ship "Taimyr" by the installation of large-scale sections of an atomic power plant, each section weighing almost three hundred tonnes. The Baltiiskii workers are to assemble the "heart" of the polar giant designed to work in the mouths of great Siberian rivers.

In the spring, "Taimyr" will set out for high lattitudes, while in the meantime ship-builders are filling it with equipment, machinery, and rigging. Just now the multi-tonne aggregate which protects the steam-generating installation has been put in position. The highest skill was required from the crane operators in carrying out this operation, since the tolerance allowed for in the "joining" of the giant component is strictly limited. In evaluating the work of assembly-workers, welders, crane operators, and riggers, the specialists from the Technical Control Division service gave them the highest mark. The vessel's body has been outfitted with a large proportion of the various machinery at this stage, in an effort to accelerate as much as possible the fitting-out stage.

Right now one more atomic giant -- "Sovetskii Soyuz" [Soviet Union] -- stands at the fitting-out wall of the plant; on the building berth, sections of the atomic ship "Oktyabr'skaya Revolutsiya" [October Revolution] are being

assembled. In the spring, the atomic ice-breaker "Vaigach" will arrive from Finland for fitting-out.

Vodnyi Transport
13 September 1988
Page 1 (Slightly abridged)

Cargo Operations at Dudinka

In the present navigation period, the workers of the Taimy Regional Division of the Yenisei Steamship Line are to receive a large amount of freight for the northerners. And in the other direction, from the docks of the Dudinka Sea Port and the port stops on the peninsula north of the Polar Circle, the Steamship Line will send back predominantly the most valuable non-ferrous metals -- the output of the Noril'sk Mining and Metallurgical Industrial Group.

The volume of shipping increases every year. The ships of the Yenisei Steamship Line arrive at the shores of Dudinka in the middle of June. They unload onto the banks of the great Siberian river by means of floating cranes. It is very difficult in these conditions to coordinate the interaction of freight inspectors and dockyard workers, port fleet workers and motor transport workers, railway workers and representatives of numerous consignee enterprises. But V. Kurakin, Head of the Taimy Regional Division, manages it rather well. What helps Valentin Aleksandrovich [Kurakin] is that he has lived in Dudinka for almost three decades, and during this time he has learned all the peculiarities of river transportation work in the Far North, where during the three months of open water it is necessary to receive all the freight needed for the life and work of Taimyr residents for the whole year.

During the two preceding navigation periods, the workers of the Taimy Regional Division have been testing the new conditions of economic operations, implementing in their collective new progressive forms of labour organization and renumeration. Starting this year, the collective of river transportation workers north of the Polar Circle has made the transition to full self-financing and non-subsidized operation. And now the transportation centre of Dudinka works in a precise and coordinated manner.

Vodnyi Transport
17 September 1988
Page 2 (abridged)

MISCELLANEOUS

Across the Bering Straits

On 7 September the survey vessel "Dmitriy" Laptev" left its mooring in the Chukotsk port of Provideniya on a different kind of voyage. On board the vessel was a delegation of representatives of social organizations from Magadan Region. The northerners are headed for Alaska on a good-will visit.

In June of this year a large group of Alaskan residents paid a similar visit to Chukotka. And now the Soviet citizens are returning the visit. What is unusual about this visit is that the Magadaners are taking the shortest route possible--across the Bering Straits. This is the first time that Soviets have made such a trip since the war.

The Magadaners will spend three days with their neighbours. They will visit Nome and Anchorage, and will get to know how people live in the US's northernmost state.

Accompanying the Magadan delegation on the "Dmitriy Laptev" is a large group of foreign journalists representing the most important news agencies, newspapers and television companies in the world. The journalists spent a week getting to know the magadan Region and visiting Magadan, Bilibino and Provideniya.

In Memory of the "Noril'lag" Prisoners

Following the wishes of the majority of the residents of Noril'sk, the Executive Committee of the City Soviet has opened a special account (#70202) in the local branch of Promostroybank (Industrial Development Bank) for donations towards the construction of a monument to the victims of Stalinist repressions--those who went through the nightmares of the "Noril'lag" barracks.

The scores of thousands of people who were driven here from every quarter of the country became the unwilling builders of a gigantic metallurgical combine and a city in the snowy desert. Many perished soon after arriving as a result of the back-breaking labour, dystrophy, scurvy and diseases brought on by the cold. Many were shot. But there are also many who managed to survive the convict prisons, and they will be able to tell others of their fate, and the fate of their dead friends.

A public committee has been set up in the city to perpetuate the memory of the victims of these repressions. Its members search for, and rehabilitate the names of the first exile-residents of Noril'sk. The city's newspaper, the "Zapolyarnaya Pravda," and the local radio and TV stations publish and broadcast materials that tell the story of the former prisoners of Taymyr, those that died and those that are still alive.

The list of names of those who are well-known -- names now pronounced with pride and respect--alone would fill several pages. Among them: one of the discoverers of Noril'sk's copper and nickel ore deposits, geologist N. Urvantsev; one of the first general secretaries of the Central

Committee of the Lenin All-Union Communist Youth League, A. Mil'chakov; writer and former aide-de-cmp to the legendary Civil Ware hero G. Kotovskiy, Aleksey Garri; member of the Politburo of the Central Committee of the Bulgarian Communist Party and comrade-in-arms to Georgiy Dimitrov, Blagoy Popov; historian Lev Gumilev, son of Anna Akhmatova and executed poet Nikolay Gumilev; USSR People's Artist Georgiy Zhzhenov; People's Poet of Kalmykiya, David Jugul'-tinov; and well-known publicist Yevgeniy Ryabchikov...

But the big names are not the whole story. No one who suffered as a result of Stalinist lawlessness should be forgotten; nothing should be forgotten. And the monument or memorial that will be built in Noril'sk should fulfill that noble task. It has been recommended that an open competition be organized to find a design for the monument. The residents of Noril'sk have decided to collect no less that 200,000 rubles towards its construction. The first few thousand rubles have already been collected in the "memorial account." And now that they know the account has been set up, more and more former residents of Noril'sk now living in other parts of the country are beginning to send in their donations. According to the public organizing committee there are around two million such former residents.

Izvestiya
4 September 1988
page 6 (full text)

"A Nugget is Found"

This catch surprised even those who have devoted several decades to gold prospecting. ON one of the sites of the "Seligdar" artel of the Industrial Group "Aldanzoloto", the washing device sensed a nugget of gold weighing 2.436 kilograms. It measures 13 centimetres by 8 centimetres.

According to the judgement of specialist with much experience in the exploitation of gold deposits in the Central Yakutiya, such a lucky find is rare and is of considerable scientific value. This is the third time in the history of the Industrial Group that the weight of a nugget exceeds 2 kilograms.

Sovetskaya Rossiya
30 September 1988
Page 2 (full text).

"The Most Ancient Town North of the Polar Circle"

The current field season turned out to be especially successful for the expedition of the Leningrad Branch of the Institute of Archeology of the Academy of Sciences of the USSR, which is carrying out excavations of the ancient Pustozersk and its environs.

An unknown settlement and dwelling of Stone Age man of the Ugorskaya Mound was discovered, and a cult monument of the local tribes of the XII-XIII centuries, on the site of which the first Pustozersk jail was erected in 1499, was studied. But the main

discovery awaited the archeologists on a bank of the river Pechora and its tributary Ortino: the remains of the most ancient town north of the Polar Circle.

"Regular ramparts and moats, weapons we have found, work objects and domestic objects place it alongside the known Siberian sites of ancient towns," says O, Ovsyannikov, Head of the expedition and Candidate of Historical Sciences. "These finds allow us to date the ancient town from the VI-XI centuries A.D., when the Russian, that is, Novgorod influence on this region was only just beginning. So, by all appearances, this town was a tribal centre of that extinct people which in ancient historiography was known under the name of "Pechera."

Sovetskaya Rossiya
20 September 1988
Page 4 (full text)

Sovetskaya Rossiya
30 September 1988
Page 2 (full text)

"The Most Ancient Town North of the Polar Circle"

The current field season turned out to be especially successful for the expedition of the Leningrad Branch of the Institute of Archeology of the Academy of Sciences of the USSR, which is carrying out excavations of the ancient Pustozersk and its environs.

An unknown settlement and dwelling of Stone Age man of the Ust'ekaya Mound was discovered, and a cult monument of the local tribes of the XII-XIII centuries, on the site of which the first Pustozersk jail was erected in 1780, was studied. But the main