

Steps Taken Toward World Land-Bridge at Arctic Summit

by Marcia Merry Baker

At the Arctic Energy Summit Technology Conference in Anchorage, Alaska in mid-October, a number of Russian participants presented a perspective of high-technology, advanced-science programs to develop the circumpolar region, to a gathering of 300 at this key event, held in conjunction with the International Polar Year (2007-2009). The focus of the Summit, sponsored by entities including the U.S. State Department, the government of Canada, and BP, and organized by the Anchorage-based Institute of the North, was on energy resources, with four themes: extractive energy, renewable energy, rural energy, and sustainability. Representatives of the eight polar nations (Canada, Greenland/Denmark, Iceland, Norway, Sweden, Finland, Russia, and the U.S.A.), plus six others (Australia, Japan, India, the Republic of Korea, Britain, and Switzerland), participated over the Oct. 15-18 period, in various of 96 sessions, and in opening and closing plenary sessions, addressed also by Alaska Gov. Sarah Palin, Alaska Sens. Lisa Murkowski and Ted Stevens, and British Consul General Julian Evans (for northwestern U.S. states).

Speakers included Yevgeni Velikhov, president of the Kurchatov Institute, Russia's premier research institute; Alexander Sergeyev, executive board member of RusHydro energy company; and collaborator, George Koumal, president of the Interhemispheric Bering Strait Tunnel and Rail Group (IBSTRG), a multinational group which is promoting the tunnel.

The Russian participants, plus a few co-thinkers from other nations, distinguished themselves by presenting the necessity for advanced technology, beginning with nuclear power, and including transportation, large-scale hydro projects, and a machine-tool industrial base to carry out this program. They outlined plans for 4,000 km of new rail routes to connect the High North with the Americas and Eurasia, including a tunnel under the Bering Strait (**Figure 1**). On prospects for polar navigation, they presented plans for nuclear-powered submarine shipping of liquified natural gas, and new marine infrastructure. They stressed the use of advanced electromagnetic analysis for geological exploration, and many other nuclear applications.

In conjunction with the technologies themselves, attention was given to the effect on the prospects for improvement of life for native peoples and all residents of the vast Russian High North and eastern regions. Representatives from Chukotka (counterpart to Alaska), and from the farther westward

Former Alaska Gov. Walter J. Hickel, Oct. 17, 2007 at the Arctic Energy Summit Technology Conference Awards Banquet, Anchorage, Alaska.



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provinces of Sakha and Khanty-Mansiysk, discussed their regions.

This focus on mega-projects for the betterment of mankind is in keeping with the outlook of former Alaska Gov. Walter J. Hickel, whose lifelong work has been to further the development of his own state, and the world. Hickel welcomed the participants to the Summit, which was run by the Institute of the North, which he founded 15 years ago.

Hickel's Five Priority 'Mega-Projects'

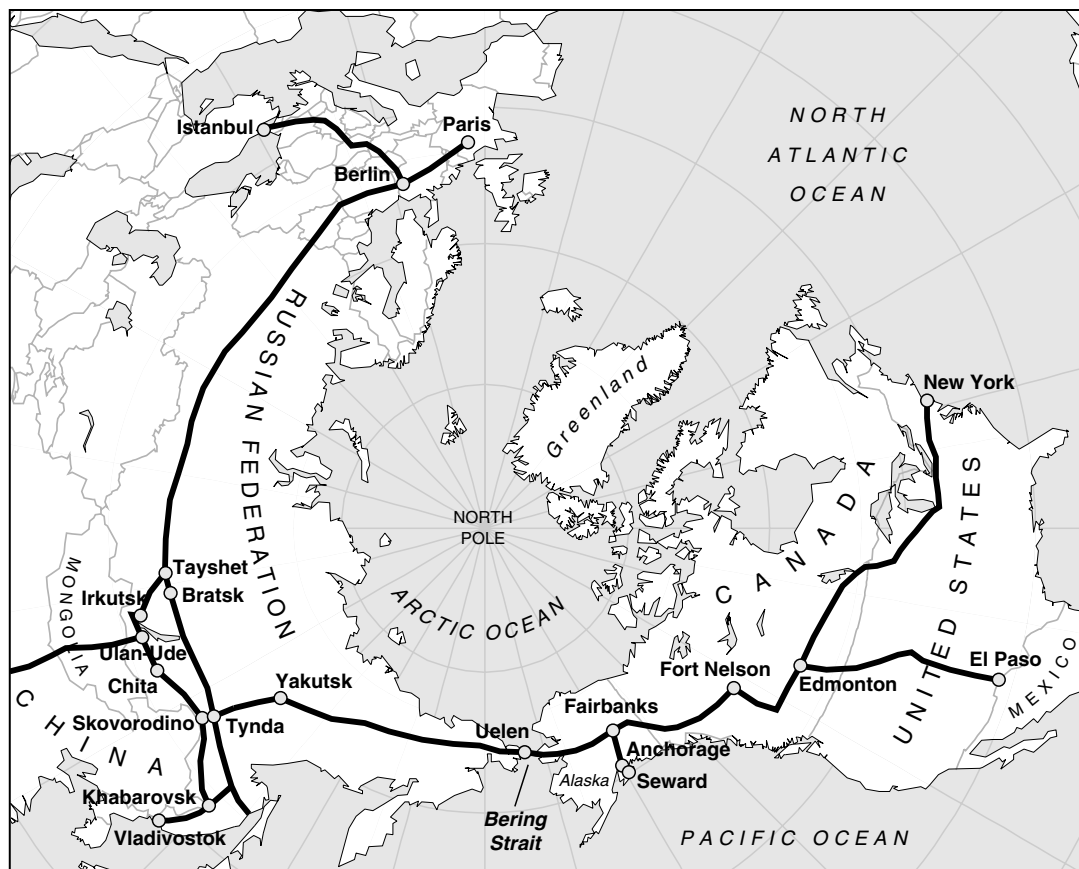
Hickel identified five priority worldwide mega-projects in his speech to the awards banquet Oct. 17, when he presented the President of Iceland, Olafur Ragnar Grimsson, with the Robert O. Anderson award. The purpose of the award, given by the Institute of the North, concerns the use of resources to benefit the common good in a sustainable way, in this case, Anderson's drilling of the early oil wells in Alaska's Swanson River basin. Under Grimsson, Iceland has become a model for providing power and heat from geothermal sources, which are so accessible there, that Grimsson calls it tapping into "Earth's fireball."

Speaking from an international vantage point, Hickel said, "In some quarters big projects are not 'politically correct.' But, if God didn't like the world, he wouldn't have created the universe." He then outlined five "big projects:"

1. *A global energy program.* He noted that 2 billion people

FIGURE 1

Future Global Rail Connections, as Seen from the North Pole



This map, featuring the Bering Strait Tunnel, shows the key rail connections to be built westward and eastward of the tunnel, to interlink with the world rail system. The Arctic Circle lies between the first and second circles shown outward from the Pole, and defines the eight Arctic nations: Russian Federation, United States, Canada, Finland, Sweden, Norway, Iceland, and Denmark/Greenland.

live in this world without electricity, and this should be remedied. We should be visionaries. R. Buckminster Fuller even envisioned that electricity generated in the North could be sent South, given the cycles of when it is needed.

2. *A tunnel beneath the Bering Sea to unite Asia and North America.* He stressed, "That tunnel will happen," pointing out that on April 24 in Moscow, a group of tunnel project supporters met, and now the supporters are in Alaska. Building the project will complete a global transportation network.

3. *Opening of the Northern Sea Routes.* These polar routes will be "the new Panama Canal."

4. *Address the global water crisis.* Seven of the world's largest rivers flow northward, most running into the Arctic Sea. In Eastern Siberia, the 3,000-mile-long Lena River, is 10 miles wide in some places. There is freshwater going into the Arctic Ocean that can be used.

5. *Harvest the resources of the North.* Hickel was adamant that work should proceed: "Let's harvest the energy of the North and quit talking about it!" He said that we can make alternative energy, as we go along.

In April this year, Hickel struck the same themes in Moscow, at the first of a "Megaprojects of Russia's East" confer-

ence series, organized by the Russian Academy of Sciences Council for the Study of Productive Forces, in conjunction with government agencies. "Why war? Why not build for peace?" At the same event, a paper by Lyndon LaRouche was presented, under the title, "The World's Political Map Changes: Mendeleyev Would Have Agreed."

Besides coverage of this conference in Russia, the Hickel and LaRouche speeches, a report on the April 24 event, and the history of the project, have been put into mass circulation in the United States by the LaRouche Political Action Committee (LPAC), in pamphlet form, under the title "A Strategy for War Avoidance." Issued in June, hundreds of thousands of copies of this pamphlet have been circulating, as part of an effort to orient citizens and office-holders to the necessity of an infrastructure-building, FDR-type policy response to the worsening financial and economic breakdown.

Since the April Moscow conference, all hell has broken loose in the world financial system, as the home-mortgage-based bubble exploded, and the U.S. dollar plummeted. So far, Washington has taken a denial and do-nothing approach. In fact, Senator Murkowski, right after her appearance at the Oct. 15 opening of the Arctic Energy Summit, was scheduled

to attend a local Anchorage event on the implications of the home-mortgage financial crisis on Alaska.

The LaRouche movement has undertaken other efforts to further the world economic reconstruction approach. The Schiller Institute, headed by Helga Zepp-LaRouche, held a conference in Kiedrich, Germany Sept. 15-16, centered on the theme of completing the Eurasian Land-Bridge, of which the Bering Strait Tunnel is a crucial part. Here, several hundred people from every continent but Antarctica met, to discuss high-technology priority projects. A paper was given there by Victor Razbegin, vice president of IBSTRG. Proceedings of the conference have been published in *EIR*, and will soon appear in book form.

On Dec. 11 in Ottawa, *EIR* will sponsor another conference on the Land-Bridge theme, following up the Kiedrich event. In Ottawa, speakers will include Hal Cooper, the Seattle-based transportation engineer, an advocate of the Eurasian/Americas Bering Strait Tunnel and world rail grid, with long experience in Russia, Alaska, and Canada. Conference host Robert Ainsworth is reviving attention to such Canadian infrastructure-builders as Thomas C. Keefer (1821-1915), responsible for the Canadian National Railroad. Keefer wrote a mass pamphlet, *The Philosophy of Railroads* in 1850.

Bering Strait Tunnel/Rail Project

In Anchorage, on the first day of the Arctic Energy Summit, the IBSTRG held a press briefing on the project, giving the scope of the plans, the funding perspective, and the status of the organizing effort for the Bering Strait Tunnel at present (see below). The exciting point was made that Russia has committed to providing \$20 billion of the expected total cost of \$65-70 billions, so the task ahead is to line up other governments and private investors. (**Figure 2** shows Russia's full rail program).

On the eve of the Summit, members of the group had done some reconnaissance on the site of the project, including visiting the village of Wales, on the Seward Peninsula, which would be the eastward terminus of the Bering Strait Tunnel. On Oct. 14, a team from the IBSTRG, members of the Alaskan government, and a number of prospective investors conducted aerial monitoring of the vicinity of the project; also, ground and water samples were taken. A preliminary study shows the suitability of the terrain.

They also subsequently met on the project, with Governor Palin, Senator Murkowski, and the U.S. State Department official Dan Sullivan, Assistant Secretary of State for the Bureau of Economic, Energy and Business Affairs.

The IBSTRG issued two press releases during the Summit, to report particulars on their activities. They stated Oct. 17, "In September 2007, the Russian government approved a strategy for development of Russian railroads for the period ending in 2030. The main elements of this strategy include construction of rail links:

1. Berkakit (on the Baikal-Amur Railroad)-Tommot-Yakutsk;

2. Nizhny Betyakh (Yakutia)-Moma-Magadan;

3. Mainland Russia-Sakhalin Island, with a tunnel underneath the Tatar Strait.

"IBSTRG plans to hold a board meeting in Washington, D.C. in November at which new members are going to be elected to the board.... IBSTRG will present the Project to investors and public figures in Washington, Tokyo, and Seoul in November, in London in December, and in Moscow in February."

In effect, this drive for world rail development corridors and associated energy expansion, is at present a leading edge of the campaign for world economic revival, for the good of all peoples and nations. In 1997, LaRouche put forward the theme of the need for a "Eurasian Land-Bridge" of development. Since 1978, he has pointed to the Bering Strait crossing, as one of the key links in world infrastructure.

At the Arctic Energy Summit, the same development principles were made explicit in presentations by officials from the Russian nuclear agency, the Kurchatov Institute, Rus-Hydro—the biggest hydro-power concern in Russia—as well as by Hickel. Many participants supported these same principles implicitly, especially the technical experts and geologists from several polar nations, who addressed how to find and make use of resources.

Vast Arctic Resources

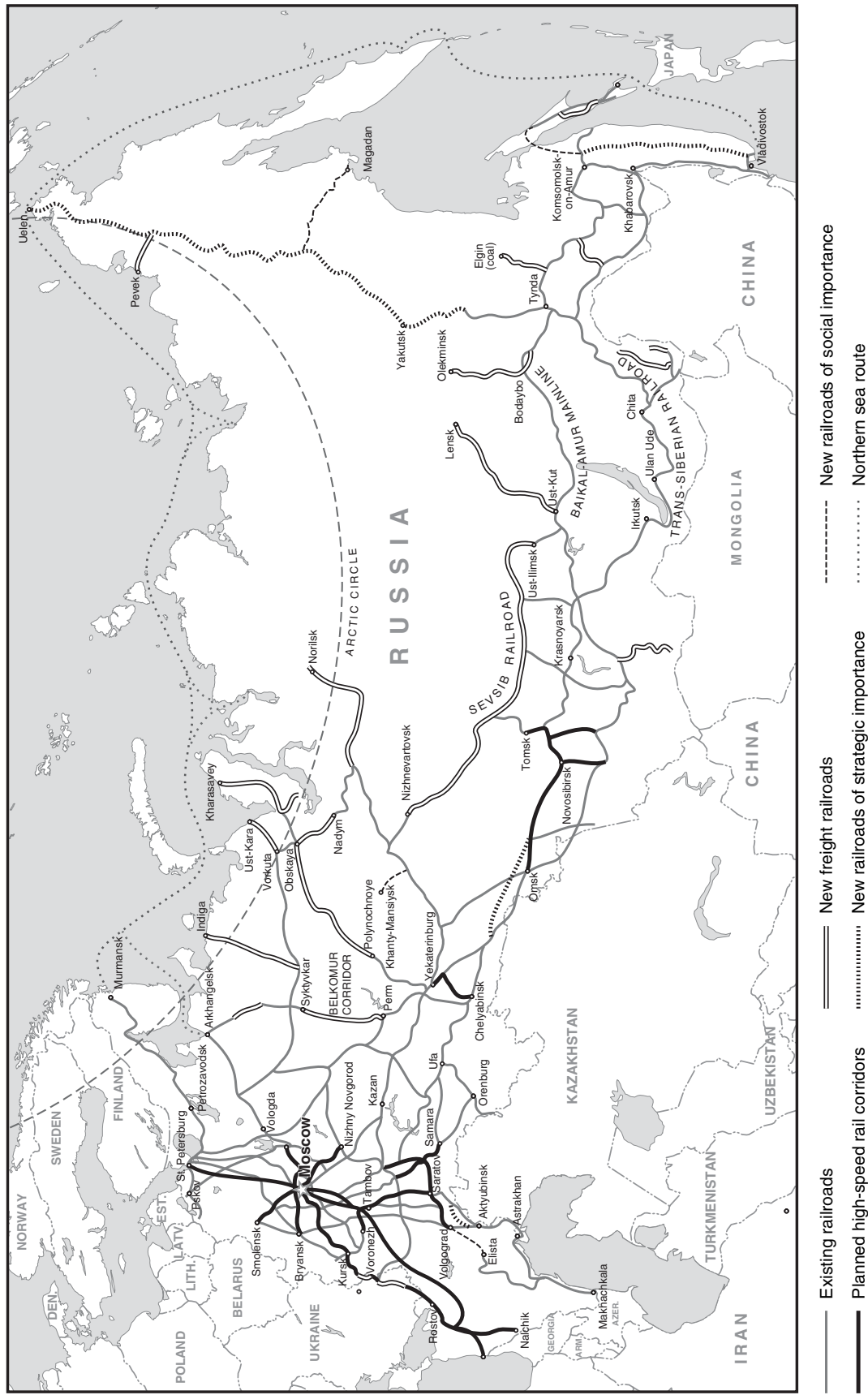
The fossil fuel and mineral resources of the circumpolar region are vast. From ores to diamonds, there are significant deposits. The current talk is that over 25% of the yet-to-be-discovered oil and natural gas fields of the Earth are located in the High North. Various Arctic geologic basins are now legendary for their riches, including Prudhoe Bay and the Alaskan North Slope, and the Shtokman Basin. Recoverable natural gas reserves have been identified in Canada's Beaufort-Mackenzie Basin; significant oil volumes exist in Russia's South Kara Yamal Basin, etc. The U.S. Geological Survey staff is now working on a comprehensive survey of the Upper Arctic, to be released in 2008.

Look at coal: It is estimated that Alaska's coal resources constitute half of the U.S. geological coal resource base. "Arctic Alaska remains one of the last underexplored and undeveloped large coal basins in the world. Estimates of Cretaceous and Tertiary low-sulfur coal in deposits north of the Arctic Circle exceed 5 trillion hypothetical tons," according to James G. Clough, a geologist with the Alaska Division of Geological and Geophysical Surveys, who presented a status report on coal in northwest Alaska. As stated in his abstract, "Despite considerable potential, there never has been any commercial coal mining in Arctic Alaska. In contrast, more than 3 million short tons of bituminous coal near Svalbard, Norway, are successfully underground-mined annually and then shipped over 1,500 miles south to market."

The treasure of Arctic resources is one part of the background for both the excitement and apprehension about the

FIGURE 2

Planned Russian Railroad Development to 2030



Based on a map released by Russian Railways with the title "Prospective Topology of the Russian Federation's Rail Network Development until 2030," our map shows railroad upgrades and new construction, included in the government's plan for 2007-2030. The program was adopted in April 2007. Targetted high-speed rail corridors are centered on Moscow, Yekaterinburg, and in central Siberia. Among the "railroads of strategic importance," planned for construction between 2015 and 2030, is the 3,500-km line from the Lena River near Yakutsk to a Bering Strait crossing at Uelen. "Railroads of social importance" tie cities, which would otherwise be isolated, to the national rail network. Not all existing rail lines are shown. Many lines connect to railroads in adjacent countries, which are not shown here.

future, which was expressed at the conference. There is concern about the “boom-bust” cycle, especially among native peoples, who have experienced repeated depopulation of villages, and repeated harm to fishing, hunting, and agriculture practices, with no advancement in the overall economy. There is suspicion with cause, and many native spokesmen raised these issues. Among those attending the conference were Gary Harrison, chief of the Athabaskan Nation, Chickaloon Village; and Patricia A.L. Cochran, chair of the Inuit Circumpolar Council.

At the closing of the Summit, a plenary speech was given, on what can be done to alleviate the current situation among rural peoples, by George Cannelos, federal co-chair of the Denali Commission, an Alaska agency created in 1998, to assist with rural infrastructure. Modelled somewhat on the 1960s creation of the Appalachian Commission in the Lower 48 states, the Denali Commission carries out concrete tasks such as providing health care and school facilities, and replacing all the outmoded and dangerous diesel fuel tanks and fixtures in use for electricity generation and heat, in villages all across the state. This latter project is now 50% complete.

In this atmosphere, the no-compromise Russian speeches on the benefits of large-scale, nuclear-power based infrastructure, were critical. Among such speeches were the following: (Video of all the sessions will be available in a few weeks on the website www.arcticportal.org.)

- Academician Yevgeni Velikhov spoke on “Nuclear Power in the Arctic,” at the plenary session, and also participated on a panel, with Iceland President Grimsson, and others from Norway, Canada, and the U.S.A., titled, “Policy Experiences in Developing Energy Assets in the Arctic.”

- Vyacheslav Kuznetsov, executive director of Innovative Energy at the Kurchatov Institute, presented a paper, prepared jointly with Velikhov, on “Nuclear Submarine Transport of LNG.” He also spoke on a panel, including Alexander Sergeyev (below), and Swedish, Canadian, and American participants, on “Shipping and Transportation Options for the Arctic.”

- Alexander J. Sergeyev of RusHydro spoke on the topic of a world rail grid, “The Role Played by the World Link Project in Developing Arctic Energy Resources as Exemplified by North-Eastern Russia.”

In addition to these “technical” presentations, Russian government officials from several vast, low-population Far North and East regions, spoke of how best to intervene to upgrade the living conditions and infrastructure of their regions. Alexander Grigorev, of the Department of Economic Planning and Analysis of the Sakha Republic (Yakutia), pointed out that Sakha has one-fifth the area of all Russia, but only 950,000 people.

There is seasonal dependence on local-use diesel fuel, the equipment is aging, and diesel is getting more and more expensive. Grigorev gave specifics on steps to shift to coal, and eventually to mini-nuclear and hydrogen fuel, and also to cen-

tralize power provision as much as possible. The power base can be upgraded as the new rail routes are expanded in this region over the next 30 years. The new rail line is already under construction to Yakutsk, the capital of Sakha.

A similar plan was presented for Khanty-Mansiysk Autonomous District, the oil- and gas-rich region of central Russia. Here, as of the 1990s, 94 population centers had no central electricity supply. A program has been launched to assist in constructing power grids, and as a result, 46 villages will go on centralized power. This is part of the Industrial Urals-Arctic Urals plan, which includes developing the use of some of the abundant local deposits of brown coal for centralized power generation. Research is also underway to study installing nuclear power. An integral part of the upgrading in the Arctic Urals over the 2007-2015 period, is the building of rail connections.

In Chukotka, across from Alaska on the Russian side of the Bering Strait, one leading feature of new power supplies, is the plan for a floating nuclear power plant on Chaun Bay by 2012 (see interview).

Kurchatov Institute: Nuclear Power Essential

Academician Velikhov led off his presentation by posing the question, “If you look at the history of using nuclear power in the Arctic, the history says, what is our goal?” He stressed that, first of all, we gain in terms of demand and supply, because Russian technology—which is mostly concentrated in the shipyards—is very important for the development of such regions. What is our achievement?

He then showed a series of scenes of the extensive machine-tool and construction complex, at the nuclear shipyard in Severodvinsk. This yard, Sevmash, was initiated in 1936. When building commenced in 1939, Velikhov recounted, his father was chief engineer for construction. As of 1942, the facility was the principal yard for marine war production. He then showed how the shipyard looks today, with extensive

EIR Conference

Executive Intelligence Review

The Strategic Importance of the Eurasian Land-Bridge Canada and the Coming Eurasian World

Ottawa

Tuesday, Dec. 11, 2007

Noon-9:00 p.m.

For location, agenda, and pre-registration:
Mr. Robert Ainsworth (514) 855-0907



Presidential Press and Information Office

Over the recent period, Russia has expanded its commitment in two key infrastructure areas: nuclear energy and railroad construction. Here, President Putin (center) visits the Russian Research Center of the Kurchatov Institute in Moscow. Left to right: First Deputy Prime Minister Sergei Ivanov; Institute president Yevgeni Velikhov; and Institute director Mikhail Kovalchuk.

machine-tool capacity and a 25,000 person workforce.

There have been some 200 nuclear submarines and ice-breakers built. There is a record of 6,000 reactor years of successful operation in the North.

Velikhov said, “We are looking for the next step. The next step is for nuclear power stations for the industrial environment. And this next step is already under construction at Severodvinsk.” He said that for the 21st Century, there are middle-sized reactors for various purposes—showing a 300-megawatt unit, for many applications around the globe. The design of the power station is very compact. There can be a nuclear power station of 600 MW. He then showed that, “We developed the technology to make it smaller. This is for offshore use.”

Then Velikhov reported on other shipbuilding activities, and industrial gear-up, for necessary inputs to Arctic infrastructure. The yards are working on oil and gas installation platforms. “This is our field,” he said, showing photos of the gigantic *Prirazlomnaya* platform under construction.

Among the other nuclear-age technologies Velikhov included, is the “huge field” of application of nuclear technologies to exploration. Today we have the use of resonance for electromagnetic sound. This allows very fast means of interpretation of data. One example he showed, was its use in the Sabah offshore oil fields in Malaysia. The progress of this technology for wave-length analysis of electromagnetic data, means that it is very possible to get high resolution readings, and have an expanded capacity to look at offshore resources.

Velikhov concluded his presentation on nuclear power and high-skilled, industrial productivity by summing up simply, “I demonstrate to you the technology of exploration,

transportation, and technology of production. I think that all together, we have a good chance for safe and reliable and secure development of the Arctic.”

Opposing Premises

Who could reject this high-tech development outlook? The opposition was expressed in terms of variations on one or both of the current politically correct anti-development premises: First, that the Arctic region will gain only if its vast fossil fuels and mineral wealth is extracted and “monetized” for world markets—i.e., there should be no deliberate fostering of regional development; instead, global markets must rule, and benefits will “trickle down.”

Secondly, that there must be no large-scale infrastructure projects, because, given the assertion of global warming, there must be only localized wind power, biomass, geothermal, tidal, and renewables in order to “protect” the Earth from meltdown. Nuclear power is out.

A full three-quarters of the Summit sessions on technological, social, and economic concerns for the Arctic nations, adhered to these premises. But privately, a majority of the geo-scientists and production-trained persons demurred. They especially scoffed on the last day of the Summit, when Al Gore’s Nobel Prize was announced. Many pointed out the periods in geo-history when carbon dioxide levels increased, in the absence of human activity of any kind at all.

The “energy boom” question, however, caused trepidation. The world oil price was rising hour by hour during the Summit, by the end of the month, hitting close to \$100 a barrel. “Out of control,” was how one old coal hand saw it. Not a boom, but a blowout of the financial system.

Nevertheless, Assistant Secretary of State Dan Sullivan avoided this side of reality in his opening plenary address, and instead spoke of bringing onto markets the “huge reserves” of the Arctic, and “enormous potential in Alaska” to aid U.S. energy security, and world needs, within a context of altering carbon consumption practices because of “climate change.”

Conspicuously omitting discussion of nuclear power, Sullivan instead outlined the Bush Administration’s commitment to “energy diplomacy for biofuels in the Western Hemisphere.” He stressed that this past Spring, Brazil and the United States signed agreements for the “commoditization of biofuels and development of markets.”

Thus, the clash in policy views was apparent from day one at the Arctic Energy Summit: There is the campaign for high-tech infrastructure and national economy-building; or there is the pathway of more globalization, low-grade energy modes, and the worsening breakdown from hyperinflation and financial collapse.

(Contact the author at marciabaker@larouchepub.com).

Nuclear Power for Russia's Chukotka

Lev Shtilman, advisor to Gov. Roman Abramovich of the Chukotka Autonomous Region in eastern Russia, was interviewed on Oct. 16 at the Arctic Energy Summit Technology Conference in Anchorage, Alaska, by Marcia Merry Baker.

EIR: Would you describe some of the history of eastern Russia? Before the current economic development push, did your province lose population some years ago?

Shtilman: The number of population was reduced to about half of what it was.

EIR: So what is your population today?

Shtilman: Almost 60,000 people. We previously had around 100,000. People who actually were in the productive labor force were reduced in a lesser proportion. Now, they are bringing in temporary workers, so you can't say that there was a complete reduction in the productive forces of the economy.

The current governor adopted a policy for resettling pensioners to the central region of the country, where life is more comfortable, and that reduced the demand for social services in the region. They are working hard to implement the governor's resettlement policy, building housing. And while, in the 1990s, there was an exodus of working people, and the pensioners were just sitting around, because they couldn't leave, now, everything has fundamentally changed.

EIR: Regarding the commitment of Russia, as a nation, to nuclear power, and what Academician Yevgeni Velikhov was describing yesterday about this, is there something special to look forward to in Chukotka in the near or distant future?

Shtilman: Academician Velikhov, in his report, talked about floating atomic power plants. In Chukotka, there is a plan for a floating power station. It is planned for Chaun Bay in the north. I consider, as a power engineer and expert, that this is a wise and correct decision. In the areas where they plan these floating nuclear power plants, there is a real growth in demand for electrical energy, with the development of industry (mining, primarily). Moreover, there is some local industry. In terms of using oil or coal in these areas—these resources don't exist there. The transportation costs of coal or oil or diesel fuel would be very great. Not even to mention the environmental issues of dealing with carbon.

Currently, the electrical energy issue is being solved by the Bilibino nuclear power plant, which is providing the bulk of the electrical energy. But in 2020, the power plant will have

used up its productive life. It is pretty clear that by 2012, if we don't put these floating plants in place, or some other power solution, this region will have an energy deficit, which will hold back development.

EIR: What are some particulars about the floating power plants intended for Chaun Bay?

Shtilman: They are 70 megawatts per station. They look like a medium-sized ship. Academician Velikhov showed a photo of an artist's conception of the floating nuclear power plant for Pevek. That is the engineering concept, developed in the Soviet Union for Chukotka. That was the original idea, from the 1980s.

Then, when there was a lot of turmoil in the economy of Russia, this project was transferred to Severodvinsk. And thus, the first floating station is going to be built within the next five years, there, in the European North.

The technology has already been worked on, on ice-breakers, so that it's pretty much developed. It is well known; it has existed for a long time.

Each barge has two units for redundancy. As you saw in the picture, they lie not far offshore. There's a special protection system against ice, and against freeze-up. There is an on-shore facility that takes in the electricity. You can also get waste heat from the station to heat the town.

Once every five years, the barge is towed by tugboat, and taken to the firm that built it, and it is re-fueled. You get another plant that replaces it.

EIR: Where is the center of construction of the floating nuclear power plants?

Shtilman: Severodvinsk, in the Murmansk Region, in the factory where atomic submarines have been built since Soviet times, and it was one of the [defense industry] conversion projects. For this project to be less expensive, and more profitable, it is good to build a lot of them. You get the economy of scale.

EIR: How many are planned?

Shtilman: There are 12-15 that are planned for Russia: Yamal, Khanty-Mansiysk, Chukotka, and elsewhere. And they need a couple of spares, so that they can keep rotating.

EIR: When will Chukotka receive its new floating nuclear plant?

Shtilman: According to my plan, it's got to be operational no later than 2012, when the units of the Bilibino power plant begin to be taken out of commission. You can't slow down your energy use.

EIR: Will yours be the second floating power plant in all of Russia?

Shtilman: Correct. And the first one is promised for within four to five years, according to the Atomic Energy Agency.

EIR: Among the other circumpolar nations, do you find that



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An artist's conception of a Russian floating nuclear power plant.

there is also discussion of nuclear power, and floating nuclear plants for the Arctic? The political faction associated with such famous U.S. names as Al Gore, among the Democrats, and Arnold Schwarzenegger among the Republicans, opposes nuclear power and also opposes mega-projects. But despite that, do you know of discussion among the polar nations—in Scandinavia, or Canada or Alaska in the United States?

Shtilman: I don't happen to know of any.

The President of Russia was in Africa, and he signed some contracts there. There is great interest in developing floating nuclear power plants for African countries. There may have been discussion of contracts. But I don't know.

EIR: Today, President Putin happens to be in Tehran, where the issue of a national interest in nuclear power is central.

Shtilman: There are two sides to the same question: atoms for peace, and atoms for war. When you talk about military use, you have to exclude it as a class, because you can kill masses of people. But on the other hand, the peaceful use of the atom, with the proper use of rules and regulations for using nuclear energy—it's a good thing for humanity.

From my point of view, you need to distinguish between those two sides of atomic energy. We know that the poison of a snake can kill people, but it can also be used as a medication, for the health of people.

EIR: Like fire.

Shtilman: Yes.

EIR: Finally, would you speak about the economic development benefits of the rail corridor plans, and the Bering Strait Tunnel, especially for your province?

Shtilman: I just heard about it [the Tunnel project] two days ago. Up to now, I didn't even realize that there was such a project!

For people who believe in Darwin's theory of evolution: The first difficulty was when [the hominids] got down from the trees, from being a monkey. But today, no matter how hard it is to cross the road because of the cars, nobody wants to go back to the trees! So, the question is multi-faceted. If people,

as *homo sapiens*, will think about the future, this project has good prospects for humanity, and for relations between these close neighbors, Russia and America. And it would give a positive impulse for the native people of the region.

And for the native peoples, like it or not, it is a question of being pulled out of a Stone Age economy, into the age of metals. In order to survive, they will have to adapt to the new environment. Not a single Chukchi wants to use an oil lamp, when he can use electricity. Electricity can kill you! But people understand that, without electricity, they don't have the life that a person deserves.

For example, I had a discussion with the governor.

One native village was 100 km from a high-voltage electricity source, so it used to get its electricity from diesel power. We were talking about putting in a 100-km power transmission line, so that their life would be better, because centralized electricity is always better than local generation. I had to figure out the cost of that project.

I calculated that for each villager, you've got to lay out \$5,000. I said to the governor, "It is so expensive!" He said very correctly and strongly, "People have the right to live there as human beings." And that line was built three years ago. Now they all use civilized benefits. And there is no protest from any of them.

I didn't invent that story; that is what I saw. Since then, that is the position that I have taken when I look at power issues, even though the governor is younger than I am!

Press Conference

Progress Is Made on World Rail Project

by Marcia Merry Baker

On Oct. 15, a news briefing was held at the site of the Arctic Energy Summit Technology Conference in Anchorage, Alaska, by representatives of the Interhemispheric Bering Strait Tunnel and Rail Group (IBSTRG) and RusHydro, the largest Russian hydropower company, on the Bering Strait Tunnel, reporting on "The Preliminary Results of Exploration of the Tunnel's Prospective Route." The four principal speakers, and translator, are shown in the photograph. IBSTRG president George Koumal led off the briefing, followed by Academician Yevgeni Velikhov, Alexander Sergeyev of RusHydro; Lev M. Shtilman, Energy Advisor to Gov. Roman Abramovich of the Chukotka Autonomous Region; and IBSTRG Treasurer Craig Burroughs.



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Speakers at the Oct. 15 press conference on the Bering Strait Tunnel and World Link rail system: Academician Yevgeni Velikhov, president of the Kurchatov Institute; Alexander J. Sergeyev, executive board member of RusHydro; George Koumal, president of IBSTRG; Lev M. Shtilman and John Tchotsky, advisors to the Government of Chukotka; and Craig Burroughs, treasurer of IBSTRG.

Velikhov stressed the role of nuclear power, as he did in his earlier Summit plenary address. He said that, if you look at all great Russian achievements over the past century and a half, they proceed by steps. Today, we need nuclear power as the start-up energy source for the industrial production and construction for the mega-projects. We can produce 70-MW plants, built on a “conveyer-belt” process, to support the actual construction. In the future, there can be moves to a “more permanent energy supply,” including geothermal and hydro, but, “in the beginning, nuclear power is very important.”

Shtilman spoke of the improvements to life on both sides of the Bering Strait (see interview). Burroughs estimated that the entire rail and tunnel program could be built for \$65 billion, with huge revenues to be expected from the new trade routes and development involved. This point was elaborated in response to a question from *Petroleum News*, about how much analysis had been done of the “payouts” to be expected. The rail corridors transit an area of huge resources.

The following is a paraphrase of the briefing by Koumal, and a verbatim transcript of the translation of the remarks by Sergeyev, both of whom, the following day, gave in-depth conference sessions on the Bering Strait Tunnel, and the World Link rail system, respectively. (Video of their presentations, and of the Oct. 15 press conference, will be posted soon on www.arcticportal.org).

A Modern ‘Northwest Passage’

Koumal began by referring to a recent mention in a *New York Times* article, of the term “Northwest Passage,” saying that, “Twenty years ago, our organization started thinking about making a century-old dream of a Northwest Passage, a reality.

“But instead of thinking of a ship in the icy seas, we turned back to a history-proven, best long-distance, transport mode.... And we proposed to connect the North American continent with a railroad system to Europe, and Africa, with a tunnel under the narrow waters of the Bering Strait.”

Koumal reported that, “Yesterday, we visited the site of the Bering Strait tunnel. We were standing on the beach of the little village of Wales, on the Seward Peninsula. You can stretch your hand, and touch Mother Russia. When you are looking west, you are looking into Russia. I think it is a project which will open a treasure chest of the Arctic.”

He related that his group discussed the project with a number of people in the government that day. We discussed it with [Sen.] Lisa Murkowski [R-Ak.]; we told her about Wales. We spoke to [former Alaska] Gov. [Walter] Hickel. And we spoke to [Assistant] Secretary [Bureau of Economic, Energy and Business Affairs Daniel] Sullivan. We have been corresponding with the State Department for some time. And it was very refreshing to see him. “Finally, the U.S. State Department knows there is the Arctic!”

So we are very pleased with our visit to Wales, to those people who want to become part—they want to end their isolation. They want jobs, training, health care, and electric power. And our project means all those things to those people, and to everyone in the remote villages on both sides of the Bering Strait.

Many people think that tunnelling under the Bering Strait is really very difficult, but it is not difficult. The idea to build a tunnel under the Bering Strait is 150 years old. People in 1905 and 1906 thought that the whole project would be a cinch. It is 44 miles in the stretch. However, there are two islands, so the tunnelling would actually be easier than the tunnelling between England and France. The underwater distances are shorter. And above all, the geology in the Bering Strait is about 300% better.

The challenges are the railroads. There are 2,000 miles of railroad to be built on the North American continent, and there is pretty much the same distance of rail to be built on the other side. However, as I speak today, our Russian colleagues are already working on that.

They are building a railroad from Baikal-Amur Mainline to the north, to the city of Yakutsk, the major industrial center on the Lena River. From there, they have a plan to build a railroad to Magadan, a major mining center farther to the Northeast. And of course, they have plans for a line all the way up to the Chukotka Peninsula to the Bering Strait to North America.

So, ultimately, we can get on the train here in Anchorage, and sip champagne in Siberia, and go to Paris—a much more civilized way to travel than by air. As a *Time* magazine article said recently, everybody knows that the modern airliner manages to compress days or weeks of travel, into a few hours of “astonishing misery.”

Railroads are the miracle that provided us with the standard of living that we have today. And all that we have to do—we can *create an environment along the railroad track*, where the palm trees will grow. You can have “climate control.” And the Alaska seal will not know that there is a tunnel going under his sea. So it is totally an environmentally friendly way to travel.

So we should join the people on all continents. They are all the same, with the same desires and hopes and plans for the future. Whether here, or in Siberia, or in Timbuktu in Africa, we are all the same people. And we have to do something to enlarge the wealth of this planet. Because there are 6.5 billion people. When Jesus walked the streets of Jerusalem, there were 300 million people. It took 1,800 years to reach 1 billion. But it took only 200 years to reach where we are today. We have to take care of the people.

We will need some energy to start it. Diesel power stations cannot be the basis for heavy construction. The U.S. Army, and the Army of Russia as well, have worked on mini-nuclear power plants. You can carry the plants on two trucks. You can generate enough power—

Velikhov interjected: “For such things, you need trucks!”

Koumal concluded, “Or you can put the generators on railroad cars. So that would be the initial way to supply the energy. However, the permanent solution would be sustainable hydro-power. Over 60% of the energy in eastern Russia can come from hydro-power. . . . Speaking of energy, I would rather have Academician Velikhov speak.”

Sergeyev: Russia Has Started on the Project!

Transcription of the remarks by Alexander Sergeyev:

“I represent the Russian Hydroelectric firm—RusHydro. It is the second-largest hydro-company in the world, producing based on renewable resources. Today, we only produce electrical energy within Russia, but we’re very interested, and looking at assisting those countries that are interested in developing their renewable resources and energy potential. There is hydro potential in the United States and especially Alaska, that could get a big push.

“I’d like to thank Mr. Koumal for his statement about the Bering Strait, which we just returned from visiting yesterday.

“I would like to give you some news about our project. I’d like to announce that Russia has started building their part of this international transport system—World Link. While we’re standing here, the special machine is putting in the rails all the way to the city of Yakutsk. Our company is providing the hydroelectric energy for this project.

“On Oct. 19, we’re going to be providing 2,000 megawatts at our station. The Bureyskaya Hydroelectric Power station is opening.

“On the 6th of September, there was a meeting of the Russian government, where they adopted as a basis for, and supported the development of, railroads for Russia until 2030.

“Russia has looked at funding one-third of this project, or about \$20 billion. So there is now about \$50 billion of

financing left to be funded.

“There are 2,000 kilometers from British Columbia to the Seward Peninsula. There are also 2,000 km [on the Russian side] and the Tunnel, which is 150 km.

“My second piece of news is that this railroad, when it will be in operation, will be powered by, for the most part, hydroelectric power. And the construction of the Tunnel—we are having discussions already—is to use floating nuclear power plants.

“Another piece of news, is that there is a lot of hydro-potential that could be developed in Alaska. You know the Susitna River is a giant storer of electric energy. And if you build an electric power plant, that the U.S. Department of Energy has looked at already, the American part of the [World Link] railroad would have a source of energy that is environmentally friendly.

“I’d like to remind you that there are 200 years of diplomatic relations between Russia and the United States. You might know that Russia was one of the first countries that recognized the independence of the United States. We have a really good chance to be able to think about realizing this project together. Thank you.”

Koumal then added: “I would add that the Interhemispheric Bering Strait Railroad is Russian, United States, and Canadian. We will have a new board of directors, reflecting the efforts of the three nations. . . .”

FDR’s Post-War Plan: ‘Northward to Asia’

by Marcia Merry Baker

Alexander Sergeyev, executive board member of RusHydro, in his “World Link” presentation on intercontinental rail corridors to the Arctic Energy Summit Technology Conference on Oct. 16, made a special point of showing a photograph of President Franklin Delano Roosevelt. Sergeyev stated, “Russians hold President Franklin Roosevelt in great esteem. He was the one who led the United States out of the Great Depression and led to victory in World War II.” Sergeyev cited the “great construction” projects of the FDR era, including rail and the Hoover Dam. “In 1942, FDR gave the Army Corps engineers the task to study the feasibility of a railroad to connect Alaska, through Canada, with the lower states. I read the report. But it sat on the shelf for almost 60 years. So Russia today is actually implementing the Roosevelt view that allowed the U.S. to come out of the Depression!”

In fact, the development of Alaska as part of the world rail land-bridge, represents the fulfillment in very specific terms, of the vision of FDR, and his Vice President Henry Wallace during the 1940s. While FDR and Wallace were forced to pur-

sue air links between the Western Hemisphere and Russia, primarily from the standpoint of supplying urgently needed war materiel to the embattled Soviet Union during the war, Wallace put forward a much broader vision, which was endorsed by FDR. The 1943 ALCAN Highway, a 1,500-mile mega-project accomplishment of the Army Corps of Engineers, was just the beginning of what was intended.

The following are excerpts from a number of publications from 1944 written by Wallace, whom FDR sent to the Soviet Union and China in 1944, with an eye to the perspectives for the post-war world.

“Northward to Asia,” is the title of a map showing the Bering Strait and adjacent lands, making up “the North Pacific, a great post-war communications highway between America, Russia and Far East,” which appeared in the 1944 pamphlet, “Our Job in the Pacific” (published by the American Council, Institute of Pacific Relations). In it, Wallace wrote, “Easternmost Siberia and Alaska form the crown of the arch over the North Pacific. America’s interests here are bound up with those of Russia on one side and Canada on the other. Like the Canadian Northwest, Alaska needs and can maintain a much larger population than at present. This population is needed not only to develop local resources but to service the rail, motor and air routes which will link America and Asia.”

‘60 Million Jobs’

Wallace took up the question again in his 1945 book *60 Million Jobs*, in a chapter titled “New Frontiers Abroad; New Frontiers of Abundance.” The title refers to “the total of 60 million jobs as synonymous with the peacetime requirements of full employment” in the United States, engaged in rebuilding the U.S. and world economies. In Chapter III, Wallace wrote, “Our first big postwar job abroad, of course, is to help restore some sort of order in the devastated areas, and get farm and factory production running again.”

After reviewing different regions around the globe, he said, “But the biggest frontier of future development will be found with the new dawn in the northern Pacific and eastern Asia.

“After V-J Day—after our boys have landed back on home shores at Seattle or Portland, San Francisco or Los Angeles—then we shall think more and more of our West as the link with the East of Asia.... The East of Asia, both Chinese and Russian, is on the march in a way which is easy for any American to understand who sees these great areas at first hand for himself. The rapid agricultural and industrial development of these peoples means so very much to the peace and prosperity of the entire postwar world.

“Our Northwest was long held back by unfair freight rates and by failure to develop the power of its mighty rivers. But thanks to



FDR Library

President Franklin Delano Roosevelt (right) and Vice President Henry Wallace (1940-1944), at a press conference. Wallace also served as Agriculture Secretary, 1933-40.

men like Roosevelt and Norris, McNary and Bone, the Northwest during the past ten years has rapidly expanded. This expansion must continue to the limit of its agricultural, industrial, and commercial potentialities. This includes Alaska, which has not yet begun to measure up to its possibilities. But this growth must be not merely in national terms, but also in terms of Asia. Vigorous two-way trade with Soviet Asia and China will greatly increase the population and prosperity of our Northwest and the whole of our people.

“All of this I knew in a theoretical way before going to Asia in 1944. After having seen something of the industry and agriculture of East Asia, I am more than ever convinced that we are entering upon what might be called the ‘Era of the Pacific....’ (Research by Robert L. Baker.)

Northward to Asia



Reproduced from Our Job in the Pacific (1944), by Henry A. Wallace, published by the American Council, Institute of Pacific Relations. Wallace, then Vice President, wrote this after his trip through Canada, Alaska, Russia, and China in the Spring of 1944. The original caption: “Polar air routes and Arctic economic development may make the North Pacific a great post-war communications highway between America, Russia and the Far East.”