

# Russia and China: Develop the Far East

by Michelle Fuchs

*The following report is based on an LPAC-TV presentation<sup>1</sup> of Sept. 30. It gives a small slice of the major projects underway in Eurasia, and concretizes La-Rouche's assertion that two major nations of the Pacific, Russia and China, are engaged in an in-depth, high-technology development drive which the United States can, and must join, to launch a worldwide recovery.*

Over the recent weeks, Russia and China have shored up their cooperation on those kinds of high-technology endeavors which will serve as the spearpoint for a global recovery, technologies such as nuclear power and space travel. That cooperation will surely be advanced again as Putin makes his planned trip to China this October. But the already ongoing motion in these nations towards the development of the Far East, with a clear direction towards the development of the Arctic region and a Eurasian Land-Bridge, already demonstrates an intention which goes beyond a near-sighted stabilization of the current economic crisis, to the development of what will come to be the Eurasian world.

A United States which dumps Obama, could join with China and Russia in a commitment to that progress; but at present, the United States is moving ever further away. We will take a glimpse into that process by looking at some of the recent developments in Russia and China that converge on development of the Siberian Far East and the Bering Strait connection. We'll counterpose

1. <http://www.larouchepac.com/node/19662>

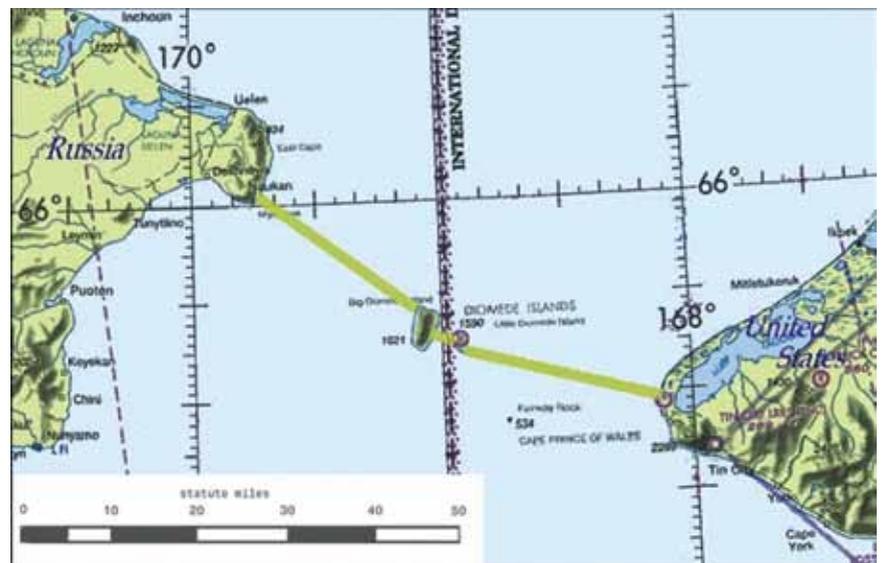
this rapid-paced development to the arrested development of American infrastructure and large-scale projects like NAWAPA, which have been on the books for decades, but have not been supported by subsequent administrations, including the Obama Administration.

## Chinese Rail Leaps Ahead

China is currently leading the world in the implementation of maglev technology, the next step in long-distance transport. On Jan. 1, 2004, China completed the Shanghai Transrapid, the first commercial high-speed magnetic levitation line in the world, designed to connect Shanghai Pudong International Airport and the outskirts of central Pudong. Achieving a record test-run speed of 311 mph, the top operational commercial speed of this train is 268 mph, making it the world's fastest in regular commercial service. In very long distances, such as between major cities, or across the Bering Strait, maglevs, elevated above the track using electromagnetic attraction/repulsion, can be run in a vacuum tunnel that eliminates air friction, enabling speeds of thousands of miles an hour.

Scientists at Southwest Jiaotong University are pushing these boundaries. Earlier this year, they broke records when they ran a test model vacuum maglev train at 745 mph at the Traction Power State Key Laboratory. At this speed, passengers would be able to travel from Guangzhou to Beijing by maglev in less than two

FIGURE 1  
**The Proposed Bering Strait Tunnel**



hours, while the same travel distance takes three hours by air.

More maglev lines are planned, and one of the eight rail transit lines currently under construction in Beijing is the S1 medium-low speed maglev line, extending from the western Mentougou district to Pingguoyuan subway station, intended for completion before March 2013.

Another area of Chinese technological development crucial for the Arctic territory is the Qingzang rail, built in the high altitudes of the Tibetan mountains. This line confronted many of the technical difficulties that will be faced in a Siberian environment. About half of the second section was built on barely permanent permafrost, where, in the Summer, the uppermost layer thaws, and the ground becomes muddy. Chinese engineers dealt with this problem by building elevated tracks with foundations sunk deep into the ground, building hollow concrete pipes beneath the tracks to keep the rail bed frozen, and using metal sun shades.

Similar to the Trans-Alaska Pipeline System, portions of the track are also passively cooled with ammonia-based heat exchangers. As the air in Tibet is much thinner, with the oxygen partial pressure being 35-40% below the partial pressure at sea level, special passenger carriages are used to maintain adequate oxygen, and several oxygen factories were built along the railway.

At this elevation in these latitudes, water in toilets must be heated to prevent freezing. The railway also passes the Kunlun Mountains, an earthquake zone, where a magnitude 8.1 earthquake struck in 2001. Dozens of earthquake monitors have been installed along the railway.

The technologies developed and applied by China in the Tibetan mountains can be applied elsewhere, and China has already made clear its intention to participate in the development of the Far East, which harbors natural resources needed by China. As senior Chinese National Development Commission official Wang Huajiang said at the Sept. 12 opening of the annual Baikal Economic Forum this year, China, which last year invested more in the Russian Far East region than Russia's own federal government did, is planning to establish a special fund to support investment in Russia, and will work jointly with Russia to support small and medium-sized Chinese and Russian businesses investing in Russia.

### **Russia Moves East**

Russia is already moving toward the East. Many Russians, as affirmed in a conference three weeks ago, titled "Comprehensive Infrastructure Development in Northeast Russia: From Limitations to Growth," are ready and prepared to proceed with the most crucial

## **China Takes Step Toward Permanent Space Station**

Sept. 29—With President Hu Jintao and other leaders of the Chinese government looking on at the Beijing mission control center, and undoubtedly many millions watching on TV, the China National Space Agency successfully launched its Tiangong-1 space module into Earth orbit today. Tiangong-1 will orbit the Earth, awaiting the arrival of the unmanned Shenzhou-8 before the end of this year, to carry out China's first rendezvous and docking tests.

Tiangong-1 is made up of two modules, rather than three in the future manned configuration. It is larger and heavier than the manned Shenzhou craft. Tiangong-1 has an experiment module, which is

where visiting astronauts will live and work on future missions. Inside, there are two sleeping bags, adjustable lighting systems for sleep, exercise equipment, and entertainment and communications equipment. Experiments will be conducted while crew members are there, and remotely controlled from the ground when they are not.

China has plans to launch follow-on Tiangong-2 and -3 modules, which will be equipped to extend the capabilities of the orbital facility, and when all linked together, will be able to accommodate crew for 20 days, and then, up to 40 days. An unmanned cargo carrier, similar to Russia's Progress, is also being developed to deliver freight to the crew.

The first test of the module will be the unmanned, then manned docking, and then the assembly of new modules. By the end of this decade, China plans to have a space station that can be permanently manned.

—Marsha Freeman



This is a clip from a Roscosmos animated video of plans for the in-progress Vostochny Cosmodrome, included in the LPAC-TV presentation (<http://www.larouhepac.com/node/19662>).

link between the Eurasian world and the United States, with the construction of the Eurasian connection advocated by Lyndon LaRouche since 1978, of a Bering Strait bridge or tunnel.<sup>2</sup>

The well-publicized conference, hosted by the government of the Sakha Republic-Yakutia, was attended by the deputy head of the Federal Rail Transport Agency; representatives of important institutions like the SOPS (Council for the Study of Productive Forces) and the Chamber of Commerce and Industry; Sen. Aslambek Aslakhanov, a former advisor to Putin and a big advocate of the Bering Strait tunnel; and Alexander Levintal, the deputy of Victor Ishayev as Presidential Envoy for the Far East Federal District. In addition, it was attended by 500 people from Russia, China, South Korea, the U.S.A., and some European countries, and focused on the Bering Strait connection.

The Russian side of the project is already underway, with the Russian Railways' two-part plan for building a Russian connection between the more central rail grids and the extremity of Russia in Uelen.

Let's take a closer look at the current Russian Rail-

2. See "The Eurasian Land-Bridge: The 'New Silk Road'—Locomotive for Worldwide Economic Development," *EIR Special Report*, January 1997.

ways plans. The first leg, intended for completion by 2015, includes a railroad from the Baikal-Amur Mainline to Yakutsk. Yakutsk is the capital of the Sakha Republic, and until now, this city of 270,000 people, located at 66°N latitude, has had no rail connection to the rest of Russia.

The second phase, defined as top priority for 2016-30, is the construction of a rail line to Magadan, then all the way to the Chukotka village of Uelen, the potential Russian side of the Bering Strait. The first 266 km of the 800-km track from Berkakit to Yakutsk, had already en-

tailed construction of 45 bridges and moving of significantly more than 30,000 cubic meters of earth, when it was completed two years ago. The Russians know the pressure is on to increase available railways in Russia. The Trans-Siberian Railway is already operating at capacity, and under current plans it is expected that the Baikal-Amur Mainline freight will increase four- to sixfold by 2020.

But the rail projects will involve more than just laying rail on top of inert ground. This will mean the development of Siberia, both in resource extraction and processing into higher-value materials, and development of new areas fit for human habitation.

Another aspect of the Russian plan for Far East development includes the creation of entire new cities, located far from any areas that may now be considered hospitable, and with vectored scientific objectives.

On Aug. 11, Russian Federal Space Agency head Vladimir Popovkin confirmed the intent to complete by 2018 the construction of the Vostochny Cosmodrome space launch center, the first Russia-based spaceport. Construction of the science city will begin next month. Over five years, 30,000 workers will build research centers, an academy for young scientists, and an astronaut training center, and space manufacturing facilities in the Amur Region near the Russian-Chinese border.

## And from Obama? Sabotage

Now counterpose what Russia and China are doing, to the United States under Obama. Look at the Susitna Dam project and the Tanana Valley Bridge project, two necessary components for transforming Alaska into a transportation and research center in the coming Eurasian world.

The 2-mile-wide, 60-mile-long reservoir created by Susitna Dam will be one of many collection points for the vast flows of Arctic water to be channeled southward in the first stage of the NAWAPA system. This crucial project, under Obama, is now lying in

limbo. Despite the recent go-ahead by Alaska Gov. Sean Parnell, and the fact that this project has been on the books and discussed for 30 years, only \$65 million is allocated and is to be used to begin a process of feasibility studies, environmental impact studies, and licensing processes, which are all expected to take 5-6 years, before construction could even begin. The Alaska Energy Authority is expected to need another \$10 million for more licensing and impact studies.

Even were the dam completed and the 6-8 gigawatts of hydropower from the dam brought online, the prob-

## Arctic Conference: 'Territory of Dialogue'

The Russian Geographical Society (RGS), with the support of Prime Minister Vladimir Putin, hosted the Second International Arctic Forum at the Northern Federal University in Arkhangelsk, Russia, Sept. 22-23, bringing together 450 scientists, politicians, and reporters from Russia, the United States, Canada, Norway, Denmark, Iceland, China, Japan, and many other countries, to discuss the development of this rich, but largely untapped region of our planet.

Participation in the conference led Alaska Lt. Gov. Mead Treadwell to issue a call in the *Anchor-age Daily News*, for the his state, and the U.S. as a whole, to wake up to the opportunities offered by Arctic development, and both cooperate and compete with Russia in this endeavor.

This year's conference, held in the ancient capital of the Russian North, focused on the urgency of creating an Arctic transportation system, including the development of commercial and research navigation, sea and air transportation terminals and corridors, polar aviation, and cargo and passenger trans-polar and cross-polar transportation, with all the safety issues involved. The Russian organizers argued that without a transportation infrastructure, the Arctic cannot be developed, and development of this region is the guarantee of Russia's prosperity.

In his address to the conference, Putin emphasized that Russia is determined to turn the Northern Sea Route, "the shortest route between Europe's largest markets and the Asia-Pacific region," into "an international transport artery that will rival traditional trade lanes in service fees, security, and quality. States and private companies that choose the Arctic trade routes will undoubtedly reap economic advantages."

RGS president Sergei Shoigu, who also heads the federal Emergencies Ministry, reported that specific recommendations were adopted following the discussions. Russia will establish an Academy of Sciences Arctic Research Center in the Arkhangelsk Region, "to give a fresh boost to science in the North," and Russia will expand its icebreaker fleet, the government committing to build three nuclear-powered, and three diesel-electric icebreakers for use on the Northern Sea Route, with the first of the three nuclear vessels to be completed by 2015-16.

The title of the conference, "Arctic: Territory of Dialogue," points to the new mode of international relations required for mankind's survival. As Vladimir Kotlyakov, honorary president of the RSG, put it: "Cooperation is a must in the Arctic region. It has large reserves which should be used, but it is impossible to explore and develop them independently. On the other hand, there are political territorial disputes around the Arctic region, which can be resolved only through negotiations. If they are resolved unilaterally, new conflicts will emerge."

lem is that they are talking about this project as if it were a local project. The power that's going to be generated is designed from the standpoint of the past, of past energy requirements, not from the standpoint of accounting for growth in Alaska in the future. What energy will be required decades or even centuries down the line, when Alaska will become the linchpin for a global transportation network?

Now, the other project, the Tanana rail bridge crossing, would extend Alaska's current small-scale rail grid further up past Anchorage to Fairbanks. This project has made it past most environmental blocks, including a recent attack from the Obama EPA in late 2010, which slowed the project, when they filed a claim that the current location required a levee that would harm the fish.

However, the Tanana bridge is now embroiled in a labor dispute, as Alaska Railroads, the state-owned rail company, outsourced the work to a Chinese company when it was able to underbid American companies by 22%. The bridge fabrication is going to be done in China, and the steel will come from there as well. Under

economic collapse conditions, and without any Federal government regulation of this process, American companies have little chance of surviving. As in the Susitna Dam, there is little understanding among some, of the Tanana bridge being more than a just a local project, playing a role in an intercontinental rail grid run across the Bering Strait.

So, as we see, China and Russia are on a fast track to the development of the Far East, with all of its extreme weather and related challenges. The United States is currently suffering the effects of small-mindedness and shortsightedness, refusing to acknowledge that the way out of our economic crisis is to think and build bigger than your imagination currently tells you is possible.

Therefore, the disease we must cure is in the head. Russia and China are standing on the eastern edge of the Bering Strait, with their hands extended to the United States for cooperation. The question is, will the United States get its act together, and return that handshake that will seal the deal on the Great Pacific Alliance?

# Seven Necessary Steps for Global Economic Recovery

A 40-minute feature video presenting Lyndon LaRouche's Emergency Program to End the Global Depression

<http://larouchepac.com/node/19282>



5. IMMEDIATE NATIONAL MOBILIZATION FOR THE CONSTRUCTION OF THE NAWAPA PROJECT



6. ENGAGE LATENT LABOR FORCE FOR SUBSIDIARY PROJECTS SUCH AS TRANSPORT AND NUCLEAR



7. EXTEND COOPERATION INTERNATIONALLY TO MEXICO, CANADA, RUSSIA, CHINA AND OTHERS



1. FORCED RESIGNATION OF BARACK OBAMA & IMMEDIATE PASSAGE OF GLASS-STEAGALL



3. FOR LACK OF REAL ASSETS REMAINING, ISSUE HAMILTONIAN CREDIT FOR NATIONAL PROJECTS



2. DIVISION OF FICTITIOUS FROM REAL LIABILITIES ACCORDING TO GLASS-STEAGALL STANDARD



4. THE ONLY BAILOUTS WILL BE HONEST BAILOUTS FOR THE BANKRUPT CITIES AND THE STATES