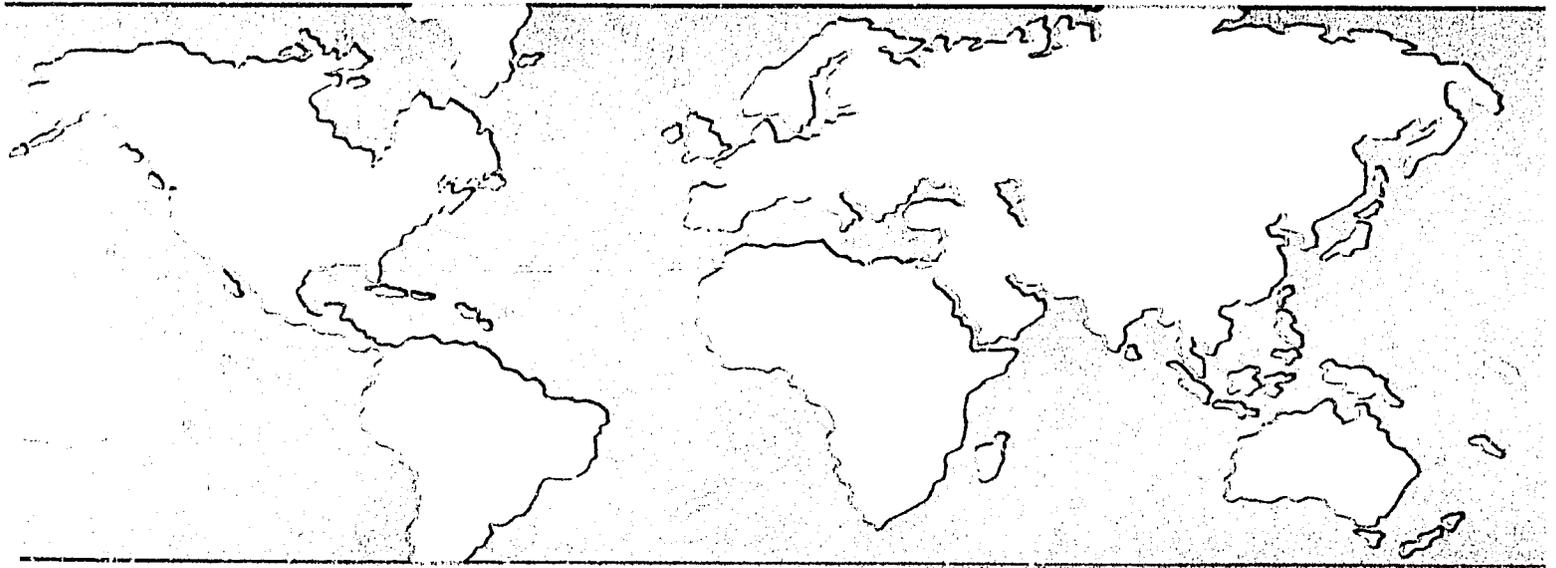


Fall 1992 Gateway Seminar Report



**Defense Conversion:
Achieving U.S.-Russian Cooperation for an
Orderly Build-down and Economic Renewal**

October 15-18, 1992



GEONOMICS
INSTITUTE • Middlebury, Vermont

Seeking Solutions to International Economic Problems

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Orderly Build-down and Economic Renewal**

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Introduction

By *Michael P. Claudon*

President, Geonomics Institute



Michael P. Claudon

With the advent of a new era in U.S.-Russian relations, both countries face the compelling challenge of reversing decades of military buildup, converting their military-industrial complexes, and exploring avenues of mutual cooperation in meeting future security needs.

While the challenges of conversion are formidable, it is clear from discussions at the Fall Seminar that there are also great opportunities. A smaller, more stable, and well-defined defense complex in Russia is clearly in our national interest.

To that end, the 60 seminar participants — senior officials from Russia's ministries involved in defense conversion, senior U.S. Administration members, defense conversion experts, Russian defense enterprise managers and American business people — acting as private citizens codified their recommendations for U.S.-Russian cooperation on defense conversion and economic renewal in the Bread Loaf Charter.

This report contains the highlights of our three days of discussion leading up to the Charter. In his keynote address, Soviet affairs specialist John Hardt laid out the challenge for both countries, "If we fail to provide timely coordinated assistance, the crisis surrounding Yeltsin's reforms may deepen and lead to the collapse of order and prospects for reform in the Russian economy."

The Bread Loaf Charter and commentary, which follow the keynote address, call for two specific actions. First, convene experts from both sides to define principles of mutual security, to agree upon specific actions to implement these principles, and to ensure that such actions promote defense conversion and economic renewal.

Second, the Charter calls for a U.S.-Russian business working group to develop strategies to generate mutually beneficial trade and investment, especially strategies that will promote defense conversion. A prosperous Russia, very simply, is good for everyone. The success of political reform and democratization will depend, to a great extent, on the ability of the Yeltsin Government to meet the pressing economic needs of the Russian people.

American business has much to gain from a stable Russia that has the legal infrastructure and business culture to participate in the world economy. Russia's 150 million people are a market for American goods; the country's defense sector has developed world-class technologies and is eager to join with Western partners to find mutually profitable commercial applications.

The report's last three pieces look more closely at the obstacles and opportunities for American business in Russian defense conversion.

Sergei Kortunov from the Ministry of Foreign Affairs outlines the importance of defense conversion and recommends economic and political steps that both governments can take to speed the process.

Aleksei Ponomarev from the Interdepartmental Analytical Center details the problems that Russian enterprises have encountered in finding Western partners.

Kathryn Wittneben's report on growing American corporate involvement in Russian defense conversion highlights both the risks and rewards of investing in Russia.

We welcome your comments.

Keynote Address

Defense Conversion: Achieving U.S.-Russian Cooperation for an Orderly Build-down and Economic Renewal

By John P. Hardt*

Associate Director and Senior
Specialist in Soviet Economics,
Congressional Research Service



John Hardt

**The author's views are his own, not necessarily those of the U.S. Congress, Congressional Research Service of the Library of Congress or the U.S. Government.*

We are in the process of radical revolutionary change where the great adversaries of recent years are now potential military and economic partners. In that sense, defense conversion is at the heart of a successful economic transition and partnership. But we are profoundly uncertain about how to proceed, what to expect, and how to get results.

The Russians and other transforming economies have largely adopted the Western economic model that attempts to provide rising real incomes, employment opportunities, and a stable monetary environment. That's simple to state, but as we can see in Russia and the other newly independent states difficult to achieve.

Russia is putatively the richest country in the world with its abundant natural resources and skilled manpower. But this wealth has been used to create a military superpower and to consolidate the power of the Government and the Party. The challenge is to redirect the resources of the defense industrial complex. Willy Sutton used to say, "I like the banks, because that's where the money is." We must look at the defense industrial complex, because that's where their best human resources are.

For generations, they have channeled the best and the brightest and given top priority to the defense complex. The Sakharovs of the past produced bombs and the ingredients to be a military superpower. Simplifying again, they must redirect these human assets if Russia is to effectively restructure its economy. The consumer, Ivan Ivanovich, and his desire to live better must now be given top priority over expanding the power of the state.

We have a parallel in the Renaissance where the Medicis hired Leonardo DaVinci to prepare fortifications and battering rams to knock down defenses. Fortunately, he was able later to redirect his resources to being a creative artist.

But Russia is also facing revolutionary changes with no real parallel in history. Never has a country faced the need to so rapidly make many profound changes in governance, bilateral and multilateral relationships. It's almost like Christopher Columbus setting out for the New World. In Russia, one-sixth of the earth's surface, we have a country embarking for the first time in their history to develop simultaneously a free market and a pluralistic society based on a rule of law.

Democracy and Free Markets

Linking market and resource development and efficiently translating resources to consumer income generating employment requires a democratic market. This has been the tradition and lessons of the Western transformation. It is important that Russia follows this synergistic model of democratic, pluralistic development. A market place for goods is fostered by a market place for ideas — "one man, one vote." There needs to be democratic leadership, but it needs to be strong democratic leadership. This may seem contradictory, but strong leadership is needed to successfully proceed through a revolutionary transformation based on a broad consensus for change.

In business terms, little can be done to attract foreign investment unless there is political stability and a predictable legal environment. Responsible leadership that can be held accountable is needed to guide the process in a predictable fashion. Having spent a good deal

of time recently in the Russian Parliament, I can speak to the problem of political diversity and accountability there; strong, accountable, and inclusive leadership is essential to provide the political base for effective economic restructuring and defense conversion. Factions can issue decrees but ultimately can not implement them without the support of the industrialists, the military, the agricultural interests, the people, the cities; the separation of power and a political consensus must be built on a functional consensus for effective policy implementation.

In restructuring an economy and a system from a predominantly military industrial complex to a civilian oriented, open economy, it is particularly crucial to look at the political underpinnings of that system. Is there a framework that they can borrow from other countries? The current approach of the reactionary parts of the Civic Union, a group of factions reflecting the interests of many industrialists, is the Chinese model of a vigorous free market under strong autocratic leadership and arbitrary police power.

Elsewhere in the former Soviet Union, President Nazarbayev in Kazakhstan looks to the South Korean model where there is market development and a very strong autocratic government hand, supported by the police. In effect they support retention of the political part of the old system but move toward the market on the economic side. Domestic and Western forces will not support such an undemocratic market transition in Russia.

**DeGaulle's France:
A Model for Development?**

A better model is the DeGaulle model. DeGaulle in the Fifth Republic established an inclusive government made up largely of non-

Gaullists. DeGaulle's government ended the war, reformed, restructured, and reduced the military. He brought the former members of the French empire into some degree of comity and turned the country toward developed Western markets. And he did that with a domestic program, designed by a liberal economist, that was supported by industrialists and a broad cross-section of society. Moreover, he introduced a new tax code, reformed agriculture, and continued the process, that he had started in 1944, to establish an independent professional civil service.

These historical developments provide useful current insight for Russian leaders. The experience of France is not directly translatable, either from the French to the Russian or from France as a country to Russia. But the point is that we need to think about the Russian transformation in a democratic context. These changes require strong, inclusive, and effective leadership that can implement participatory policies. A strong, inclusive democratic coalition is needed, not a dictatorship.

Many opposition reform groups called for a broad renewal program. Comprehensive patriotic renewal means more than support of monetary stabilization. Beyond attacking inflation, the government must address the problems of consumer goods production, productivity, income, and employment.

This requires not only strong domestic leadership, but also cooperation and technical help from the West and especially the leadership of the United States. The Charter for American-Russian Partnership and Friendship signed at the June 1992 Summit provides just such a framework for cooperative programs and technical assistance.

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It is critical to move assets into productive civilian activities in the new environment in a way that minimizes unemployment. Government leaders who disregard the issue of mass unemployment are likely to be out of office.

In its comprehensive restructuring, Russia must focus on programs that benefit the people in the short term as well as the long term: improving the food supply at affordable prices, increasing the productivity of the energy sector, improving medical care, cleaning up the environment, and increasing good housing for returning military and the public are all critical. If citizens are to give their consent to be governed and participate fully in the process, they must have performance from their government — if not immediate tangible performance, credible hope for future performance. Inflation, few goods in the stores, and a prospect of high unemployment with little prospect for improvement is not performance that generates confidence in the government.

Conversion: A New Patriotism

The core of a new conversion strategy should be to shift the productive scientists and manpower, no longer required for defense programs, to competitive, consumer-related programs that can improve productivity and the quality of life. Establishing the Soviet Union as a military world power was a patriotic effort, but transforming the country and building a better society is certainly an appropriate new patriotic goal.

By supporting this comprehensive restructuring, President Yeltsin can rekindle a sense of patriotism and redefine national security in economic and social terms. Without this redirection, Russia cannot become competitive in the global marketplace. Again, the defense establishment is at the heart of restructuring, because that's where the best assets are for competing in the consumer goods markets.

The precondition for initiating a successful defense conversion is de-

veloping better information about the military industrial complex. The government has purposely shrouded its military activities in mystery and largely kept its assets and activities secret. A complete inventory of these assets is needed so the government can decide what must be retained to support their future military and what may be converted.

It is critical to move assets into productive civilian activities in the new environment in a way that minimizes unemployment. If government leaders do not treat employment as an important human value, they will be required to treat it as an important political value. Government leaders who disregard the issue of mass unemployment are likely to be out of office. Keep in mind that no government in Central Europe that has faced the electorate after introducing "shock therapy" has been reelected.

It is necessary to assess what enterprises are producing civilian goods, can continue, and are not dependent on state defense orders and those that are needed to meet future defense needs. Three categories of defense industrial enterprises should be supported by the state budget or released for privatization.

1. Enterprises primarily producing civilian or consumer goods under Defense Ministry jurisdiction. These major producers of civilian goods could become competitive with prudent availability of state credit, some restructuring, and expanded non-defense output. The goal would be to privatize these newly competitive enterprises as rapidly as feasible.

2. Research and production enterprises that have a reasonable chance for joint ventures with foreign firms should become priva-

tized enterprises. These enterprises would require some restructuring to become efficient producers for foreign and domestic markets whether or not they become joint ventures. State credit and foreign assistance would be needed in the short run. Some enterprises such as those in joint space activities might remain state supported in the longer term or seek foreign partners.

Foreign assistance should be sought and funding could be provided the first two categories on a phased, conditional basis. The purpose would be to make the enterprises self-financing at as early a date as possible or move toward closing them. State funding to keep category 2 afloat could proceed with aggressive restructuring efforts to create competitive enterprises or to proceed toward privatization.

Phased Reduction Is Important

3. Research and production enterprises needed to produce military items for projected military forces with allowance for mobilization or surge capacity should remain state enterprises on the state budget. The currently projected force levels, a fraction of former levels, should have assured state funding and orders within a future phased-down requirement, e.g., a five-year force development plan.

Precise judgments on the retention and state support of enterprises may not initially be necessary. More critical is timely reduction of the massive defense burden on state budget. A phased reduction would also provide some certainty of employment for workers, scientists, managers, and communities for meeting continuing defense needs.

The third category should be clearly and definitively established so that state financing for force development can be planned, de-



A value-added tax dedicated to defense conversion could be an innovative revenue source for the costly conversion process, Mr. Hardt suggested in his keynote address.

bated, and approved by the parliament in a multi-year defense budget. More tax revenue may be necessary depending on the political judgment on what force development is required. A value-added tax dedicated to defense conversion/renewal like the U.S. gas tax dedicated to roads might be an innovative revenue source.

This step would then "blue-line" (certify for retention and support) a small portion of the current defense industrial assets. With this process and revenue base, workers, scientists, managers, communities could all be reassured that funding and employment would be assured for at least a specific time period with credible criteria for extension. This planned capacity could then limit production for Russian military needs, not foreign arms sales.

The majority of defense production capacity would be "red-lined" or eliminated. This is capacity, primarily developed for producing mili-

In some cases, investment might not provide immediate market returns but would improve the quality of life, environment, health, and housing or facilitate the process of change. Although not likely to be funded from the market, meeting these needs is socially important.

tary hardware, with capital assets not economically competitive in meeting civilian demands. While much of the plant and equipment is not convertible, the human capacity (scientists and workers) could be retrained and protected with an effective safety net during the transition to new gainful employment.

The challenge is to identify those elements that can compete in a market and to provide an effective and efficient way to move them to new firms. If these assets can be used productively to meet domestic needs and to earn hard currency, they will attract the interest of private investors and international organizations that support private enterprise, like the European Bank for Reconstruction and Development and the many activities of the World Bank family.

Improving Quality of Life Is Key

In some cases, investment might not provide immediate market returns but would improve the quality of life, environment, health, and housing or facilitate the process of change. Although not likely to be funded from the market, meeting these needs is socially important. Few indicators rank higher in public opinion polls than those involving the quality of life.

Few investors would not rank improving the infrastructure as a key factor in attracting new investment. Projects could be ranked by their potential to resolve urgent ecological and health problems in each community, to generate jobs, or to save money. Such beneficial new employment-creating projects should be contrasted with social safety nets providing payments to enterprise staffs that do not provide employment and production of valuable products or services.

The current retention of staffs, funded by inflationary monetary policy should not be acceptable for domestic or international support. Prudent funding and staffing of quality of life and infrastructure projects require international funding, domestic financing, and local support. These activities provide gainful employment, but would not be self-financed and such broad-based support is essential.

The link between international and domestic funding could be matching funds; for example, the Udmurtia region could be informed that they could qualify for some international funding for health, environment, or housing projects if they provided some of the funding from Russian state or local taxation. Additional ruble funding might be arranged from innovative repayment or conversion of old Soviet debts and the Lend-Lease Settlement. In any event, the credit creation should be restructured to keep down the real interest rate so as to promote domestic and foreign investment.

At the national level, President Yeltsin might appeal for a national renewal program that draws on the best scientific talent to meet the nation's pressing problems: reverse the decline in health standards; change ecocide to environmental protection; provide adequate housing in place of dwelling space below the European sanitary norm; and become an efficient economy capable of becoming competitive internationally.

This job-creating program could be supplemented by volunteer national service and new value-added taxes to be targeted to correct food, energy, and environmental shortages and problems. Moreover, human resources from the defense sector could be redirected along

with supplies of goods and equipment; military builders could be shifted to the food and energy sectors; strategic reserves could be used to meet critical civilian needs.

In short, this could be a patriotic mobilization effort to renew not only the quality of the Russian economy, but renew its spirit and pride. If the transition is not developed in these terms, it will be difficult to gain the support of the people and to justify foreign, multinational, and international involvement and funding. The IMF and the World Bank, for example, may be planning to increase their support for restructuring and market-oriented programs to as much as \$3 billion a year, i.e., to take on the annual financing level of India and Indonesia only if Russia continues its free-market reforms.

Cooperation Is in Our Interest

Where do the United States and Russia fit into this process? At the first hearing of the U.S. Senate Foreign Relations Committee in February 1992 on the START (Strategic Arms Reduction Talks) process, the committee asked whether past adversaries could cooperate, and on what basis. What is in our mutual interest? Three areas of cooperation came out of those discussions.

The first is our military interest. It is centrally important to us and the world that the threat of the former great power military capabilities be reduced through arms cuts and that the defense budget cuts permitted by these reduced threats are prudent.

Second, in an era of Russian-American cooperation threats around the world have changed. Consider some of the changes: the unification of Germany; the revolutions in Eastern Europe; the negotiations in the Middle East; the Cambodian

settlement in Southeast Asia; changes in Cuba and Latin America. The major necessity for both powers developing global systems of defense bases has largely disappeared. In the late 1950s Nikita Khrushchev said, "We are now a global power and every issue in every region will be influenced by us."

He was right. Wherever Russians and Americans had foreign involvements we both started out by asking what are they doing; that was a major reason for our military and diplomatic commitments. Today, there is great potential savings and improved prospect for peace from working cooperatively together.

Third, we have mutual economic interests. Michael Camdessus, head of the International Monetary Fund, has developed two scenarios. In the optimistic scenario with Western support, Russia and the other republics are growing 4 percent a year by the turn of the century. This positive growth would increase world national product annually by about a half a percent.

That increment could well be the difference between global prosperity and depression. The pessimistic scenario forecasts a continuing decline of 20 to 30 percent in the output of the region and a regional recession primarily from the disastrous collapse of the market of the former Soviet Union.

But more specifically and the critical element that led to the U.S. House's support of the Freedom Support Act last summer was the argument by Majority Leader Gephardt that we should "help Russia to help ourselves." If we invest in oil and help develop the Russian oil industry, this will create exports, profits, and jobs in this country. If we participate in telecommunications development, this will bring

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We must link, not separate, military and economic issues. For example, we are leaving many countries the option of selling arms in order to balance their payments — not just Russia, but Brazil and a number of other countries. We must have an orderly plan to support our common interests and to focus and target our assistance and multilateral resources toward reducing international tensions.

very substantial investment returns and employment to the United States. One can go through a series of industries where we can benefit. Why is this relevant to defense conversion? Because that's where the assets, expertise, and potential are for conversion and for developing profitable global commerce and reduced threats. Again, these mutual interests are compelling:

- In assisting their reduction in military capabilities, we benefit from reduction in our defense spending, letting us transfer resources to other productive uses;
- In assisting in the dismantling of a confrontational, military-based foreign policy, we benefit from a cooperative international system under rule of law;
- In assisting in successful economic and political transformation, we help generate the market for profitable trade and investment and economic growth that can be translated into jobs and income.

The gravest threat is that we fail to take advantage of this historic opportunity. Failure could set in motion a long sequence of events where Russia, Ukraine, and much of this region may be lost to the community of democratic, market-oriented states.

Charter Needs Implementation

The United States and Russia have a special relationship with opportunities and responsibilities on both sides for the development of an interactive, coordinated, mutually agreed upon strategy. The need to develop such an approach was at the heart of the Charter for American-Russian Partnership and Friendship signed at the June Summit. Of special and mutual interest would be an early, bilateral downscaling of forces and a reorien-

tation and weapon dismantlement plan; a detailed global cooperative plan for building confidence, reducing tensions and resolving international issues; and a comprehensive foreign trade and investment plan to protect and assure maximum benefit for each side by creating a favorable investment climate.

Direct involvement by top leaders would be required to bring this about. Only the former adversaries could effectively construct this comprehensive (security, political, and economic) system. If the charter were made operational it could then be the model for East-West transition toward peace and prosperity. It would be based on mutual interest in three areas: reduction of defense burdens, development of a cooperative foreign policy, and promotion of trade and investment.

1. Arms Reduction Programs

This partnership could have a primary influence on a range of security issues, especially if development of the charter in Washington includes joint five-year force development and budget plans for Russia and the United States based on ratified arms reduction agreements. An American-Russian program for defense build-down could spell out a strategy for conversion and target American monetary and technical assistance to facilitate this restructuring. This cooperation could build confidence in the mutual process of reducing military capabilities.

Downscaling is even more daunting in many ways than upscaling, because we both must rechannel resources and, in many cases, destroy weapons. We have \$400 million in the current budget to destroy weapons, but we don't know if there are other equally serious problems and bottlenecks. We fear that some unemployed scientists are liable to go

to Baghdad or some other place endangering world peace; on an ad hoc basis we then say we should take care of the scientists. Wouldn't it be much more reasonable to develop government-to-government agreements to deal in a coordinated, comprehensive way with such concerns?

2. Cooperative Foreign Policy

We need these bipartisan government-to-government agreements not only on downscaling the military-based, confrontational foreign policy but also in upscaling the cooperation in the international arena. A cooperative foreign policy program could deal in an orderly way with many international issues, such as nuclear proliferation, arms sales, terrorism, and drugs as well as regional areas of tension.

We must link, not separate, military and economic issues. For example, we are leaving many countries the option of selling arms in order to balance their payments — not just Russia, but Brazil and a number of other countries. We must have an orderly plan to support our common interests and to focus and target our assistance and multilateral resources toward reducing international tensions and increasing prospects of global peace and the rule of law.

3. Trade and Investment Strategy

The Charter for American-Russian Partnership and Freedom calls for the removal of barriers and promotion of trade and investment between Russia and the United States. Specifically, the charter states that Russia intends to speed up privatization and demonopolization, introduce structural and sectoral reform, and create policies directed at furthering competition and effective property and contract rights.

The Russian Federation intends to



A cooperative foreign policy could deal in an orderly way with many international issues, such as arms sales, drugs, and terrorism, Mr. Hardt stressed.

improve its laws in the fields of taxation, property, and contracts and those relating to intellectual property rights. The parties intend to lower constraints to trade and investment and to remove Cold War-era restrictions on business. The parties will also work to strengthen national export control systems and prevent arms proliferation and to promote high-technology trade and investment. America and Russia intend, as indicated in the Charter, to work together bilaterally and multilaterally, particularly through the new COCOM Cooperation Forum.

These are necessary, but not sufficient steps to implement a trade and investment strategy. For example, we have tended to move slowly on critical issues, such as Russians' concerns about the slow pace of eliminating COCOM's high-technology restrictions. COCOM is no longer the restrictive problem it once was, but we should be moving forward and be looking at our trading relationship as mutually advantageous. Safeguard systems that we now have in military verification

We must understand that defense conversion is not a side issue to be dealt with later, but a central issue that must be promptly addressed collectively as well as individually.

If we fail to provide timely coordinated assistance, the crisis surrounding Yeltsin's reforms may deepen and lead to the collapse of order and prospects for reform in the Russian economy.

programs can provide access to civilian enterprises that provide security for military planners and private investors alike.

Government as Facilitator

We should be urging Russian and U.S. government officials at the highest levels to facilitate major new investment and commercial agreements with private enterprises. The Kazakhstan-Chevron agreement to develop the Tengiz field may serve as a model. We need joint productivity committees headed by private sector representatives to emulate the successful productivity and restructuring programs of the Marshall Plan. Productivity increases can be mutually beneficial and lead to foreign investment.

We also need more facilitating mechanisms, including credit guarantee facilities and commerce-promoting legislation. Much of the U.S. legislation was passed during the Cold War when the Soviet planned economy assured a closed economy. The United States has recently begun to identify some legislation that impedes trade and investment but has not revised the legislative framework to conform to a policy of partnership and friendship in trade and investment.

Finally, Russia's unprecedented transformation of a command economy to a market economy in a democratic, not authoritarian, context will require broad domestic support and visionary and effective leadership. It will also require a near-term program that emphasizes restructuring, defense conversion, and an improved quality of life. In the long term, this transformation presents the possibility of a much more peaceful and productive world. A rising Russian economy will raise all boats, including ours.

In the West, we must act prudently and in our own self-interest. We must understand that defense conversion is not a side issue to be dealt with later, but a central issue that must be promptly addressed collectively as well as individually.

If we fail to provide timely coordinated assistance, the crisis surrounding Yeltsin's reforms may deepen and lead to the collapse of order and prospects for reform in the Russian economy. Success can be shared by both the former adversaries; our assistance would be the greatest single contribution to global peace and prosperity.

*Bread Loaf Charter and
Commentary*

The Bread Loaf
Charter:
An Action Plan for
American-Russian
Partnership in
Defense Conversion

From October 15-18, 1992, 60 Russians, Americans, and Canadians came together for Geonomics' Fall Seminar to discuss the obstacles and opportunities in reversing decades of military buildup and in converting defense industries to civilian production. During the three days, the participants — senior officials from Russia's five key ministries involved in defense conversion, senior members representing the U.S. Departments of State, Commerce, and Defense, and the Agency for International Development; American and Russian defense conversion experts and business people — found that they shared a common concern: defense conversion, despite its critical importance to the political and economic security of both countries, is moving far too slowly.

Military build-down and economic renewal based on the transfer of defense industry assets to private hands is possible, but only if both sides work cooperatively and aggressively to create the political, economic, and military framework for conversion. Toward that end, seminar participants agreed in the Bread Loaf Charter on a set of guiding principles and recommended that two task forces develop proposals to deal with specific military, economic, and political concerns.

A Follow-up to June Summit

The specific recommendations of the Bread Loaf Charter (*See page 13.*) build on the general goals of the Charter for American-Russian Partnership and Friendship signed at the Bush-Yeltsin Summit last June and on supporting defense conversion legislation. While the Partnership Charter has spawned new programs, such as the Department of Commerce's new BISNIS program that encourages invest-

ment in Russia, seminar participants agreed that cooperative efforts must be expanded.

Timely Action Is Critical

The NIS states and the West can ill afford a protracted debate on appropriate courses of action. Mounting misery and poverty are testing the limits of Russian peoples' patience with economic reforms.

Despite this growing political and economic crisis, Western pledges of support have not always been followed by technical assistance programs or the extension of loans and credits. Twenty-two countries and multilateral institutions are now operating at least 230 different aid programs in Russia, but IMF and World Bank officials admit that commitments are increasingly lagging behind promises. The G-7 countries and IMF have pledged \$24 billion in aid, credits, and deferment of foreign debt payments, but red tape, concerns over the progress of economic reform and foreign debt payments have delayed or stopped many programs.

Conversion in both countries will ultimately cost billions of dollars, billions that neither the Russian nor American governments nor multilateral institutions have. The Charter for Russian-American Friendship and Partnership and the Bread Loaf Charter do not attempt to fund conversion through government aid. Rather, the charters attempt to help create the legal, political, and social infrastructure needed to encourage private and enterprise investment. Russian ministry officials stressed at the seminar that they understood our budgetary constraints and argued that low-cost technical assistance would be most helpful for both sides.

The Russian government must provide technical support and some

We face interconnected political, security, and economic problems that require prompt, joint action. Articulating new mutually agreeable military doctrines that reflect the new post-Cold War security environment, for example, is an essential precondition for a partnership in defense conversion.

transitional funding, but conversion will ultimately take place at the regional and enterprise level and must be financed from enterprise profits. The enterprises themselves are learning to live without state orders and are trying to develop products that meet consumer needs.

Appropriations under the Freedom Support Act are on the right track. Up to \$400 million will be available to the U.S. Department of Defense for purposes authorized under the Former Soviet Union Demilitarization Act of 1992. Of that total \$40 million will be available for conversion of NIS defense industries; \$15 million is allocated to military-to-military contacts and personnel requalification; \$25 million will be available for joint research programs. Up to \$50 million can be spent on the Multilateral Nuclear Safety Initiative. These appropriations are a significant first step and are psychologically and politically important.

Monetary Policy Is Not Enough

In a significant break with the policies of the G-7 countries and the IMF, the framers of the Bread Loaf Charter called for a partnership that goes well beyond narrowly focused monetary stabilization programs. Defense conversion and economic reform must include specific attention to individual and mutual national security concerns and international affairs, in addition to economics. Monetarist economists notwithstanding, monetary stabilization is necessary but not sufficient to deal with Russia's economic and political problems.

A central theme of the Bread Loaf Charter is that we face interconnected political, security, and economic problems that require prompt, joint action. Articulating new mutually agreeable military

doctrines that reflect the new post-Cold War security environment, for example, is an essential precondition for a partnership in defense conversion. Similarly, privatization of defense enterprises is an essential precondition to attract foreign investment in defense conversion.

Business Task Force Is Needed

The group, and especially the Russian and American businessmen involved in commercial spinoffs from former defense plants, argued energetically that joint defense conversion projects present long-term opportunities for U.S. business. Toward that end the Bread Loaf Charter calls for a U.S.-Russian business working group to develop strategies to generate mutually beneficial trade and investment that promotes defense conversion.

That economic renewal and military conversion are strongly complementary, not conflicting, activities, was a theme we heard repeatedly from all constituencies at the seminar.

Russian defense enterprises represent Russia's best technology, most highly trained work force, and most modern production facilities. In Russia, where the military sector once employed one out of every five workers, accounts for 20 percent of the GNP, and 80 percent of all R & D personnel, defense conversion is the key to successful economic reform. Since the best assets are in Russia's defense sector, the greatest potential for short-term progress lies in converting and privatizing the defense sector.

As the deputy general director of Russia's leading "Star Wars" firm put it, "During years of defense research and development we have come up with many distinguished discoveries, but they are raw diamonds. You have great technologi-

The Charter*

On October 14-18, 1992, the undersigned group of private citizens of Russia, United States, and Canada, agreed during the Geonomics Institute's Fall Gateway Seminar to a set of principles and recommended actions for the leaders of Russia and the United States.

These recommendations build on the Charter for Russian-American Partnership and Friendship and related supporting legislation in both countries.

It is critical that we find mutually acceptable ways of removing barriers to technology transfer and joint development of technology processes, within the context of a mutual safeguard and proliferation control regime appropriate to the new security environment. In view of the critical need for course corrections in each country's current policy to conform with the principles of these statements and proceed forthwith to implement necessary action programs, a series of specific understandings were reached.

Critical global political, security, and economic conditions require joint action in conversion and economic restructuring. A set of problems must be addressed to put these major countries on a new, more positive course.

- To develop a detailed program in order to reemploy released military manpower, defense industry employees, and physical assets for production of civilian goods and services.
- To reach understanding of the concepts and doctrines underpinning respective national security.
- To identify programs at the company and enterprise levels and varying territorial jurisdictions that are mutually beneficial in promoting employment and profit.

- To effectuate effective conversion, and rapid and extensive privatization in Russia, it is necessary to redirect and restructure domestic assets and to attract foreign investment. Particular attention must be given to the redirection and retraining of the military related human assets to new productive civilian tasks.

- To release major constraints on financing through prompt and definitive relief of the debt burden on the Russian economy; the facilitation of funding by national, multinational, and other organizations of targeted programs; and the creation of a favorable private investment climate.

- To change restrictive legislation and the regulatory climate in both countries consistent with the needs of the new cooperative environment.

To bring about these actions of the Charter specific steps should be undertaken:

- Convene a group of responsible authorities and experts of both nations to define agreeable principles of mutual security, to agree upon specific actions to implement those principles, and to ensure that such actions further our stated objectives of defense conversion and economic renewal.

- Task a United States-Russian business working group with developing detailed strategies to generate maximum mutually beneficial trade and investment between the two countries facilitated by the defense conversion process. Included in this task is the goal of developing and enhancing transparent legal and regulatory structures in both countries.

The participants plan to continue their dialogue and call upon their respective governments, businesses, and research organizations to take prompt action on these matters of critical importance.

* Thirty-six seminar participants signed the charter as private citizens. A list is available from Geonomics.

There are many unresolved questions in possible high-technology partnerships and in global competition for high-technology markets. Where does the United States want to cooperate with Russia and where does it want to compete?

cal threats from Japan; this is the best time to cut them together.”

Government officials and business people alike believe that joint commercial projects could very well represent the future trend of increased cooperation between our two countries. The American investor benefits from Russia's technology, such as in advanced computer software, and trained workforce and gains access to the country's huge domestic market. The Russian enterprise learns Western marketing skills and production techniques needed to compete in international markets.

But there are many unresolved questions in possible high-technology partnerships and in global competition for high-technology markets. Where does the United States want to cooperate with Russia and where does it want to compete, ministry officials asked. Will the United States, for example, accept competition in areas which it has monopolized, such as space services?

Improve Infrastructure

While there is growing interest in business opportunities in Russia, the lack of an appropriate legal and institutional framework continues to discourage investors. In the last half year, the Russian government has adopted nearly two dozen laws, protecting patents and trademarks, computer programs, and data bases. These should help normalize technology transfers. But the work is far from complete, especially in defining and valuing intellectual property. The Bread Loaf Charter calls for much more rapid progress creating a Western-style legal and business infrastructure.

Russia also badly lacks modern telephone and computer communications. It needs to establish institutional mechanisms to support com-

mercial payments; insurance and land title guarantees; dissemination and application of business legislation; and appraisal and valuation of buildings, land, stock, bonds. In short, Russia needs continuing help in creating the necessary infrastructure for commercial operations. Consistent, not arbitrary, application of legislation and regulations is essential to a partnership for defense conversion.

Shrink the Defense Complex

A smaller, more stable, and well-defined defense complex in Russia is clearly in the national interest of the United States. The prospect of uncontrolled exports of defense equipment and technology and the emigration of nuclear specialists to the Third World is a frightening sequel to the end of the Cold War.

Herein lies the catch-22. There is very little political will to downsize the U.S. military sector rapidly until Russia makes significantly greater progress with its own demilitarization program. But, Russian success depends directly on Western technical assistance, access to current technologies, and lowered trade barriers, and Western aid has been slowed by the global recession, domestic priorities, red tape, and the lack of concrete programs in Russia.

Both sides must be sensitive to the need to balance national and international security requirements with their economic interests. It is critical, as the Bread Loaf Charter argues, that military authorities and security officials discuss and understand each other's security needs, agree upon the level of their armed forces, and develop strict regulations on the export of arms. Without such discussion and agreement on military doctrines, it will be difficult for both sides to build support to move aggressively in reducing

the size of their armed forces and military-industrial complex.

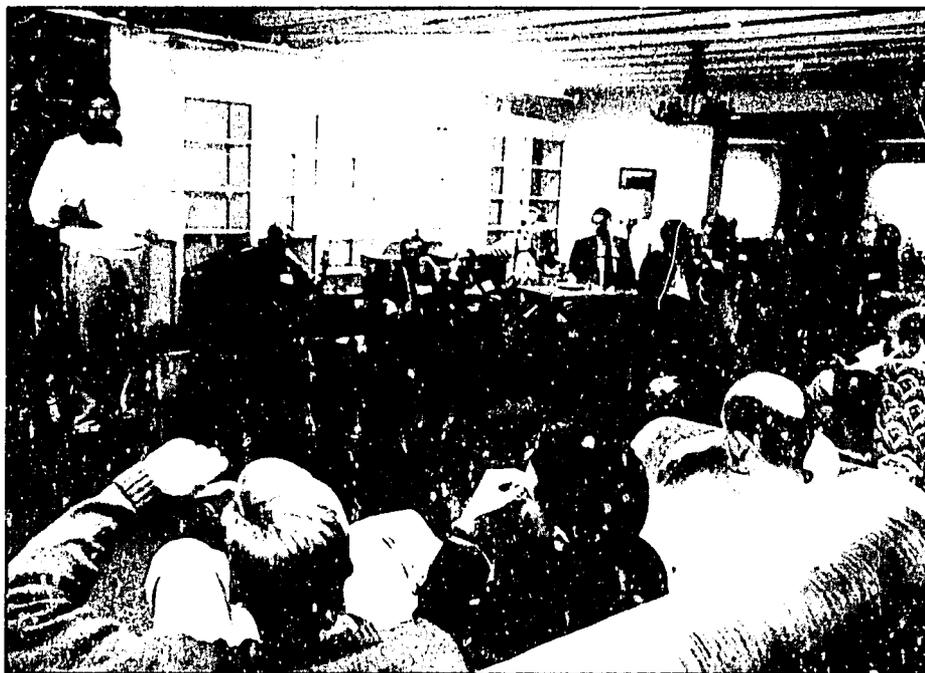
Joint discussions are particularly important given the pressure on the Russian government and defense enterprises to sell arms to the Third World to raise critical hard currency and to keep the military industrial complex afloat. Arms sales, such as the sale of Russian submarines to Iran, Mig-29s to Malaysia, or helicopters to Turkey are potentially destabilizing and highlight the need to avoid cut-rate competition and the creation of an international arms bazaar.

Rethink COCOM

Converting defense industries and retraining enterprise and military personnel for new jobs in civilian industries offer great promise for U.S.-Russian cooperation. There are numerous opportunities for the U.S. in training, technology transfer, and retooling and redirecting defense industries into producing vital consumer and agro-industrial sector goods.

In this regard, Russian business people and policymakers argued passionately that greater access to current Western technology is critical to the modernization of their infrastructure. The Commerce Department has eliminated export restrictions on about three-quarters of its dual-technology list in the past two years and now operates on a "presumption of approval" rather than a "presumption of denial" in evaluating export requests.

But the Russian participants expressed severe irritation by what they consider to be lingering Cold War attitudes that continue to restrict export of dual-use technologies in such areas as fiber optics, telecommunications, and high-speed computers. Many Russian policymakers believe that they are



Converting defense industries and retraining enterprise and military personnel for new jobs in civilian industry present many opportunities for U.S.-Russian cooperation.

only being permitted access to outdated technology, particularly in telecommunications and transportation. This lack of trust and access to technology is a "national put down" one ministry official complained.

Such advanced technology is critical if Russia is to compete in international markets and to attract Western investment. Toward that end, the Bread Loaf Charter places a high priority on developing mechanisms to promote productivity, competitiveness, and technology exchange.

Establishing the COCOM (Coordinating Committee on Multilateral Export Controls) Cooperation Forum at the June Summit is an important step. The forum, which is scheduled to hold its first meeting in November, provides the West and the NIS with the bilateral framework for discussing export controls and to coordinate techni-

cal assistance efforts. It is critical that the Forum move aggressively to review restrictions, to remove restrictions where possible, and to place safeguards on the use of dual-use technology. It is equally important that the Departments of Commerce and State, which are not bound by the "gentlemen's agreements" of COCOM, also review remaining export controls on dual-use and military technologies.

Easing the Foreign Debt Burden

Russia's inability to service its \$80 billion foreign debt highlights the need for the country to broaden its export base and to capitalize on its high-technology resources. If Russia is to be an international economic power, it must emphasize the export of high-tech manufactured goods and services and reduce the uncontrolled export of strategic raw materials.

Cooperation Is in Our Interest

Good intentions and calls for cooperation are not enough. It is time to convert good intentions into solid programs for defense conversion and mutual economic renewal.

- In assisting in the reduction of their military capabilities, we, too, can transfer resources from our military to productive civilian uses;
- In helping dismantle a confrontational, military-based foreign policy, we benefit from a cooperative, law-based international system;
- In aiding their economic and political transformation, we create profitable trade and investment abroad and economic growth at home.

The gravest threat is that we fail to take advantage of this historic opportunity.

*Defense Conversion:
The Russian Perspective*

The Need for Multilateral Support

By *Sergei Kortunov*

Chief, Department of Conversion
and Export Control,
Ministry of Foreign Affairs



Sergei Kortunov

Conversion of defense industries to civilian production is critical if Russia is to have a well-balanced, responsive economy. Without effective and timely conversion of defense industries, economic reform could fail. But if conversion is to succeed, the Russian government must dramatically reverse its policies: American companies must be encouraged to invest and their investments must be protected; and the U.S. government must change its restrictive Cold War policies.

Defense industries are capable of producing high-technology goods that equal or surpass world standards, but these industries have long operated under their own rules. Market-oriented economic reforms are now changing these rules and are a major problem for isolated and privileged defense industries.

Conversion and timid steps toward a market economy, for example, have sharply increased prices for civilian products manufactured by military factories, reduced living standards for this most skilled group of workers, and led to a disintegration of the system of state orders. Does that mean that defense industries and a market economy are entirely incompatible? Many think so. Some believe defense industries are a major obstacle to market and economic reforms.

I believe this is a superficial view. The defense industries have monopolized the country's scientific, engineering, and labor elite, and have the potential to be a vital component of a market economy.

Shifting Priorities Is Essential

Why is defense conversion so critical to economic reform in Russia? Defense spending in the United States accounts for only 5 percent

of GNP. At the current and projected rate of the defense budget cuts (about 4 percent a year in real terms), cuts will only decrease the GNP about 0.2 percent a year. A reasonably healthy economy can easily bridge that gap with moderate increases in industrial output. Therefore, the decline of U.S. defense spending is not a serious macroeconomic problem, even though it causes severe dislocation for some companies, employees, and communities.

The former Soviet Union has been spending more than 20 percent of its GNP on defense, which is one of the reasons for the country's deep economic crisis. To reduce spending to U.S. levels in a few years would decrease the GNP about 5 percent a year, or about 25 times the decline in the United States. This would happen when the rest of the economy is in dramatic decline. As daunting as these figures may seem, they don't capture the entire problem, which is qualitative and quantitative. The Russian defense industries have the highest quality of any industry in the country, the best engineers and managers, access to scarce materials, and a functional support infrastructure.

Thus the American approach to defense spending, which lets market forces consolidate the industry, cannot be duplicated in Russia. Such a significant part of national economy cannot be permitted to vanish. Russia must use these resources to make products badly needed in the civilian economy.

What is even more important, any fundamental and durable transformation of the security relationship between the United States and the former Soviet Union will tend to break the military-industrial complex's grip on national resources. This will promote a productive mar-

ket economy and stable democratic institutions.

Defense conversion does not boil down to retaining old plants to produce civilian goods. Sometimes that will be feasible; often it won't. Rather, defense conversion is an integral part of a comprehensive post-Communist reform process requiring a massive shift in society's priorities and its ways of doing business.

It will involve large-scale redeployment and retraining of manpower resources; systematic identification of facilities and enterprises that can be adapted and those that must be closed; elimination of barriers and creation of incentives for private-sector involvement; and development of a rational and accountable defense acquisition system. But above all, it will require that the democratically elected leaders of the new independent states make responsible tradeoffs between legitimate defense requirements and the economic and social needs of their people.

Since the Soviet defense industries had to compete with the military-industrial complex of the West, they had to meet world market requirements. It's no longer doubted that these industries' employees have "commercial value" and skills of international standards.

It would be extremely undesirable, if not criminal, to dissipate this potential. And yet there is a risk that this may happen in the current conversion program. Military factories are now stepping up consumer goods' output while still manufacturing their military products, instead of converting their facilities entirely to civilian production. Meanwhile, fundamental research, which depended on defense budget subsidies, has declined.

Defense conversion is difficult even when there is a well conceived program: the current program has failed to analyze the critical role and fate of military factories. This is perhaps understandable. The powerful administrative elite of the military-industrial complex has traditionally had the final say. Their one-sided views are bound to be counterproductive and economically disadvantageous to the country as a whole.

While there are common problems in defense conversion in the United States, there is also a critical difference. The government owns these enterprises. But it is also obvious that no matter how much the government does, it does not have sufficient resources. The role of the Russian government should be to assist the private sector especially in privatization and the formation of stock markets.

Finally, it must be frankly admitted that Russia needs outside help in the fundamental reform of its military-industrial complex and in developing these new nongovernmental organizations. Without such help and the integration of the Russian economy into the world economy, conversion is irrelevant and doomed to failure.

International Projects Needed

Defense enterprises must be given more autonomy to alter their production. The state, however, can help with fundamental market research that helps converted enterprises gain access to world markets.

The best way for enterprises to switch from military to civilian production is to become an integral part of major international projects, such as the European civilian research program Eureka, the development of "electronic money," improvement of air traffic control in Russia, and the construction of

Defense industries employ manpower whose "commercial value" and skills match international standards.

It would be extremely undesirable, if not criminal, to dissipate this potential. And yet there is a risk that this may happen in the current conversion program.

high-speed railways. These cooperative ventures would provide access to Western economic, intellectual, and technological resources while commercializing advanced technologies developed by defense industries.

It should be noted, however, that attempts to establish business links with potential American partners have been irregular and unprofessional. There are a number of existing and new organizations, which are duplicating each other's efforts. In the process, they are misleading U.S. companies and raising doubts about the reliability and competence of Russian partners.

There has been an increasing number of cases where former employees of the military-industrial complex, presidents of various associations and foundations, have tried to set forth Russia's position on conversion without being authorized to do it. To clarify these issues and provide information to the business community abroad, the government has set up the Coordinating Council to be its liaison with governments and the business community abroad.

This group is headed by Mikhail Malci, advisor to the President of the Russian Federation on matters of conversion, and includes representatives of the Ministry of Industry and the Ministry of Foreign Affairs. In the Ministry of Foreign Affairs a special department has been established to deal with conversion and to assist the Russian and foreign business communities in developing contacts and organizing mutually beneficial projects.

The only official sources of information are Malci, his group, and authorized representatives of the Ministry of Industry and Ministry of Foreign Affairs. Considering the



The weak ruble should help increase exports, but the government must also create a favorable investment climate that stops capital flight, Ivan Materov, deputy minister in the Ministry of Economics and Finance, said.

nationwide character of this activity, it should be supervised by a single government agency. While ensuring prompt political decision-making, such an agency could be regarded by U.S. companies as a guarantor of commitments made by their Russian partners.

At the same time, a flexible and efficient conversion program requires direct contacts with the West on a non-governmental basis. It can be done within the framework of an independent association of enterprises. In other words, we need a mechanism for broad cooperation between Russia and foreign nations, a mechanism which combines governmental and nongovernmental arrangements.

Western businessmen need to work with nongovernmental organizations that are initially supported by the state. There should be a network of information agencies, data banks, and consultants. Our long-term goal should be to create conditions so that enterprises can act independently or through nongovernmental organizations without government involvement.

The defense sector will now have to become an integral part of the market economy and even have to compete and bid for defense contracts. The Russian defense industries have a good chance to survive in this new domestic market environment and must use these new management skills to compete in international markets.

In this connection last July a private non-profit Moscow-based Integration Association was registered and started its operations. The Association unites Russian leading defense enterprises and research institutions in their efforts to promote comprehensive integration of Russian high-tech industries into the world market economy.

The Association seeks to establish direct links and ties between its members at home and abroad; identify promising areas and mutually beneficial joint projects and programs of international cooperation; utilize advanced technologies, know-how, production, and manpower potential in the aerospace, nuclear, communications, transportation and ecological fields; and help create a favorable environment for foreign investment in the Russian economy.

The organizational and operational concept of the Association was thoroughly discussed and widely supported at the International Conference on Russian defense industries conversion held under its aegis in Moscow this summer. More than 100 leaders of Russian major defense enterprises met with high-level representatives of more than 40 Western companies, legal firms, and banks, as well as governmental and nongovernmental experts from Russia, Western Europe, the United States, and Canada.

The Association has established a good working relationship with the relevant governmental bodies of the Russian Federation including Ministries of Foreign Affairs, Industry, Defense, Office of the Adviser to the President on Conversion Matters, and key committees of the Supreme Soviet. Preparations for organizing the Association's branch offices in various industrial regions of Russia such as the Volga Region

(Nizhny Novgorod, Ulyanovsk), the Urals (Chelyabinsk), Northwestern Region (St. Petersburg), and others as well as in other CIS countries are being completed.

If Russian defense industries receive significant injections of Western capital to aid conversion, they will be encouraged to produce consumer goods for domestic and world markets rather than military goods. This would reduce the possibility of war and military conflict.

But Russian defense industries face a number of problems in converting to civilian production. They have had the luxury of being the most spendthrift branch of the economy and have monopolized the best manpower and resources. The defense sector will now have to become an integral part of the market economy and even have to compete and bid for defense contracts. The Russian defense industries have a good chance to survive in this new domestic market environment and must use these new management skills to compete in international markets.

The Russian Government's Role

The Government can encourage and support defense conversion with the following measures:

1. Make public as soon as possible a national security policy and military doctrine (issued by the president or minister of defense) outlining the size and composition of armed forces and military capital/equipment requirements; cutbacks in defense industry production; and priority areas of conversion. In addition, the government should formally invite international cooperation in conversion.

2. Make a presidential appeal to American businesspeople, welcoming their energetic involvement in

Russian defense industry conversion. The government must also provide specific information on the protection of private investments.

3. Make clear that many industries will be closed or cut drastically. Others will be restructured along market lines through personnel retraining programs, abandonment of old technologies, and introduction of new technologies with the help of foreign partners.

4. Undertake projects which use and preserve the most talented designer and management teams; set up these projects in new joint-stock enterprises, not in their current organizational structures. Encourage the establishment of limited partnerships, holding companies, and small ventures that would incorporate talented designers and engineers; and encourage privatization of these new structures.

5. Arrange a fast track for projects which contribute to upgrading and developing infrastructure, such as transportation and telecommunication systems, systems for extracting and distributing energy, and for processing and distributing food.

6. Promote the creation of joint ventures with American companies which can provide manufacturing, marketing, and financial skills needed to succeed in the market.

7. Accelerate the privatization of defense enterprises by transferring state-owned assets needed for conversion to these newly formed joint-stock companies.

8. Accelerate the establishment of the legal and financial infrastructure necessary for companies doing business in a market economy and for forming business partnerships with American companies.

9. Ease the visa application process for businesspeople involved in conversion projects.

10. Separate conversion projects from the existing defense plant and governmental bureaucracies. This separation should be accomplished by creating new stock enterprises or other business entities to develop, manufacture, and market new commercial products. Conversion projects would transfer appropriate personnel and would use existing facilities (obtaining new buildings is very difficult) of large defense companies. These new entities should seek to form partnerships with U.S. companies to get immediate access to the capital and marketing and management skills needed in a market economy.

11. Introduce tax exemptions for conversion projects and other long-term privileges and benefits for U.S. companies involved in such projects. The government should identify these measures as soon as possible.

12. Develop a national program of step-by-step disclosure of the defense industries' human, material, and scientific potential.

13. Establish a financial climate favorable to normal banking operations.

14. Adopt international standards related to the joint technological projects (e.g., civil aviation).

15. Promote sales of high technologies abroad. Continue promotion of national high technologies abroad through exhibitions, seminars, etc. Create joint projects to design, produce, and sell competitive high-tech goods. Such comprehensive joint ventures are one of the best ways to generate needed

(The government should make public as soon as possible a national security policy and military doctrine (issued by the president or minister of defense) outlining the size and composition of armed forces and military capital/equipment requirements; cutbacks in defense industry production; and priority areas of conversion.



Russia and the United States must determine the rules of competition and cooperation in areas, such as space services, said Evgenii Rogovskii from the Ministry of Foreign Economic Relations.

hard currency and to speed Russia's integration into the world economy.

If and when the government develops a viable defense conversion program, it will need and, I believe, will receive, the backing of Western nations, especially that of the United States. Focusing defense conversion on development of infrastructure, for example, will delay the use of defense facilities for production of needed consumer goods.

While development of infrastructure will promote an efficient consumer market in the long run, it will do nothing to alleviate the drastic shortage of consumer goods in the short run. Western nations must understand that structural economic reforms take time and that they should be prepared to buy time by providing humanitarian assistance, especially food and clothing, under generous credit terms.

The U.S. government must also support and encourage American companies involved in joint ventures in the defense sector. If Amer-

ican firms do not find attractive opportunities, no amount of government assistance will help. But there is a surprisingly large number of American companies interested in creating joint ventures with Russian companies.

These partners recognize, and many of them have experienced, the problems of joint ventures with Russian companies: the lack of legal, financial, and communication infrastructure and the long-term commitment required for financial success. But as the new Russian government commits itself to real economic reform, American executives are finding a more attractive "risk/reward ratio."

U.S. Government's Role

American executives are looking for positive actions from the new Russian authorities and their government. I believe that Western governments, and especially the U.S. government, should take the following inexpensive actions and that they should be endorsed at the highest political level:

1. Eliminate COCOM (Coordinating Committee on Multilateral Export Controls) restraints on specific defense conversion programs. In practice, this would involve an approval procedure for joint ventures on defense conversion. The approval could require a waiver of restrictions when controlled components are needed. The product could be made and verified with appropriate end-use certification.

The end-use should be relatively easy to verify, since American experts would be involved in manufacturing and marketing. For many in Russia, COCOM is reminder of the Cold War and is a national putdown.

2. Provide technical assistance for

the creation in Russia of the legal and financial infrastructure needed to do business in the United States and to compete in global markets. U.S. partners can provide some of this technical assistance, but the cost and volume of assistance exceeds private resources, especially when immediate profitability is unlikely. Public multilateral programs and subsidies will be needed.

3. Provide technical assistance to companies trying to form joint ventures in Russia. This would involve establishing information offices in Washington, London, Bonn, Paris, and other capitals, plus a few field offices in Russia. These offices should be staffed with people having business experience, especially in establishment of joint ventures, and would be a source of information about the status of the economic reform in Russia and about working in the evolving economic system. Retired business executives could be engaged in these offices.

4. Extend the coverage of the Insurance Protection Corporation to American companies doing business in Russia (like Overseas Private Investment Corporation in the United States) to protect them from business failures that can occur from major political changes, after the joint venture is established. Beyond this, the U.S. government, with the participation of Russian experts, should study new forms of guarantees for foreign investors in Russia.

5. Expand existing exchanges and start them, if they do not exist, in each CIS country. These programs should include university-to-university and people-to-people programs, and programs that link professional groups such as military officers, lawyers, and scientists.

6. Give immediate consideration to

eliminating or suspending legislative prohibitions, enacted during the Cold War, on trade and aid to Russia and CIS states. This would include the Jackson-Vanik, Stevenson, Byrd, Church, and Johnson amendments, restrictions on Export-Import Bank credits, and ceilings on Overseas Private Investment Corporation coverage. Many restrictions have now been lifted.

7. Support the active involvement of the American private sector. In addition to reviewing outmoded legislative restrictions, private-sector involvement should be facilitated by streamlining export licensing procedures, updating the list of prohibited technologies, facilitating visa issuance for business visitors from Russia and other CIS countries, and working with each country to improve operating conditions for American business people.

8. Provide macroeconomic assistance, such as stabilization funds for debt management, through existing international organizations. The United States should provide their fair share of additional IMF special drawing rights and encourage vigorous IMF and World Bank involvement in the economic development of Russia and other CIS states, including both commercial and investment banking.

9. Facilitate the access of American companies to the technology base in Russia:

- Sponsor technology fairs for the benefit of American nondefense companies and technical agencies that showcase the technology of defense-sector companies and research institutes of Russia;
- Establish exchanges with Russian institutes and centers in the military-industrial enterprises to work on technologies for the American non-defense private sector.

While development of infrastructure will promote an efficient consumer market in the long run, it will do nothing to alleviate the drastic shortage of consumer goods in the short run. Western nations must understand that structural economic reforms take time and that they should be prepared to buy time by providing humanitarian assistance.

Some have argued that the real risk is that conversion will succeed, and that at some later date Russians will recon-vert these more efficient plants back to defense production. The real issue is which alternative would make this undesirable alternative less likely. I believe the incentives to rearm are much less likely under effective economic reform and a strong democratic government.

10. Continue to provide humanitarian assistance, especially food and clothing, under generous credit terms, until economic reforms take effect.

11. The government should also consider establishing low-interest loans for American companies involved in conversion. This move would be considerably more costly than those I have mentioned, and its necessity has yet to be determined. However, the U.S. government in supervising the defense conversion program should be mindful of instituting such a low-interest loan program later.

Although the costs of the recommended programs are not high, they are not risk free. Balanced against those risks are the "rewards" that would attend successful defense conversion in Russia. Some have argued that the real risk is that conversion will succeed, and that at some later date Russians will recon-vert these more efficient plants back to defense production. The real issue is which alternative would make this undesirable alternative less likely. I believe the incentives to rearm are much less likely under effective economic reform and a strong democratic government.

There is no serious basis for fearing that Russia will flood the world with arms in the near future. The arms market is divided, and it is very difficult to penetrate markets that have traditionally been supplied by the United States and its allies.

Global Rewards from Conversion

Whatever the "risks," I believe the rewards of successful defense conversion far outweigh them. The primary benefits are the following:

1. Defense conversion is a critical ingredient in the overall program of the current economic reform in

Russia. A total and extended collapse of Russian economy makes the country vulnerable to civil war, loss of control of nuclear weapons to irresponsible groups, and restoration of dictatorship.

2. Defense conversion reduces the routine resupply of large quantities of modern arms to the Russian military. It also reduces the level of arms export to the Third World.

3. The defense conversion effort, particularly that part conducted through joint ventures, enhances the transparency of Russian defense activity. The process facilitates the verification of arms control treaties and reduces the need for Western countries to base their defense planning on "worst-case" estimates of Russian military capability.

4. Failure of defense conversion, along with stagnation in the Russian economy, would force the lay-offs of large numbers of highly skilled weapons designers. There is the danger that some experts in nuclear weapons and ballistic missiles could end up working in covert Third World arms programs. The availability and spread of these world-class weapons engineers could substantially increase the proliferation of these weapons.

Let me underscore again, we don't expect Western governments to finance our defense conversion. Mr. Malei estimates the cost of conversion at \$150 billion in the coming years. Neither our government or your government can afford this. We need your help in creating the legal, informational, economic and political infrastructure that will attract private investors. That is our joint task; the actions I have recommended would be quite effective and relatively low cost.

The Russian Perspective

Prospects for Russian-American Business Cooperation in Defense Conversion

By *Aleksei Ponomarev*

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Aleksei Ponomarev

Editor's note: The Interdepartmental Center coordinates the programs of the five ministries involved in conversion and is an information clearing house on the military-industrial complex for foreign investors.

Russian-American relations are entering a new era with the end of military confrontation — a confrontation where concentrating resources on the military sector clearly cost both countries dearly.

In Russia, demilitarizing the economy will be particularly difficult since conversion must occur during two types of fundamental systemic change: transition from a centralized to a market economy and an overall restructuring and decentralization of the economy.

While the first attempts at conversion have encountered many problems, cooperation in reducing our enormous military complexes can clearly be mutually beneficial to both Russian and American companies and spur economic growth in both countries.

First Attempts Have Failed

In 1990-91, American and Russian companies, especially companies in the defense sectors, began exploring business opportunities in earnest. Both countries, however, generally view these contacts as failures. Russian participants cite the following principal problems:

1. American companies were frightened off by the uncertain direction of economic reforms and the lack of real progress in restructuring the Soviet economy.

2. American companies doubted the reliability of Russian partners and were concerned that many enterprises could not make good on their debts to foreign companies.

3. Defense enterprises continued to be state owned and under the direct administrative control of government ministries. Practically all the high-tech industries most attractive to foreign investors were part of the state-owned defense

complex, and it was unclear if foreign firms could have any property rights.

4. Unrealistic ruble exchange rates and complicated exchange mechanisms made repatriation of profits very difficult.

5. Detailed laws to protect foreign investment were lacking.

6. Business infrastructure was inadequate. Information on defense enterprises was limited and poor.

A number of more subjective factors were equally important:

1. Both sides felt that negotiations often took place in different economic languages. For example, Russian enterprise managers, as a rule, could not present commercially viable business proposals or conduct market research.

2. Russian enterprise managers reacted suspiciously to the completely natural desire of American businessmen to establish legal guarantees for long-term joint projects.

3. American businessmen often complained that Russian enterprise managers were unwilling to consider new products.

4. The traditional assistance of specialized Russian "innovation," consulting, and intermediary firms in negotiations was completely ignored. This stemmed from both the incompetence and the small number of such Russian organizations, and American firms limited understanding of operating conditions in Russia. In addition, Russian enterprise managers and ministerial leaders wanted to make decisions independently without sharing information.

There were also serious obstacles on the American side:

President Yeltsin's package of measures to liberalize foreign economic activity, steps toward ruble convertibility, and the beginning of the privatization process were viewed by American businessmen as clear progress towards the creation of more normal business conditions. On the Russian side, decreased demand for high-tech products in the domestic market pushed Russian industrialists to more actively search for foreign partners.

1. Many American businessmen felt that the U.S. Administration, particularly the Pentagon, retained a Cold War mentality and did not support increased economic cooperation. Large American companies, dependent on military orders, feared sanctions and lost contracts if they established close ties with the Russian defense industry.

2. There was no Russian-American trade agreement establishing a comprehensive framework for trade.

3. The U.S. Administration pursued a restrictive policy on technology exports through COCOM (Coordinating Committee on Multilateral Export Controls) and unilateral American export regulations.

4. There were no agreements, such as through the Overseas Protection Investment Corporation or Russian Government, to protect foreign investment from political risks.

5. Most importantly, there seemed to be no clear desire on the part of the American political leadership to address these problems.

There were also important subjective factors on the American side:

1. American businessmen had a poor understanding of the economic and legal peculiarities of Russian enterprises.

2. Americans were unwilling to pursue nontraditional or complicated business plans.

3. A number of experienced American firms, accustomed to working with a central ministry, continued to rely on ministerial decisions long after that was necessary. They underestimated the increasing independence of enterprises from the ministries and the decreasing role

of the government in industrial management.

4. Serious American entrepreneurs mistrusted the many Russian intermediaries and consulting firms, many of which were unscrupulous or incompetent.

Because of problems on both sides, by the end of 1991 or early 1992, American companies and Russian defense enterprises had largely stopped talking about joint projects. The record of Batterymarch, a leading American investment firm which had moved aggressively to seek defense conversion investments, is typical.

It dropped its proposal for a defense conversion investment fund and did not carry out a single large-scale project. In essence, parties on both sides remained on the sidelines during the pre- and post-coup period, waiting for a more stable political and economic climate.

New Investment Climate in 1992

By the spring of 1992, the climate had begun to change. President Yeltsin's package of measures to liberalize foreign economic activity, steps toward ruble convertibility, and the beginning of the privatization process were viewed by American businessmen as clear progress towards the creation of more normal business conditions. On the Russian side, decreased demand for high-tech products in the domestic market pushed Russian industrialists to more actively search for foreign partners.

There were also factors in the U.S. that led American industrialists to seek greater cooperation with Russian enterprises. By spring or early summer, America's economic troubles were becoming increasingly apparent and large high-tech companies, dependent largely on De-

fense Department contracts, foresaw further defense budget cuts.

The curtailment of strategic weapons systems development in the United States and the former Soviet Union has forced companies to rapidly diversify and to find new markets for their products. But entering new high-technology areas is too costly for many companies in this time of global recession.

Moreover, Japan and Western Europe and Southeast Asia are becoming increasingly competitive in high-tech markets. These factors are forcing American industrialists to turn to possible cooperation with the relatively inexpensive high-tech sectors of the Russian economy.

Summit Spurs Cooperation

Agreements reached at the June Summit lifted many of the U.S. Administration's restrictions on cooperation. Of particular importance was the agreement on cooperative defense conversion, which encourages cooperation with Russia's defense enterprises undergoing conversion. The agreement to protect foreign investment was yet another important step towards a better climate for investment.

This, of course, is far from full-blooded cooperation. Nevertheless, these are significant steps towards the establishment of a business infrastructure, the realization of mutually profitable projects, and the integration of Russia into the world economy.

Unquestionably, there are many unresolved problems. In particular, the U.S. government continues to strongly resist lifting COCOM restrictions and easing U.S. export controls. Large firms are still not ready to negotiate large-scale projects. Recently, however, small and medium-sized American companies



Many individual enterprises and regions can now deal directly with foreign investors without ministry intervention, Valerian Sobolev, first deputy administrator of the Volgograd Region, stressed.

have begun to focus on establishing close ties with larger industrial enterprises. These firms are looking for long-term opportunities and are working closely with American manufacturing firms.

An analysis of the activities of foreign firms in Russia shows that they most commonly strive towards minimal commercial risk by developing and commercializing intermediate technologies created by Russian enterprises. Once they are profitable, they begin to expand cooperation.

A possible variation could be for Russian enterprises to work as subcontractors to American firms to assemble foreign-made components for eventual re-export. Another variation could be projects to assemble components, utilizing American technologies, for subsequent sale on the Russian market or export to third countries.

Attempts to pinpoint one or two "golden technologies" from the vast

Attempts to pinpoint one or two "golden technologies" from the vast spectrum of Russian science and technology have generally ended in failure. Russians have a number of data bases, but most don't contain enough information for even a preliminary evaluation of a specific technology.

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spectrum of Russian science and technology have generally ended in failure. Russians have a number of databases, but most don't contain enough information for even a preliminary evaluation of a specific technology. In many spheres of science and technology, there can be much duplication and overlap among research institutes.

Moreover, Russian specialists are mistrustful of foreign companies that endlessly look for the right deal but never sign a contract. Therefore, it is extremely important that an American firm make painstaking preparations prior to a trip to Russia:

1. This preparation should include developing a list of American companies and their specific technology interests. This assessment speeds the search for a Russian partner.

2. Before making contacts in specific areas, the American firm should analyze its Russian counterparts using the knowledge and experience of Russian specialists in scientific and industrial policy. Those experts can evaluate the reliability and technical level of enterprises and laboratories.

3. A reliable and competent Russian partner is extremely important. The partner must be capable of working quickly and effectively in selecting potential projects. American companies make wide use of "protocol firms" that make hotel and transportation arrangements while making contacts. That, however, is not enough. American firms should also plan well in advance to connect with an organization that can competently select projects on a given theme, make preliminary evaluations, and prepare all necessary information and contacts. Experience shows that the

effective work of Russian specialists in these early stages, given the limited information on Russian enterprises and parlous economic situation, is critical.

4. Experience also shows that direct contacts at public conferences or during official negotiations at the executive level are useful for information exchange, but they don't always lead to full mutual understanding of proposed activities. Negotiating parties often begin to view each other as competitors, complicating the search for compromises.

Russian managers poorly understand foreign economic activities and world markets, which only further complicates negotiations. Similarly, Americans poorly understand the opportunities in Russia and the legal and economic conditions of Russian enterprises.

Corporate managers must enter into negotiations thoroughly prepared and be willing to work cooperatively to develop creative solutions. The infrastructure for complicated investment projects is still in a formative stage, but it is not a barrier to most joint projects.

5. American firms should be aware that the ministries no longer play the key role in approving joint projects. In the past, several ministries could simultaneously declare their jurisdiction over foreign investment projects. Current Russian legislation permits the vast majority of enterprises to establish direct contacts with foreign partners.

The process of registering agreements is not controlled and not complicated. Facilitating direct contacts between Russian enterprises and foreign companies is one of the main goals of Russia's foreign economic policy. Russian enterprise managers, however, don't



Privatization of defense enterprises, especially high-technology sectors with commercial potential, is essential to attract significant Western investment. Russian officials and American investors agreed.

always realize their level of independence from ministries.

6. American companies still face serious problems in obtaining adequate financial and operating information about Russian enterprises. This is caused, in part, by new private organizations that have sprung up in place of disbanded Soviet ministries that are attempting to monopolize information for their own benefit.

This lack of information also stems from enterprise managers' poor understanding of the need to disseminate complete information about their firm to potential investors. The Government and enterprises now understand the need to provide detailed information about investment opportunities.

We believe that the recommendations in the Charter for American-Russian Partnership and Friendship, signed at the Bush-Yeltsin Summit in June, are a major step

forward. We are attempting to improve the availability of information on Russia, particularly with the help of the U.S. Department of Commerce's new program, the Business Information Service for the New Independent States.

7. Given the radical structural reforms taking place in the Russian economy, foreign partners must constantly monitor legislative and policy changes and the status of economic reforms. Research and analyses done under the aegis of the Russian government, by organizations such as the Interdepartmental Analytical Center, can help provide answers to these questions.

We hope that this can be a watershed time in Russian-American economic relations. Cooperative solutions to the problems of defense conversion are essential if we are to create new opportunities for Russian and American industry.



***Defense Conversion:
The American Perspective***

**Perspectives and
Roles of U.S.
Business in Russian
Defense Conversion**

Kathryn Wittneben

President
Enterprise Development
Information Center



Kathryn Wittneben

This paper is drawn from Part Four of a report entitled "American Business Involvement in Defense Conversion in the Former Soviet Union: Opportunities, Constraints and Recommendations," sponsored by The American Committee on U.S.-CIS Relations. The full report will be published later this year by The American Committee.

This paper presents an overview of U.S. business perspectives on working with Russian defense-related enterprises. Based on interviews with over 100 U.S. business leaders, corporate representatives, and other experts, it focuses on two questions:

- Is your company actively working with any Russian defense-related enterprises, and do any of these business activities or projects involve conversion? Why (or why not) is your company involved there? What successes and problems has your company experienced?
- What are the opportunities for working with Russian defense-related enterprises, especially with respect to defense conversion?

In-depth answers to these questions were obtained from interviews conducted from mid-April to September 1992. The interviewees come from a wide variety of U.S. defense and nondefense industries that are examining or pursuing opportunities in Russia: aerospace; manufacturers of other military equipment and weapons; electronics, telecommunications, and other high technology, such as computer software; pharmaceuticals; automotive and steel; machine tools; food processing; energy and environment; construction; transportation; and services, including investment banking and management/consulting.

Work with Best of the Best

In general, U.S. corporate representatives state the best opportunities for U.S. business in Russia exist in its defense industries.

First, there is an economic advantage to be gained in working with the Russian defense sector. Susan Walsh and Tom Hajek, United Technologies/Pratt & Whitney,

stated that "under the old Soviet system, the military got the 'best of the best,' so in many ways it is easier to work with defense plants there than with commercial enterprises." There are classes of assets within the Russian defense sectors that make them attractive to a U.S. company, according to Frank DiBello, a partner with KPGM Peat Marwick. These assets include their brainpower, labor, facilities and plants, particular technologies and other products, i.e., planes, tanks, guns, ships, and missiles.

One of the major resources of these defense-related enterprises is their highly educated scientists and engineers. Jeff Baehr, Sun Microsystems, stated that his company is working with a group of Russian computer experts who are world-class engineers. "Because they have had no equipment for so long, they are the world's best theoreticians. It is a privilege to work with these individuals who are so brilliant. They have just never been able to implement their theories."

John Cohn, Rockwell International, verified this viewpoint, stressing that Russian defense enterprises have good technologies and good people, including capabilities in material science, computer science, computational flow dynamics, and electronics. DiBello adds that Russians possess sophisticated capabilities and technologies in a number of fields, such as biomedical research, artificial intelligence, and advanced sensors.

For example, 15,000 patents were sought annually in the FSU biomedical field, but only 2,000 of these were granted because the FSU could not afford to develop all these technologies. American companies can have access to these patent applications in order to identify and evaluate new technologies.

Other U.S. corporate representatives said they are working with Russian specialists, not only because of their high level of qualifications, but also due to their lower costs of research and development. Dr. Richard Garwin, IBM, explained that anybody in research and development at IBM who can get their jobs done better and quicker in Russia is encouraged to do so. Although IBM has not set aside specific company funds to do this, they are using Russian nuclear scientists, as well as other scientists from the Academy of Sciences, to carry out certain research and development projects.

Low Labor Costs Are Appealing

Many U.S. company representatives stated that Russia has a comparative advantage due to its overall lower labor costs. Polaroid has found it economically advantageous to establish a camera assembly line within a Moscow aerospace plant because of its lower labor costs and skilled workforce. Although Polaroid has had to provide additional training for these employees, it has found them to be highly motivated and willing to learn. The cameras assembled in Moscow meet world-class standards, according to Pavel S. Sidorov, general director of Svezor Joint Venture.

Russian defense enterprises are also better equipped than civilian enterprises, although many U.S. corporate representatives stated that a lot of the equipment in defense plants appears to be outdated, often 20 to 30 years behind American counterpart plants. However, there are exceptions. Robert Lewicki of C.J. Edwards said that he has found pieces of technology and equipment in defense plants that could not be easily duplicated in the United States at a reasonable cost, including a 75,000-ton forger that would cost at least \$30 million to build to-

day. Defense-related enterprises also have access to strategic resources, including aluminum, magnesium, and titanium, among others. These are the types of resources and capabilities that a Russian partner is able to bring to a joint business venture, according to Lewicki.

Moreover, U.S. international business experts point out that the infrastructure, which is so important to doing business there, exists at defense enterprises. They have better roads, telecommunications, water and sewer facilities, electricity, and access to railroads, airports and trucking. These factors are important components in an American firm's decision to invest in Russia.

Second, there must be a direct economic incentive to doing business with Russian defense enterprises, especially if such projects involve conversion. No American company chooses to do "conversion" in Russia. As Tom Hajek, United Technologies/Pratt & Whitney, stated "Defense conversion has to be done more for economic reasons than for political, military or security reasons." No company will choose to do a project that involves or requires conversion of defense facilities unless it makes economic/business sense. U.S. firms that end up doing projects that would be considered "defense conversion" in Russia do so because that is what is required in order for the project to be commercially feasible.

Government Support Helps

At the same time, U.S. executives said that if there is an economic incentive from the U.S. and Russian governments and/or international financial institutions to assist in defense conversion, they would be more interested and willing to consider such projects. Thus, one of the reasons for current U.S. business interest in Russian defense

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American companies and organizations are working with different types of entities within the Russian military industrial complex: ministries, enterprises, individual plants, design bureaus, research and development institutes and other entities, such as training institutes and nongovernmental organizations. Some U.S. companies are engaged in joint ventures with state enterprises, design bureaus, and/or research institutes. Some have created new joint stock companies with spinoffs from defense enterprises.

conversion is the availability of funds to carry this out. The availability of financial assistance would reduce a company's capital costs of doing business there, which makes it much more attractive as a business and investment proposition for U.S. companies.

Western Expertise Is Needed

Third, American business leaders recognize the need to assist in Russian defense conversion. As corporate citizens, they are willing to help achieve the U.S. Government's aim to support defense conversion, but not if this requires an economic sacrifice on their part.

Instead, U.S. firms want to work with the U.S. Government to identify and pursue specific Russian business opportunities that could also assist in defense conversion. Nina Dimas, international program manager, KPGM Peat Marwick, says the most persistent request she receives from Moscow enterprises is for help on defense conversion because they do not know how to carry this out.

Despite the fact that no one truly appears to know how to plan and implement conversion, U.S. firms agree they can provide the necessary expertise on critical elements: how to identify and screen technologies and how to commercialize them; how to reorganize industrial structures, redesign facilities, production lines, and products; how to retool plants and retrain workers; how to train managers in market skills and new techniques; and how to compete in the international market.

Based on the three reasons above, many U.S. firms believe there are excellent long-term business opportunities with Russian defense-related firms, although it is not always clear if these opportunities directly involve conversion.

Lessons from U.S. Experiences

American companies and organizations are working with different types of entities within the Russian military industrial complex: ministries, enterprises, individual plants, design bureaus, research and development institutes and other entities, such as training institutes and nongovernmental organizations. Some U.S. companies are engaged in joint ventures with state enterprises, design bureaus, and/or research institutes. Some have created new joint stock companies with spinoffs from defense enterprises.

Several important lessons have emerged from U.S. businesses' experiences in working with these different defense-related organizations.

The first lesson is a conversion project, as previously stated, must make sense commercially. Whether a particular business model or project could be classified as "conversion" often depends on the definition of conversion that is used. Several different models, based on different definitions of conversion, are being implemented in Russia by U.S. firms.

One business model that is being used by a number of U.S. companies is to identify Russian technologies that can be commercialized. While this definition is considered quite narrow, many U.S. firms see such opportunities as the best way to make a profit in the short term and to also help their Russian partners earn hard currency fast.

Batterymarch Financial Management in Boston is working closely with a select group of Russian defense enterprises undergoing conversion. These particular enterprises have been carefully screened by Batterymarch and are creating

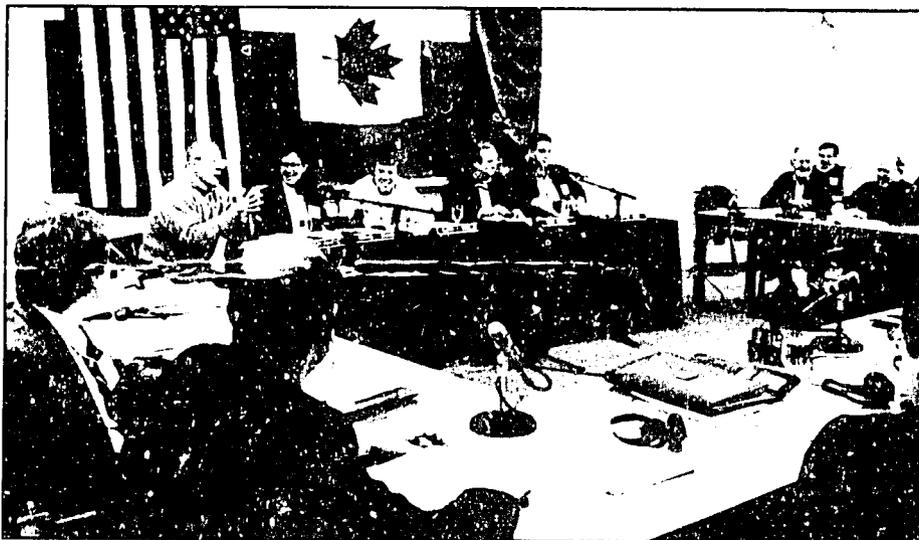
joint stock companies as a means of privatizing and attracting foreign direct investment. According to Vladimir Sidorovich, former Batterymarch director in Moscow, large defense enterprises should be divided into segments, with separate accounting systems and bank accounts. He argues that the profitable divisions of the enterprise should receive additional resources; and the unprofitable divisions should be allowed to go out of business.

Typically, the joint stock company would be formed around a division of the enterprise with a commercially viable technology. Sidorovich says that "a parent enterprise would contribute assets of the relevant division, and foreign investors would contribute hard currency and provide access to world markets. To create motivation for a parent enterprise, part of the shares of the newly-created joint stock company should be granted to employees."

In evaluating the conversion capabilities and other factors in over 100 Russian defense enterprises, Batterymarch has identified six enterprises that meet its criteria for joint stock companies that would attract foreign investors. Batterymarch is also attempting to create the "Soviet Companies Fund" (\$100 to \$250 million) to attract capital for these selected defense enterprises undergoing conversion.

Although OPIC has already agreed to provide \$100 million in risk insurance to Batterymarch for its proposed projects in Russia, Batterymarch still needs to receive the proper guarantees from the Russian government, in addition to attracting sufficient investment funds from potential investors.

A second model involves the actual reorientation of the production of



There is enormous interest and opportunities for the strategic investor, but the risk-reward ratio is still too high for most investors, Western businessmen agreed.

defense plants from defense products to civilian products. For example, one U.S. automaker is examining the possibility of assembling automobiles in defense plants that previously produced tanks and other defense-related equipment.

This second model has been implemented successfully by a number of European firms. One German company is producing aluminum wheels for the world market at two defense plants in Russia. These plants formerly built airplanes and tanks and possess a disciplined work force and metallurgical technology. What is important from this experience is that the German firm found a Western buyer for its wheels, prior to beginning production in Russia. This enabled the German firm to overcome the constraint of repatriating profits in rubles, because it was not selling the wheels on the Russian market.

U.S. business representatives said that if the Russian conversion product can be sold internationally, it is much easier to invest in a Russian defense enterprise because there will be a ready source of hard cur-

Company executives explain that the size and scope of most Russian defense enterprises makes it extremely difficult to make a large enough investment that would have any major impact on the financial and commercial viability of these enterprises.

rency profits from the beginning. This makes the investment in a Russian plant economically feasible for the U.S. (or foreign) company.

The Polaroid joint venture "Svetozor" was also developed to assemble cameras to be sold on the international market. Although some of these Polaroid products are also sold within Russia, this has been a less active part of its operations which may change in the near future.

One important lesson from Polaroid's experience is that it subcontracted for a certain number of employees and specific workspace within an aerospace plant. Polaroid is only using 30 employees out of thousands employed at the enterprise, so it was able to handpick the best and brightest for its operations. The German firm described above also did the same thing, using 100 employees out of 10,000 at the plant in which it works.

American Firms Employ Few

Employing a limited number of selected employees within a plant does not fit a broad definition of conversion that is used by experts such as Dr. William Perry of Stanford. Perry defines conversion as finding gainful employment for people, but not necessarily using plants or managers. We have not found any U.S. firms who have adopted this definition of conversion in their business ventures. Company executives explain that the size and scope of most Russian defense enterprises makes it extremely difficult to make a large enough investment that would have any major impact on the financial and commercial viability of these enterprises.

Most Russian defense plants are quite large, employing thousands of people, who will require retrain-

ing over a long period of time. The retraining factor alone would require a massive investment of time and money which no U.S. (or other foreign firm) appears prepared to make at this time. Instead, business leaders state that other types of technical assistance are needed to assist in carrying out this type of employee conversion.

However, U.S. corporate representatives do recognize the need to help create employment within Russia, although initially on a less massive scale than discussed above. A number of U.S. companies are working on creative ways to employ Russian scientists and engineers. Since this is one of the purposes of the new International Science and Technology Center in Moscow, it is expected that U.S. firms will be actively working with this center to identify and hire leading experts.

For example, Grumman Corporation, in collaboration with Los Alamos National Laboratory, is pursuing a joint U.S.-Russian accelerator transmutation proposal (ABC) as a means of utilizing surplus plutonium. This project would employ a large number of Russian scientists relatively quickly.

Boeing Company, which is the largest aircraft company in the world, signed an agreement at the beginning of August with the Russian Ministry of Industry's Aviation Department to set up a development center in Moscow. The new center will initially employ 30 Russian engineers and scientists to pursue projects in areas such as airframe technology and wind-tunnel testing. Projects such as these help to achieve a prime foreign policy objective of the U.S. Government: ensure that FSU scientists and engineers do not take positions in third countries that might present an international threat to security.

With respect to creating broader employment opportunities, Glenn Buckles, senior associate, Booz, Allen & Hamilton, said that it is important to separate the problems of generating hard currency from the issue of jobs and factories. "Selling arms will not fill factories." Instead, other domestic employment alternatives are necessary.

One such alternative was suggested by Richard Lamb, president of Richard A. Lamb & Russian Associates, who argues that the Russians need to learn what they know how to do and then market it.

American companies also need to tap into Russia's domestic market. According to Lamb, they should begin selling or leasing their technologies to Russian enterprises, assist those enterprises in manufacturing and selling the products there, and then sell the products back to the U.S. or the international market. For Lamb, developing local manufacturing capabilities is extremely important, because it would create jobs, particularly in former defense enterprises.

Another point emphasized by experts such as Maria Aronson of General Motors, is that if a large U.S. corporation made a major investment in an automotive, machine tools, or similar manufacturing or assembly facility in Russia, this would attract U.S. components manufacturers to that region. Such an investment would lead to greater employment within the Russian municipality and region, which would have a strong multiplier effect throughout the area.

Defense Companies as Partners

The second lesson involves whether U.S. defense companies make good partners for Russian defense plants. There appears to be no consensus on this issue. Rather, the answer



Enterprise managers do not realize the amount of due diligence information major Western investors require, Joseph Campbell of PaineWebber noted.

seems to depend on the particular business venture. Dr. William Perry states that a U.S. defense company understands and relates better to the people and organization in a Russian defense enterprise than a non-U.S. defense company.

Therefore, he argues that a U.S. defense company makes a good partner for a Russian defense company if it is converting to a product that is appropriate for the U.S. company.

However, if the Russian conversion product is a consumer-oriented product, U.S. defense companies might not make good partners because they do not understand the consumer market well. In addition, their accounting procedures and other business practices would also be inappropriate. Overall, Perry stresses that in areas where U.S. defense companies would face difficulties in converting themselves, they would not make good partners for Russian defense enterprises and plants.

American companies also need to tap into Russia's domestic market. They should begin selling or leasing their technologies to Russian enterprises, assist those enterprises in manufacturing and selling the products there, and then sell the products back to the U.S. or the international market.

Many American business executives believe it is often preferable to "green field" (build a completely new facility located near or next to the old facility) in Russia than to work within existing plant facilities. U.S. CEOs that have visited Russian defense plants have concluded that some, if not most, of these Russian plants cannot survive.

Green Fields Are Preferrable

The third lesson is that many American business executives believe it is often preferable to "green field" (build a completely new facility located near or next to the old facility) in Russia than to work within existing plant facilities. U.S. CEOs that have visited Russian defense plants have concluded that some, if not most, of these Russian plants cannot survive; they are poorly laid out, possess a redundant workforce, have a topsy-turvy manufacturing flow, and are unsafe.

These CEOs argue that it is better to start with a "green field" than to make the massive capital investment to update the existing plant. In contrast, Russians seem to prefer renovation of existing facilities.

Most Activity Is in Aerospace

American companies are pursuing a variety of conversion-related activities: direct selling or buying; leasing of technologies; manufacturing; and assisting Russian defense related enterprises to export products or raw materials and other resources to the United States or to other countries. These activities are being carried out in a variety of industrial sectors, including aviation and aerospace, telecommunications, nuclear energy, chemical and biological warfare, automotive, shipbuilding, machine tools, construction, and computer software.

In general, the greatest level of U.S. business activity with Russian defense enterprises is in aerospace and aviation. This is not surprising since one of Russia's major defensive strengths has been its aerospace industry. Russia is the second largest aircraft builder in the world, although it is not advanced in avionics and equipment. A number of U.S. firms are competitive in this market, according to U.S. aerospace experts, because the Russian

aviation industry needs new engines and advanced avionics.

One of the other major reasons that U.S. firms, including Boeing, McDonnell/Douglas, Honeywell and Hughes Aircraft, are so active in Russia is because Airbus, their major foreign competitor, is actively pursuing business there. In addition there is a strong need for building new airports and renovating existing ones, as well as designing and implementing new air traffic control systems throughout Russia and the FSU.

Defining Conversion

U.S. business representatives often believed that they were not involved in Russian defense conversion. However, it became clear that many U.S. business activities were directly or indirectly involved in supporting conversion. The U.S. company might only be buying or leasing technologies from the Russians or selling technologies to the Russians, but these technologies were often being used by defense enterprises and plants to carry out some type of conversion. Therefore, the role of U.S. business in Russian defense conversion is not always clearcut, but must be assessed on a project-by-project basis.

Additional findings will be presented in the final report. This will include an analysis of the constraints faced by U.S. companies in working with Russian defense-related enterprises and their recommendations on what the U.S. Government can do to help them. In general, many U.S. companies believe there are enormous long-term business opportunities in Russia, particularly in its defense industry, but there is a need for a stronger U.S. government-business partnership to take advantage of these opportunities and to overcome constraints.

Presentation Summaries

Sergei Chevardov, Conversion Specialist, Ministry of Defense

Cooperative Defense Conversion
Soviet defense enterprises, long cut off from contact with the West, have achieved many scientific and technological breakthroughs. Western investors can work cooperatively with their Russian counterparts in this new era of openness in developing mutually beneficial commercial applications. The United States and Russia, for example, should consider cooperating in the development of dual-use technologies, such as using satellite systems for global navigation and rescue.

This cooperation can take many forms: selection of technologies and development of commercial applications; establishment of joint R & D firms to develop specific components for foreign firms; creation of non-defense production within defense enterprises to assemble goods mainly for export; manufacture of goods for the Russian market with imported parts, such as airplanes with Western avionics; the manufacture of components for foreign firms; and the manufacture of finished goods based on foreign licenses with a significant number of Russian-produced components.

Priority should be given to converting defense enterprises to the production of equipment for oil and gas extraction, transportation, refining, and petrochemical processing. Factories that now build ships, rockets, tanks, and artillery can be converted relatively quickly to this production. The challenge is to bring the entire economy up to the quality and professionalism of the defense sector.

Given the huge market of Russia, conversion should also encourage production for the domestic market as well as for exports.

Andrei Gorbachev, Assistant to Deputy Prime Minister Khizha

Conversion: Problems and Solutions
Defense conversion, essential in Russia's transition to a market economy, will deepen the country's economic crisis and benefits will not be felt for the next two to three years. In fact, cutting the defense budget will not reduce the government's budget but will increase it because of the high social and economic costs of conversion.

Not only have defense enterprises lost state orders and financing, new state orders are being issued without a new military doctrine that defines future weapons needs or a strategy for the export of weapons.

In 1992, 550 defense enterprises in 89 regions are subject to conversion. The government is extending favorable credits, its only financial support, to enterprises that have concrete conversion plans that guarantee repayment by 1996. Priority is given to conversion to civilian production in energy, transportation and communications, agriculture, medicine, chemicals and timber, and the environment.

The government is developing conversion zones by offering 50 percent tax reductions in targeted regions; providing tax credits for conversion programs from 1992-96; and transferring to the regional level expenses for the maintenance and development of the social infrastructure of defense and atomic sectors.

While the government can provide information and some financial support, conversion must take place at the regional and enterprise level. Enterprises must learn to act independently and to develop products that meet consumer demand. New decentralized market



Sergei Chevardov

structures, such as regional associations and funds, are needed to help attract financing and develop horizontal ties. Successful conversion will require appropriate legislation, a system of incentives, favorable conditions for privatization, and cooperation that promotes the interests of Western governments in a smaller and stable defense complex in Russia.

Sergei Kovalev, Deputy Chairman, Russian Federation Coordinating Council; **Aleksandr F. Kononenko**, Member, Russian Federation Coordinating Council



Sergei Kovalev

Officer Retraining and Conversion
Kovalev and Kononenko outline the Council's efforts to create civilian work by the year 2000 for the approximately 100,000 military officers who will be discharged in the proposed reduction of the Russian military. Finding work for these mid-career military officers is especially critical as they could, if they are not retrained and reemployed, threaten the progress of reform. In surveys, 70 percent of these officers say they would like to become businessmen.

In an attempt to meet two needs — privatizing defense enterprises (those not involving national security) and providing employment — the council is developing plans for officers to become managers of converted defense enterprises. These enterprises will either expand their existing consumer goods production or move from defense production to civilian goods. The key to this conversion is privatization, a process essential in generating capital within Russia, in attracting Western investors, and in giving enterprises the flexibility to survive without state orders.

In order to move rapidly on conversion, small and middle-sized joint

stock companies must be split off from the giant enterprises. Western technical assistance can be most helpful in developing business plans to attract outside investment. There are various privatization plans now under discussion that give employees the option to acquire through vouchers and to purchase a majority stake in the company in the process scheduled to begin this fall.

Evgenii Rogovskii, Chief, Department of Export Strategy, Minister of Foreign Economic Relations

Developing and Implementing Projects to Restructure the Russian Economy
The government's three goals in conversion are: preserve the most valuable elements, manufacturing, personnel, and R & D; use this base to raise the technological level of civilian production; and develop exports and import-replacing goods for the domestic market.

Russia must emphasize the export of high-tech manufactured goods and services and reduce the uncontrolled export of strategic raw materials and the import of foreign-made goods, if it is to be a great power.

Medium-term priorities should be to export income from raw materials to support traditional export industries but also to develop large-scale service exports, such as freight, international transportation, environmental services, and computer programming. Later, the export of new, value-added technologies, such as materials sciences and geology, could be stressed.

Russia could also increase its exports by providing international organizations, such as the UN, high-tech services to offset increasing dues. Implementation of large-scale projects could be the basis for re-

constructing needed interregional and international ties that have been cut or have seriously frayed in the fall of central planning.

Here the government faces a difficult balancing act. On the one hand it would like to encourage and spread development throughout the country without resorting to oppressive and equalizing topdown directives. On the other hand, some regions will flourish and others will flounder in a free market. This inequality will inevitably be a source of political and economic tension.

The macromarketing of advanced technologies will require a new financial infrastructure, such as venture capital firms. Foreign partners can provide these services. In addition, the Ministry of Foreign Economic Relations understands and will provide foreign partners with reliable information on defense enterprises. Foreign capital, in turn, can be used to conduct joint development and marketing activities in a variety of high-technology areas.

Boris Yurlov, Chief, Department of Conversion and Export Control, Ministry of Science

Technology Transfer and Conversion
Russia's main domestic and foreign policy goal in technology transfer is to develop a legal and administrative system that protects the country's economic interests and national security. Developing scientific and industrial exports is critical to economic growth in times of sharply declining domestic demand for high-tech products.

To stimulate the export of high-tech products the government must restructure programs to increase their export competitiveness; create favorable lines of credit for export-oriented firms; create tax incentives

to reinvest profits in new production; and create an export credit and insurance infrastructure.

The government should establish subsidies to encourage the import of new technologies and financial incentives to attract foreign investors. The government must push for removal of foreign barriers to Russian exports and promote a domestic market through the creation of a patent and licensing system, the exchange of scientific information, and the adoption of international standards.

In the last half year, the government has adopted nearly two dozen laws on technology transfer, patents, trademarks, computer programs and data bases. These should help normalize technology transfers. But the work is far from complete, especially in defining and pricing intellectual property.

Another major obstacle is the national security classification of many defense technologies suitable for transfer. This will require special documentation before declassification. This is particularly difficult given the lack of clear laws, a developed financial system, and qualified personnel. In addition, there must be a formal process where military technology is turned over to civilian producers.

Government's role should be supportive and regulatory, such as in creating a network of technology areas and centers using the resources of the once closed defense cities. The government, lacking qualified people to manage technology transfer, must empower firms to work directly with each other.

To encourage ecommercial development, the government must ensure that patent holders have guaranteed rights to their inventions. ◀



Boris Yurlov

Seminar Agenda

Thursday, October 15

4:30 p.m.

Welcoming Remarks

Michael P. Claudon, President, Geonomics Institute

4:45-6:00 p.m.

Keynote Address

Defense Conversion: Achieving U.S.-Russian Cooperation for an Orderly Build-down and Economic Renewal

Dr. John P. Hardt, Associate Director and Senior Specialist in Soviet Economics, U.S. Congressional Research Service, The Library of Congress

Friday, October 16

8:30-10:15 a.m.

Panel Discussion

Framing an American-Russian Cooperative Relationship: Overarching Policy Issues to Achieve Demilitarization and Economic Renewal

Moderator: **Michael P. Claudon**, President, Geonomics Institute

Ivan S. Materov, Deputy Minister, Ministry of Economics and Finance

Dr. John P. Hardt, Associate Director, U.S. Congressional Research Service

Dr. Aleksei K. Ponomarev, Director, Interdepartmental Analytical Center, The Russian Federation

10:45 a.m.-12:45 p.m.

Panel Discussion

An Inventory of Russian Defense Industry Assets: Establishing Defense Requirements and Evaluating Released Military Resources

Moderator: **Peter B. Maggs**, University of Illinois College of Law

Sergei G. Chevardov, Conversion Specialist, Ministry of Defense

Andrei O. Gorbachev, Assistant to Deputy Prime Minister Khizha

Evgenii A. Rogovskii, Chief, Department of Export Strategy, Ministry of Foreign Economic Relations

Boris D. Yurlov, Chief, Department of Conversion and Export Control, Ministry of Science

2:15-4:15 p.m.

Panel Discussion

The Policy Perspective: Government Support for Private Investment in Defense Conversion

Moderator: **Charles M. Perry**, Vice President and Director of Studies, Institute for Foreign Policy Analysis, Inc.

André Benoit, Executive Director, Canada-Russia Business Council

Daniel C. Hurley, Jr., Director, Foreign Industry Analysis Division, U.S. Department of Commerce

Sergei V. Kortunov, Chief, Department of Conversion and Export Control, Ministry of Foreign Affairs

Sergei I. Kovalev, Deputy Chairman, Russian Federation Coordinating Council

Saturday, October 17

8:30-10:30 a.m.

Panel Discussion

Investing in Defense Conversion: Opportunities for North American Businesses

Moderator: **Kathryn Wittneben**, President, Enterprise Development Information Center, Inc.

Aleksandr F. Kononenko, Member, Russian Federation Coordinating Council

Robert E. Marcille, Executive Consultant, Defense Conversion Project,
Canada-Russia Business Council

Rashmi Nehra, International Trade Specialist, BISNIS,
U.S. Department of Commerce

Valerian M. Sobolev, First Deputy Head, Volgograd Regional Administration

11:00 a.m.-1:00 p.m.

The Russian View From the Trenches

Russian Enterprise Managers

Moderator: **Barry W. Ickes**, Professor of Economics, Pennsylvania State University

Vasilii P. Bakhar, Deputy General Director, Vypmel Corporation, Moscow

Valerii V. Filëppov, General Director, Scientific Production Association Ferrite, St.
Petersburg

2:30-5:15 p.m.

The American View From the Trenches

The American Business Perspective, Part I

Moderator: **Robert L. Krattli**, President, Scott-European Corporation

Edward A. Benson, President, Benson & Company Incorporated

Glenn A. Buckles, Director, European Defense & Electronics,
Booz, Allen & Hamilton

Mark D. Mariska, Chairman of the Board, The Mariska Group, Inc.

Jeffrey Moore, Director of European Programs, Grumman International

The American Business Perspective, Part II

Peter B. Maggs, Cornell Professor of Law, University of Illinois College of Law

Kathryn Wittneben, President, Enterprise Development Information Center, Inc.

Sunday, October 18

8:30-10:30 a.m.

Closing Discussion

Moderator: **Michael P. Claudon**, President, Geonomics Institute

Dr. John P. Hardt, Associate Director and Senior Specialist in Soviet Economics,
U.S. Congressional Research Service, The Library of Congress

Dr. Aleksei K. Ponomarev, Director, Interdepartmental Analytical Center, Russian
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Eugenii Rogovskii, left, and Glenn Buckles, Booz, Allen & Hamilton

The Geonomics Institute

The Geonomics Institute is a private, nonpartisan, nonprofit organization that attempts to accelerate emerging market reforms in the former Soviet Union and Eastern Europe through a program of seminars, policy workshops, and model training and technical exchange projects. Established in 1987, the Institute brings together small groups of business people, economists, scholars, and policy makers from around the world for frank discussions in a seminar setting.

Geonomics convenes spring and fall seminars each year. Workshops explore in depth issues raised at seminars and develop policy recommendations to deal with them. Training and technical exchange programs, which evolve from seminar and workshop recommendations, are practical, ground-level initiatives designed to help implement economic reforms.

The Institute publishes seminar papers in a monograph series and issues seminar summary reports. Other Institute publications include policy reports from workshops, a bimonthly newsletter, and policy papers.

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