



**STRATEGY  
RESEARCH  
PROJECT**

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

**ENSURE RUSSIA'S MARKET REFORMS AND DEMOCRACY  
SUCCEED: MOVE AND PROCESS CONSUMER GOODS**

BY

**LIEUTENANT COLONEL LARRY J. STUDER  
United States Army**

**DISTRIBUTION STATEMENT A:**

Approved for public release.  
Distribution is unlimited

19960528 023

USAWC CLASS OF 1996



**U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050**

**DTIC QUALITY INSPECTED 1**

UNCLASSIFIED

USAWC STRATEGY RESEARCH PROJECT

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

ENSURE RUSSIA'S MARKET REFORMS AND DEMOCRACY SUCCEED:  
MOVE AND PROCESS CONSUMER GOODS

by

Lieutenant Colonel Larry J. Studer  
United States Army

Mr. David C. Bennett  
Project Adviser

DISTRIBUTION STATEMENT A: Approved for public release. Distribution is unlimited.

U.S. Army War College  
Carlisle Barracks, Pennsylvania 17013

UNCLASSIFIED

ABSTRACT

AUTHOR: Larry J. Studer (LTC), USA

TITLE: Ensure Russia's Market Reforms and Democracy Succeed

FORMAT: Strategy Research Project

DATE: 15 April 1996 Pages: 25 CLASSIFICATION: Unclassified

Russia is experiencing significant political changes that have and will continue to affect the United States and the world. Many of the changes have adversely affected the standard of living for the Russian people. They are experiencing high inflation, shortages of food, and possible job losses. This study looks at the Russian transportation system as being a significant cause of the food shortages. The information was obtained from current news publication, US Government publications, Encyclopedia data, Regional Strategic Appraisal course work, and historical references. The research indicates that Russia produces sufficient food to feed the country. The problem is the amount lost in transportation from producer to consumer.

INDEX

	Page
I. Introduction.....	1
II. Background Information.....	3
A. Geography.....	3
B. Economy.....	6
III. Transportation Infrastructure.....	9
A. Air.....	12
B. Water.....	13
C. Railroad.....	14
D. Automotive.....	15
E. Storage.....	19
IV. Conclusion.....	21
V. Recommendations.....	24
Endnotes.....	27
Bibliography.....	29



## I. INTRODUCTION:

Two of the most significant events in recent decades were the collapse of the Soviet Empire and the successor states' decision to establish market economies. "The disintegration of the USSR left in its wake fifteen successor states, each struggling to cope with the demands of statehood and the need to define their role in the international system."<sup>1</sup>

In 1992 all of the new states struggled to stabilize their economies and implement market reforms. The transitions have been difficult and the outcomes still uncertain. Despite economic downturns throughout the region, major initiatives continue and the governments appear to remain committed to the goal of implementing market economies. Success or failure of this endeavor will significantly impact world order for both the near and long term.

In Russia both economic policy and performance measures are drastically changing in the emerging system. An economy that for seventy-five years placed military and protected industrial power at the top of the priority scale is moving to favor consumer needs. The important criteria have become the availability of food in the markets, consumer durable goods, medicine and other factors influencing the quality of life.

Russia is the focus of my attention in this paper, because it is the largest country of the former Union of Soviet Socialist Republics' (USSR) successor states. In the break up Russia retained the largest share of the USSR's massive military complex

(personnel, equipment, and industry). Russia retained thousands of nuclear weapons, this fact alone means it remains a significant player in the strategic equation and deserves special attention.

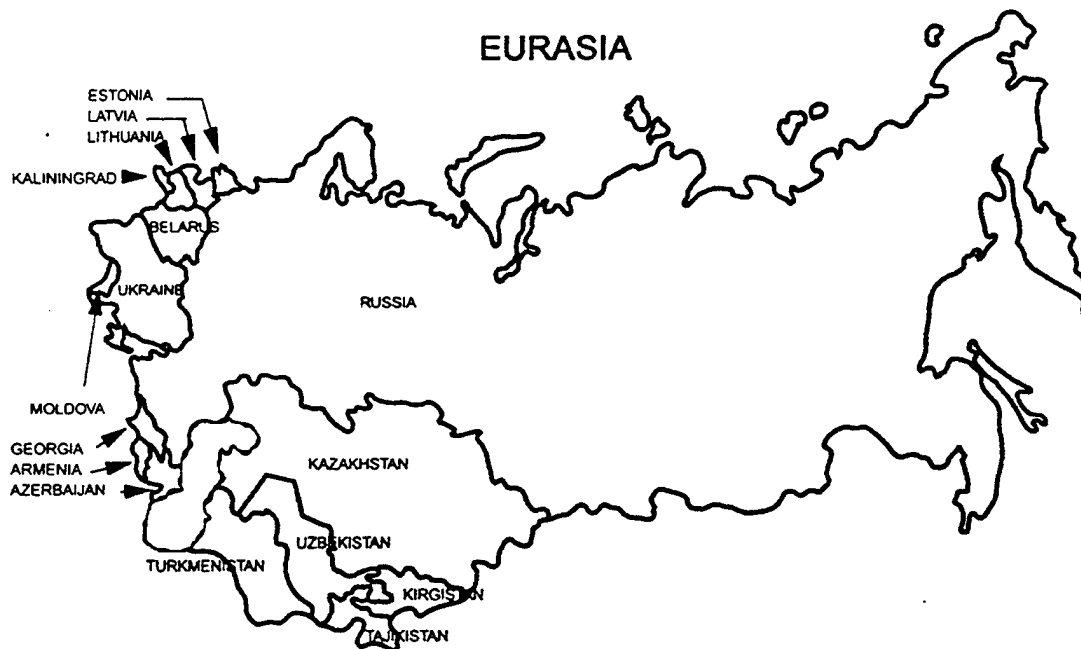
Despite the political breakup of the USSR, the common economic space that developed over more than seventy-five years will not rapidly fade away. Future economic developments in the new states will be strongly influenced by historical ties. To be successful, the United States along with other democratic countries must support the newly established transitional states, both diplomatically and financially.

## II. BACKGROUND INFORMATION:

As mentioned above, Russia is the focus of attention because of its size, natural resources, and military power. To understand this country better, the reader needs some background information for perspective.

### A. GEOGRAPHY:

A map of Russia still resembles that of the former Soviet Union (FSU).



Russia dominates the successor states by virtue of its huge size and extensive resources. At the end of the USSR, it occupied 76 percent of Soviet territory and contained 51 percent of the population. In 1990, it accounted for 61 percent of the industrial output and 46 percent of the agricultural production. Russia's natural resource endowment is formidable. In 1992, Russia produced 88 percent of the oil, 82 percent of the gas, and

56 percent of the coal used by the FSU countries. Most other resources are also in adequate supply, with the important exception of agricultural processing and transportation resources.<sup>2</sup>

Russia is the world's largest country in land mass. There are approximately 150 million people living in 6.6 million square miles. Russia makes up more than one-tenth of the world's landmass. It stretches 5,500 miles from Kaliningrad on the European Continent, to the Kamchatka Peninsula, on the Asian Continent.

Russia's population density varies greatly, ranging from 600 people per square mile in Moscow to near zero in the desert regions and the Siberian forest region. The population distribution has shifted in the last seventy-five years. In 1920, only fifteen percent of the Russian population lived in cities, but by the early 1990s sixty-six percent of the population lived in cities. This disproportionate population distribution has affected Russia's ability to exploit resources and establish manufacturing/industrial facilities.

There are two important factors which determine the environmental character of Russia: its northerly location within the Northern Hemisphere, and its continental position astride the Eurasian landmass. Much of the territory lies far from the moderating influence of the world's oceans and seas. Mountainous terrain, particularly towards the south, south-east and east, shuts out warm air masses which might otherwise come from the

Indian Ocean and the Pacific.<sup>3</sup>

The topography has significantly impacted Russia's development. Greater than one-fourth of its landmass lies north of the Arctic Circle. Forty percent of Russia's land consists of tundra with permanently frozen subsoil. Thirty percent of the country is desert and semi-desert. This region experiences high temperatures and low, irregular rainfall which prevents cost effective crop production. Only about 10 percent of the territory can be used for farming, with an additional 15 percent or so for pasture.<sup>4</sup>

Russia's climate has prevented the establishment of an adequate transportation network. The severe climate subjects the country to long winters, quick spring thaws that turn roads to mud or cause significant damage to paved surfaces. Spring also brings massive breakups of river ice with extensive flooding.

The European part of Russia, with about one-fifth of the territory, accounts for about 70 percent of the population, 80 percent of the industrial and agricultural production, and most of the economic infrastructure and markets. Siberia and the Far East, with over half the territory and about 10 percent of the population, contains more than 50 percent of the country's natural resources; minerals, timber, and petroleum reserves. Siberia, remains a frontier linked to western Russia by a single railway, which has allowed only a narrow band of permanent settlements to be established along the southern reaches of the region.<sup>5</sup>

## **B. ECONOMY:**

To understand the collapse of the USSR and its economy, it is necessary to take a historical perspective of the system. For 75 years, the fifteen republics of the FSU were bound together in a highly centralized state. The Soviet economy was built over seven decades, and it was never created to function as a market system.

The Soviet economy was a "war-economy". It was a military-industrial complex energized by the "threat" from the West. This caused the leaders to direct resources toward defense related products. The military had preferential choice from the industrial complex without price penalties. It was assured of quality and speed of delivery. The Soviets subordinated design, construction, and production of consumer goods and infrastructure to military aims.

With this approach to the economy, how could the system survive as long as it did? One explanation for the relatively successful economic development of the USSR until the 1970s is that the goals of industrial policy accurately reflected the rational priorities of early industrialization - namely, the expansion of heavy industry and raw materials production. Over time, however, these priorities became outdated, but the command economy was not capable of redirecting its efforts. The centrally planned economy was adequate for industrialization but ineffective for post industrial development.<sup>6</sup>

The production of consumer goods was always a neglected

sector in the Soviet Union. A basic reason was the original emphasis on fast industrialization, based on high accumulation and a rapid development of heavy industry. As a result, the consumer was neglected, and individual consumption was disregarded for collective consumption.<sup>7</sup>

In the FSU, prices were largely symbolic, set by the state to subsidize development of individual industries or to discourage consumption, and had little or nothing to do with the international value of the articles. All of this was possible because it was a closed system. In general the prices of food, fuel and raw materials were kept low, while the prices of most consumer goods were above world prices.

The movement to world prices after 1992 tended to disrupt interrepublic trade. Some of the poorer republics were unable to pay the increased prices for food and fuel while other republics did not want to pay world prices for merchandise that did not meet world standards.

Official Russian sources concede that grain losses reach as high as 20 to 30 percent on the harvest, roughly equal to the level of grain imports, and that vegetable and fruit losses are believed to range as high as 50 percent.<sup>8</sup> These phenomenal levels of waste highlight the fact that distribution, rather than production, is the heart of the food problems. Down stream agricultural activities - transportation, storage, and processing - have arguably been the most neglected and inefficient sectors in the FSU economy. Elimination of these

losses would go far to end any existing shortages.

Transportation costs and spoilage added to the excessive costs and poor quality of some items. Since the FSU is such a large area, freight was hauled unusual distances compared to western standards. This added costs and contributed to transportation damage and spoilage which increased the price for consumers.

The transportation system of the FSU was owned and operated by the government and closely integrated with the economy. The Soviet leadership looked upon transportation as a necessary evil to keep the economic machine turning and not a sector of the economy to be developed for its own sake. The Communist Party leaders were more concerned with developing the heavy-military industrial complex. Therefore, they devoted minimal resources to transportation. In addition to being influenced by the policies of the regime, the development of transportation was greatly influenced by the country's vast size, geography, climate, population distribution, and location of industries and natural resources.

### III. TRANSPORTATION INFRASTRUCTURE:

The United States must ensure that Russia's transportation infrastructure is developed sufficiently to ensure the future of Russia's economic system. It is imperative the infrastructure for growing, manufacturing, processing, and transporting consumer goods be developed. This must be done to ensure that Russian citizens do not lose faith in the market economy and the democratic process taking place in their country.

Most people argue the industrial infrastructure should be the starting point for considering the future direction for reforming the Russian economic system. They say it needs to be modernized and converted from a heavy-military production complex to a consumer oriented industrial base.

True, it must be changed, but I believe the transportation infrastructure needs to have first priority. In order for the Russian citizens to attain a greater level of trust in the market economy and democracy, basic needs must be met. The most basic of which is food in sufficient quantity at reasonable costs.

The transportation system is the lifeline of Russia's economy just as it is in any country. The system links the widely scattered cities, towns, and settled rural areas of Russia. It is the critical factor in keeping materials supplied to industry, agriculture, and consumers.

The transportation system of the FSU was government-owned and closely integrated with the overall resources and investment policies of the total economy. Therefore, concerted efforts were

made to limit investment in transportation, eliminate overlap and competition, and minimize traffic. This policy resulted in an unusually heavy reliance on railroads for intercity movement of freight and passengers at the expense of other forms of transportation.<sup>9</sup>

The Russian transportation network is about at the level of the United States in the 1920s. Enormous distances and the harsh climatic conditions are major impediments.

Russia is faced with immense difficulties in ensuring adequate transportation within its vast territories. The Russian transportation system has a wider variety of natural barriers to deal with than most countries. These include great deserts, high mountain ranges, huge swamp tracts and, above all, the climate. Across such a vast expanse of land the nature and scope of the transportation infrastructure is widely different. The wilds of Siberia have a minimum of facilities, the size of the area and the nature of the permafrost terrain hindering any attempt at extensive development. However, large cities such as Moscow have modern, integrated urban transport systems.

Much has been written and reported about the food shortages in the FSU and Russia. The problem is not that farmers do not produce sufficient quantities of cattle, grains, fruits and vegetables. The problem is the waste that occurs from the farm to the consumer.

Gross agricultural production rose by more than 50 percent between the 1950s and 1990s, more than double the population

growth rate for the same period. The consumer did not see a proportionate improvement in the availability of foodstuffs. This paradox indicated that the inability to meet demand for agricultural commodities was only partly the result of production shortfalls. Much of the blame was attributable to other factors. Chief among these were the transportation, storage, and processing elements of the food economy.<sup>10</sup>

Woeful mismanagement of the transportation networks requires shippers to adjust their operations to the transportation system. This is unheard of in Western countries where private companies and different modes of transportation offer alternative opportunities to shippers in order to solicit their business. Shippers in Russia are frequently required to hold shipment until entire trainloads or shiploads can be sent to single destinations.

During peak shipping periods, in order to relieve the overworked railroads, shippers are urged to use waterways or mixed modes of transport. This involves transshipments between waterways and railroads, and means added time, waste, and expense for shipment.<sup>11</sup>

Currently there are only two cost effective methods of transportation available to move farm products to the consumer. They are railway and waterway. To eliminate the excessive losses incurred from the producer to consumer, storage, processing, and automotive transportation need to be improved.

I have addressed the various methods of transportation

below. The emphasis is on automotive.

**A. AIR:**

The great distances to be covered in the FSU and Russia encouraged the use of air transportation. Even the severe Russian winter conditions do not adversely affect the aircraft as much as they do surface transportation. In some of the more remote regions aircraft provided virtually the sole form of transportation and communication. It was official policy to encourage air travel over long distances by providing low passenger fares. The average length of passenger aircraft journey was about 1,800 km, while the average freight consignment, including mail, newspaper plates and other items requiring high-speed transit, was 1,900 km.

At the time the FSU broke up all civil aircraft were under the control of Aeroflot. Aeroflot was responsible for internal and overseas air services, air ambulance service, aerial survey, agricultural spraying, forest fire fighting operations, and other aerial missions.

However, with the breakup of Aeroflot concern is growing over the safety of air flight in Russia. Poor maintenance, strikes, and overloaded aircraft have all contributed to lower safety standards among the Russian free-market lines. The average Russian passenger aircraft is about 20 years old which is causing problems obtaining replacement parts and qualified mechanics.

The airline industry needs an infusion of capital to ensure

it remains viable. However, because of its limited ability to haul large cargo loads at reasonable cost this method of transportation is inefficient and too costly to meet producers needs. Therefore, it should not be considered as a target for US government assistance. US air carriers, however, may consider developing joint ventures with Aeroflot. The joint venture would give Aeroflot the resources to improve operations and give the US carrier greater access to the Russian travel market.

**B. WATER:**

Russia is blessed with a considerable number of long navigable rivers. In past centuries they were significant modes of seasonal long distance transport. However, Russia's severe climate prohibits year-round use of this relatively available mode of transportation. The inclement weather causes large numbers of waterways to freeze rendering them impassable from late October to late April. In a modern industrial economy, freight must be able to move year-round. The cost of keeping the waterways open year round is prohibitive. However, when navigable, the rivers are an efficient and cost effective means of freight transportation.

The Russian water transportation system should not be considered a target for US government or private industry assistance. The limited shipping season would not provide a sufficient return on investment capital to make this a viable option.

### C. RAILROAD:

Railroads were the most important component of the FSU's transportation system. Historically, railroads were the premier mode of transportation. Railroads played significant roles in times of war, and they accelerated industrial development. They also facilitated the normal flow of raw materials, manufactured goods, and passengers. They carried freight over great distances, and between producers and users.<sup>12</sup>

The railway system was a planned system of main routes without competitive overlap and with only sufficient feeder lines to provide necessary minimum service to major sources of tonnage. The urgency for speed of industrialization and the benefits of economy of scale led to the construction of railroads between a few major producing areas at the expense of underdeveloped areas. Industrial plant locations often were determined by railroad location, and farms forced to convey their produce to rail heads, usually by primitive means.

Russia is one of the few countries still building new lines on a large scale, a major undertaking being the Baykal-Amur Mainline which provides a more northerly route across Siberia. This route is expected to open vast tracts of territory and valuable mineral deposits.<sup>13</sup>

Russian railways are among the most intensively used in the world. They are the main freight carriers and also take large numbers of passengers, both on long distance and suburban services. Railways move 66 percent of the passenger and 69

percent of the freight traffic in Russia. The route length in the CIS is over 147,000 km of passenger and freight lines, with 110,000 km of industrial lines adding to the network.<sup>14</sup> The European area of Russia is best served by railways. Rail is the primary method of transport in the European section of Russia.

There is a severe shortage of food-carrying railroad cars and storage facilities. Because of this a substantial part of annual production fails to reach city markets. It simply rots or spoils before it reaches the consumer. When properly used, food-carrying cars, refrigerated and unrefrigerated, become a place of storage as they move over large distances.<sup>15</sup>

Russian railroads are constructed to a wider gauge than neighboring countries. This is an impediment to international movement of goods by rail. At the borders the railcars' undercarriages need to be changed or the cargo transloaded to another train.

The Russian railway system is viable and cost effective transportation mode. The US does not need to target this method of transportation for economic assistance.

#### **D. AUTOMOTIVE:**

In Russia roads have always had a bad reputation. Road transport under the FSU regime was less well developed than in almost any other industrial country. The natural conditions were partly to blame.<sup>16</sup>

Russia does not have a unified national highway system. The quality of the roads are so poor that trucks weighing over six

tons can use only 10 percent of all roads. Parts of Russia, like the Far North, lack any hard surface roads. A lack of concrete and asphalt means that only 19 percent of the roads are open all year around. Roads are plagued by massive cracking and poor drainage. Vast stretches of dirt and gravel access roads are frequently impassable. Over 60 percent of all Russian villages lack any hard surfaced roads to connect them to each other. As a result, 40 percent of the cost of agriculture is transportation.<sup>17</sup>

Without a developed network of highways and service facilities, FSU authorities essentially relegated trucking to local and short hauls. In 1990, in terms of ton-kilometers of freight traffic, trucks carried only 6 percent of all freight movement. But because there were so many short journeys tonnage loaded on to trucks amounted to about 60 percent of all goods loaded.<sup>18</sup> The agricultural sector accounted for about 80 percent of freight originated on trucks. Long distance or intercity hauling was mainly by railroads and inland waterways.

Trucks were used almost exclusively for collecting produce and taking it to railheads or water terminals or from rail and water terminals to its destinations. Because automotive transport was not generally used for long hauls, many roads outside of urban areas had gravel or dirt surfaces. The lack of paved roads in rural areas seriously hampered the movement of agricultural products and supplies.<sup>19</sup>

Trucking enterprises are not able to meet the strong demand

for their services. The reasons are inadequate roads, inefficient traffic organization - some 45 percent of vehicles traveled empty - and prolonged periods of unserviceability as the result of shortages of spare parts, drivers, tires, and fuel. Even in the large metropolitan areas, refueling and repair facilities are scarce by Western standards. Given the extent of poor roads, many cargo vehicles are rugged, cross-country, all-wheel traction similar to military tactical vehicles.<sup>20</sup> These are expensive to operate and not designed to haul produce.

Recent years have seen a deterioration in Russia's road network. It is estimated that over one-third of Russia's roads are in a poor state of repair and one-quarter are in need of complete rebuilding.

In 1992 Russia had 698,000 km of surfaced motor roads, supplemented by 226,000 km of unsurfaced road network. Moscow, with its population of nearly nine million, has its own metro transportation system. This system is being extended, and supplemented by suburban railway services. By comparison, the United States had more than 7.5 million kilometers of surfaced roads in a country with half the land area. Huge areas of Russia have no roads at all. Those roads designated as major highways are usually only two-lane blacktop. Although the Russians recognize the lack of good roads is a real handicap to their economy, particularly in the critical agricultural sector, the tightness of investment resources has forced them to progress slowly in the grading and surfacing of roads.<sup>21</sup>

Rural roads are in terrible shape. They are little better than dirt tracks. These roads cause delays in shipments, high fuel consumption, and increased tire wear. In marshy and permafrost areas, unsurfaced roads are usable only when the ground and rivers are frozen, from about November to May. Repair and refueling facilities along rural roads are rare or nonexistent. Nevertheless, in rural areas, roads are the prime arteries for shipping farm products and bringing in equipment and supplies. Poor road conditions are a major factor in Russia's serious agricultural problems, particularly the one of perishables spoiling before they reach the market.<sup>22</sup>

Russia has a long-range program for providing every village with at least one hard-surfaced connection to a main road network, but this is far from being realized. The responsibility for the construction of many of these country roads lies with the farm managers. Since they are concerned with meeting farm production quotas, it is likely they will not spend much time or money on the roads.

Russian specialists have estimated that two-third of agricultural labor time is spent on transport. More than half of total agricultural investment is in transport. Thus, it is obvious that the biggest single drag on the expansion of marketable farm produce is the transport system.<sup>23</sup>

The national highway system is an area that needs considerable attention. The US should assist Russia in developing a comprehensive highway construction plan. This would

make the movement of consumer goods more efficient and eliminate a large percentage of the waste and spoilage.

**E. STORAGE:**

There is insufficient understanding that part of the shortage of food products is created as the result of lack of storage facilities. Storage space for perishable products awaiting shipment is a major problem in Russia. The physical plants are not structured properly. Some facilities are outdated, others are under utilized, and others are in the wrong location.

Large quantities of grain and other produce are lost each harvest season because of lack of adequate storage. Frequently piles of wheat are left on the ground or on the highways exposed to the elements while waiting to be shipped. Since late summer and fall, harvest season, is the rainiest part of the year in much of Russia, the grain often starts to sprout and is therefore unusable. Major outlays of investment capital are now being made for the construction of grain elevators and general warehousing for fertilizers and other farm produce.

Russia overemphasizes food production without commensurate consideration or investment for post-harvest food handling facilities. Food moved through the state system is owned by nobody and is thus treated very carelessly. A normal harvest of any crop ensures considerable losses due to the poor location and inefficient use of storage and processing facilities.

Russian storage facilities are potential targets for US

assistance. The US government and private industry can provide a great of assistance to the Russians in this area. Both the government and private industry have experts who can provide advice in this vital process of post-harvest food handling. This would be less costly and more effective than financial aid. The development of necessary storage facilities will vastly reduce the waste and spoilage of produce before it reaches the consumer.

#### IV. CONCLUSION:

Russia is a great power due to its actual and potential influence on world affairs. It is the largest country of the FSU, therefore, the guarantor of that region's stability, and events there will affect the other states in the region.

The future of the Russian Federation will likely be one of following scenarios. 1) Current policies continue, Russia maintains its territorial integrity. The market economy and democracy emerge over a command economy system and communism. Russia takes its place among free market economies in the world. 2) A nationalistic, authoritarian regime emerges that seeks to recentralize virtually all power back into the hands of Moscow, as well as reassert Russian domination over some portions of the former Soviet Union that are now independent states. 3) Moscow fails to establish an effective balance of power with the republics of the country, and a much looser confederation emerges, perhaps leading to the disintegration of Russia into several new states.

In developing and promoting an aid program, the Clinton Administration must emphasize to Congress and the public the long-term nature of the effort. Assisting Russia promote economic reforms will significantly increase the chances that democracy will take root, and open foreign markets for US products.

The United States wants economic reform to succeed in Russia. The core of our strategy is to help democracy and

markets expand and survive in places where we have the strongest security concerns and where we can make the greatest difference.<sup>24</sup> Russian stability is crucial to world peace. Economic reform and economic stability in Russia are essential for regional stability. Our goals are to promote long-term stability, develop supportive infrastructures, promote strong free market economies, and provide an environment that allows for orderly political change and economic progress.

It will be years before the far reaching effects of the changes taking place in Russia are fully felt. However, it is clear that the single country that once dominated the Eurasian landmass - the Soviet Union - will never again be viewed as a unified political-economic-social-geographic entity. Instead, fifteen independent states with their own customs, traditions, problems, and national interests have emerged.

The dismal agriculture record is not the result of production. Rather, it is the result of poor transportation, storage, and processing. The keys to improvements in food availability are movement away from the command system and a successful move to a market economy.

The government needs to develop a National Transportation System, with emphasis on roads, and devote resources to it. This will ensure that Russia is capable of developing a highway system that is adequate to move commodities to markets.

Fundamental influences on future transportation development will depend on the outcome of political struggles within the

Russian government. However, the United states can assist Russia develop the necessary infrastructure to ensure the citizens receive sufficient food. This includes a transportation system that ensures rapid and responsive movement of goods from producer to consumer. This will ensure the amount of wasted and spoiled food is reduced and the citizens have access to sufficient quantities.

## V. RECOMMENDATIONS:

Regardless of how the Russian Federation evolves, the US should not focus all of its attention on Moscow and President Yeltsin. The US should attempt to create long-term relationships at various levels throughout Russia. With the consent and assistance of the government, the US should seek to build a network of local programs which enhance the quality of life for the average Russian citizen.

The United States and Russia should frame an agricultural, transportation, trade, and assistance strategy flexible enough to address the unique situations that Russia faces. This may require altering the forms and mix of current US assistance in ways that help Russia introduce reforms that better meet the peoples' needs. Key aspects of this program should include:

- \*Enhance the US Department of Agriculture Office in Moscow.
- \*Establishment of a US Department of Transportation Office in Moscow. Emphasis should be on highway transportation needs.
- \*Enhance the US Department of Commerce Office in Moscow.
- \*Extend commodity credit guarantees to Russia.
- \*Provide technical assistance to Russia for developing their transportation system.
- \*Provide technical assistance for post-harvest food storage and processing.
- \*Enhance the farmer-to-farmer exchange program.
- \*Enhance the model demonstration farm program in Russia.

Additional US actions to assist Russia in becoming a market economy and meeting consumer needs may include:

1. Actively lobbying the international business community and international financial institutions to assist Russia's efforts to move to a market economy. "It is primarily through international channels - particularly the International Monetary Fund (IMF) - that meaningful financial and long-term technical support can be provided to Russia and the other newly established states of the region."<sup>25</sup>

2. Enlarge the existing trade agreements with Russia. This will help stabilize Russia's economy and bring substance to the formula "Trade, rather than aid" as put forth by the deputy Chairman of the Committee of European Communities. Others have adopted it, and the Russian government supports it strongly.

3. Work with Russian leaders regarding growing, processing, transporting, and marketing consumer products.

4. Work with the national government to allow the US to provide direct technical assistance to regional and local governments.

5. Enlist American industries to create business partnerships with Russian enterprises. This will provide the Russians with many of the resources and incentives needed to transform themselves. Plus, it will give american businesses the long desired access to Russian industries and the vast consumer market.

6. Encourage US-Russian private joint ventures. This can

offer targeted investment opportunities to Russian businesses in amounts far greater than Washington can provide. Teaming American business people with new Russian firms can be an effective means of transferring the values and skills of entrepreneurship to a new generation of Russian managers and workers.

7. Continue the extension of US credit with the requirements for, (1) the Russian government continue to support democratic and market reforms, (2) the Russian government target resources to the improvement of the national transportation system - especially the road network, and (3) the Russian government target resources to the improvement of post-harvest storage and processing of agriculture products.

**ENDNOTES:**

1. Institute for National Strategic Studies, Strategic Assessment 1995: U.S. Security Challenges in Transition (Washington: National Defense University, 1995), 51.
2. Denis J. B. Shaw, ed., The Post Soviet Republics (Essex, England: Longman Scientific & Technical, 1995), 163.
3. Ibid., 12.
4. Ibid., 12.
5. Robert G. Jensen, Theodore Shabad, and Arthur W. Wright, eds., Soviet Natural Resources in The World Economy (Chicago: University of Chicago Press, 1983), 11-12.
6. Merton J. Peck and Thomas J. Richardson, What Is To Be Done? Proposals for the Soviet Transition to The Market (New Haven: Yale University Press, 1991), 181.
7. Archie Brown, Michael Kaser, and Gerald S. Smith, eds., The Cambridge Encyclopedia of Russia and The Former Soviet Union (New York: Cambridge University Press, 1994), 409.
8. Ibid., 402.
9. Paul E. Lydolph, Geography of The USSR (Elkhart Lake, WI: Misty Valley Publishing, 1990), 371.
10. U.S. Department of the Army, Soviet Union a Country Study, DA Pam 550-95, 2d ed., (Washington: U.S. Department of The Army, 1991), 519.
11. Paul E. Lydolph, ed., Geography of The USSR (Elkhart Lake, WI: Misty Valley Publishing, 1990), 372.
12. U.S. Department of The Army, Soviet Union a Country Study, DA Pam 550-95, 2d ed., (Washington: U.S. Department of The Army, 1991), 546.
13. Archie Brown, Michael Kaser, and Gerald S. Smith, eds., The Cambridge Encyclopedia of Russia and The Former Soviet Union, 2d ed., (New York: Cambridge University Press, 1994), 417.
14. Ibid., 417.
15. M. Wesley Shoemaker, ed., Russia, Eurasian States, and Eastern Europe 1995, 26th ed., (Harpers Ferry, WV: Stryker-Post Publication, 1995), 103.

16. Denis J. B. Shaw, ed., The Post Soviet Republics (Essex, England: Longman Scientific & Technical, 1995), 67.
17. Jonathan R. Adelman, Torrents of Spring; Soviet and Post-Soviet Politics (New York: McGraw-Hill, Inc., 1995), 21.
18. Archie Brown, Michael Kaser, and Gerald S. Smith, eds., The Cambridge Encyclopedia of Russia and The Former Soviet Union, 2d ed., (New York: Cambridge University Press, 1994), 416.
19. U.S. Department of The Army, Soviet Union a Country Study, DA Pam 550-95, 2d ed., (Washington: U.S. Department of The Army, 1991), 545.
20. Ibid., 565.
21. Paul E. Lydolph, ed., Geography of The USSR (Elkhart Lake, WI: Misty Valley Publishing, 1990), 394.
22. U.S. Department of The Army, Soviet Union a Country Study, DA Pam 550-95, 2d ed., (Washington: U.S. Department of The Army, 1991), 565.
23. Paul E. Lydolph, ed., Geography of The USSR (Elkhart Lake, WI: Misty Valley Publishing, 1990), 227.
24. William J. Clinton, A National Security Strategy of Engagement and Enlargement (Washington: The White House, 1995), 23.
25. Institute for National Strategic Studies, Strategic Assessment 1995: U.S. Security Challenges in Transition (Washington: National Defense University, 1995), 65.

## SELECTED BIBLIOGRAPHY:

- Adelman, Jonathan R. Torrents of Spring; Soviet and Post-Soviet Politics. New York: McGraw-Hill, Inc., 1995.
- Aslund, Anders. "The Russian Road to The Market." CURRENT HISTORY 94, no. 594 (October 1995): 311-316.
- Blank, Stephen J. "The New Russia in The New Asia." Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, July 1994.
- Blank, Stephen J. "Reform and The Revolution in Russian Defense Economics." Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, May 1995.
- Blum, Douglas W., ed., Russia's Future: Consolidation or Disintegration? Boulder: Westview Press, 1994.
- Brown, Archie, Michael Kaser, and Gerald S. Smith, eds., The Cambridge Encyclopedia of Russia and the Former Soviet Union, 2d ed. New York: Cambridge University Press, 1994.
- Clinton, William J., President of The United States. A National Security Strategy of Engagement and Enlargement. Washington: The White House, 1995.
- Colton, Timothy J. and Robert Legvold, eds., After The Soviet Union: From Empire to Nations. New York: W.W. Norton & Company, 1992.
- Coplin, William D. and Michael K. O'Leary. Political Risk Yearbook 1995. Syracuse: Political Risk Services, 1995.
- Fish, M. Steven. "Democracy Begins to Emerge." CURRENT HISTORY 94, no. 594 (October 1995): 317-321.
- Gallagher, James J. CSM (Ret). Low-Intensity Conflict: A Guide for Tactics Techniques and Procedures. Harrisburg, PA: Stackpole Books, 1992.
- Goldman, Marshall I. "Is This Any Way to Create a Market Economy?" CURRENT HISTORY 94, no. 594 (October 1995): 305-310.
- Institute for National Strategic Studies. Strategic Assessment 1995: U.S. Security Challenges in Transition. Washington: National Defense University, 1995.
- Jensen, Robert G., Theodore Shabad, and Arthur W. Wright, eds., Soviet Natural Resources in The World Economy. Chicago: The University of Chicago Press, 1983.

- Lydolph, Paul E., ed., Geography of The USSR. Elkhart Lake, WI: Misty Valley Publishing, 1990.
- Nagorski, Andrew. The Birth of Freedom: Shaping Lives and Societies in The New Eastern Europe. New York: Simon & Schuster, 1993.
- Odom, William E. and Robert Dujarric. Commonwealth or Empire? Russia, Central Asia and The Transcaucasus. Indianapolis: Hudson Institute, 1995.
- O'Prey, Kevin P. Russia in Transition: A Farewell to Arms. New York: Twentieth Century Fund Press, 1995.
- Parrott, Bruce, ed., State Building and Military Power in Russia and The New States of Eurasia. Armonk, NY: Sharpe, Inc., 1995.
- Peck, Merton J., and Thomas J. Richardson. What Is To Be Done? Proposals for The Soviet Transition to The Market. New Haven: Yale University Press, 1991.
- Prina, L. Edgar. "The Future of SSNs; CSIS Plays Twenty Questions." Sea Power 36, no 10, (October 1993): 29-36.
- Sestanovich, Stephen. Rethinking Russia's National Interests. Washington: Center for Strategic & International Studies, 1994.
- Shalikashvili, John M. General, Chairman of the Joint Chiefs of Staff, National Military Strategy of The United States of America 1995: A Strategy of Flexible and Selective Engagement. Washington: Joint Chiefs of Staff, 1995.
- Shaw, Denis J.B., ed., The Post Soviet Republics. Essex, England: Longman Scientific & Technical, 1995.
- Shoemaker, M. Wesley, ed., Russia, Eurasian States, and Eastern Europe 1995, 26th ed. Harpers Ferry, WV: Stryker-Post Publications, 1995.
- Thompson, John M. Russia & the Soviet Union: An Historical Introduction From The Kievan State to The Present, 3rd Edition. Boulder: Westview Press, 1990.
- Tilford, Earl H. Jr. "World View: The 1996 Strategic Assessment From The Strategic Studies Institute." Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, February 1996.
- Twining, David T. The New Eurasia: A Guide to The Republics of The Former Soviet Union. Westport, CT: Praeger, 1993.

- U.S. Central Intelligence Agency. The Soviet Economy in 1978-79 and Prospects for 1980. Washington: National Foreign Assessment Center, U.S. Central Intelligence Agency, 1980.
- U.S. General Accounting Office. Former Soviet Union: US Bilateral Program Lacks Effective Coordination. Washington: U.S. General Accounting Office, 1995.
- U.S. Department of The Army. Soviet Union a Country Study. DA Pam 550-95, 2d Edition. Washington: U.S. Department of The Army, 1991.
- U.S. Department of The Army. Operations. Field Manual 100-5. Washington: U.S. Department of The Army, 14 June 1993.
- U.S. Department of The Army. Decisive Force: The Army in Theater Operations. Field Manual 100-7. Washington: U.S. Department of The Army, 31 May 1995.
- U.S. Department of The Army. Peace Operations. Field Manual 100-23. Washington: U.S. Department of The Army, 30 December 1994.
- U.S. Joint Chiefs of Staff. Doctrine for Joint Operations. Joint Pub 3-0. Washington: U.S. Joint Chiefs of Staff, 1 February 1995.
- U.S. Joint Chiefs of Staff. Joint Tactics, Techniques, and Procedures for Foreign Internal Defense. Joint Pub 3-07.1. Washington: U.S. Joint Chiefs of Staff, 20 December 1993.
- U.S. Joint Chiefs of Staff. Doctrine for Planning Joint Operations. Joint Pub 5-0. Washington: U.S. Joint Chiefs of Staff, 13 April 1995.
- White, Stephen, Rita Dileo, and Ottorino Cappelli, eds., The Soviet Transition: From Gorbachev to Yeltsin. Portland, OR: Frank Cass, 1993.
- Wolf, Charles Jr. The Role of the Military Sector in the Economies of Russia and Ukraine. Santa Monica, CA: Rand Corporation, 1993.