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**ALL FEATURES GRATE AND STALL:
SOVIET STRATEGIC VULNERABILITIES AND
THE FUTURE OF DETERRENCE**

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**ALL FEATURES GRATE AND STALL:
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FUTURE OF DETERRENCE**

by

John M. Weinstein

15 July 1983

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FOREWORD

This memorandum examines Soviet weaknesses and vulnerabilities. It is the author's opinion that there can be no doubt that the Soviet Union is and will continue to be the principal adversary of and threat to the United States. The massive, unrelenting and ominous buildup of Soviet conventional and nuclear forces undermines deterrence, destabilizes international security and, therefore, cannot be viewed by US political leaders and military planners with equanimity.

However, it is important to recognize that deterrence is a state of mind that must incorporate more than quantitative force balances and asymmetries. Indeed, the calculus of deterrence also depends upon the political, economic and military weaknesses and vulnerabilities of each superpower. These are important because they set limits to the options a state can pursue in hostilities and what it can expect to achieve. A state's vulnerabilities also provide a framework which can guide its opponent in fashioning effective political and military policies to deter aggression in the first place.

The body of this paper examines economic, political, demographic and military vulnerabilities and weaknesses of the Soviet Union which affect its domestic and international priorities and potentially constrain its options *vis-a-vis* the United States. Vulnerability analysis is an important element of the deterrent calculus. However, one must avoid the error of inferring from the numerous and debilitating Soviet problems that the Soviet Union will not continue to threaten the United States. Furthermore, Soviet vulnerabilities in no way reduce the necessity for continued American vigilance of the Soviet threat or the implementation of the crucial defense initiatives undertaken by the Reagan Administration to maintain the credibility of America's deterrent.

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This memorandum was prepared as a contribution to the field of national security research and study. As such, it does not reflect the official view of the College, the Department of the Army, or the Department of Defense.



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BIOGRAPHICAL SKETCH

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**ALL FEATURES GRATE AND STALL:
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INTRODUCTION

The last decade has not been a happy time for US defense planners. During these years, they have witnessed a profound and ominous expansion and modernization of Soviet nuclear and conventional military capabilities. At the nuclear level, the Soviet Union has deployed the SS-17, -18, and -19 intercontinental ballistic missiles (ICBMs) with multiple, independent reentry vehicles (MIRVs) which rival the accuracy of the most modern US Minuteman III. Moreover, the larger yields of the Soviet warheads have led many planners to fear that the Soviet Union is rapidly approaching and, indeed, may now possess the ability to deliver a debilitating strike against the land-based leg of the US strategic triad—which has been instrumental in the postwar period in preserving peace by deterring nuclear conflict.

The deployment of more than 350 mobile SS-20 (with MIRVs) intermediate range ballistic missiles (IRBMs), more than two-thirds of which are targeted against NATO Europe defenses;¹ the ability

of the Soviet Union to threaten the Middle East, Northern Africa, Southwest Asia, Japan, South Korea, the People's Republic of China, and even Alaska with these weapons (as well as the Backfire bomber); and the persistent augmentation and modernization of Soviet conventional land, air and naval forces in Europe and around the world have had several unsettling consequences that threaten the security of the United States and its allies. In Europe, NATO nuclear superiority, which for years has countered Warsaw Pact conventional superiority, has disappeared. Consequently, we observe (1) a reemergence of the doubts first voiced by Charles DeGaulle more than 25 years ago about the credibility of the US nuclear guarantee of Europe's security,² (2) a broad-based nuclear freeze movement on both sides of the Atlantic, (3) calls by some to abandon America's continental military strategy in favor of one which puts more emphasis on maritime assets,³ and (4) an increase in anxiety and ambivalence among the NATO allies across a broad range of military issues. The emotional debate in Europe about the December 1983 initiation of deployment of the 572 US intermediate-range nuclear missiles most vividly illustrates these concerns.⁴

The distressing, massive Soviet military expansion of the last two decades shows few signs of abatement. In fact, some have argued that in spite of the economic dilemmas currently confronting the Soviet economy, the Soviet Union conceivably, *cannot* reduce the militarization of its economy.⁵ Such a transition might cause serious personnel, bureaucratic and economic dislocations and deprive the Soviet Union of one of its most lucrative sources of capital: the foreign military sales which brought the equivalent of \$63.4 billion in 1982 dollars into Soviet coffers from 1975 to 1982.⁶

It is not surprising that these developments have caused great alarm in the West, especially when they are viewed in conjunction with a Soviet military doctrine which stresses speed, shock and surprise in offensive operations⁷ and the active Soviet civil defense program which is designed to minimize the destruction of nuclear war and allow rapid postattack recovery⁸. While one need not conclude that the Soviet leadership views war with the United States as desirable or imminent, it is likely, however, that heightened Soviet military power may cancel many prior US advantages, reduce US policy flexibility and allow the more active and ambitious pursuit of Soviet foreign policy objectives.⁹ Indeed,

it is very likely that the continuing Soviet intervention in Afghanistan; Soviet support for the aggressive policies of Vietnam; and Soviet collaboration with its Cuban proxy to exploit instability in Africa and Latin America led President Reagan to conclude that:

Soviet military power has spread around the globe threatening our access to vital resources and our sea lines of communication, undermining our forward line of defense in Europe and Korea and challenging us even at home here in our own hemisphere.¹⁰

The following may well be considered as significant trends which present crucial domestic and international military and political challenges to the United States and its allies: (1) relentless increasing of Soviet military power across all functional and geographic fronts; (2) current destabilizing contentions in the NATO alliance; (3) expanding US, Western European and Japanese reliance on continued access to scarce and critical strategic resources (e.g., petroleum, chromium, uranium);¹¹ (4) proliferating opposition in the United States and Western Europe to the growth of defense spending at a time of global recession and economic stagnation; and (5) an expanding "peace movement in Europe and the United States which has helped to undermine the prodefense consensus that helped Ronald Reagan in his quest for the US presidency.

Undoubtedly, the Soviet Union is—and will continue to be into the foreseeable future—the principal threat to and adversary of the United States. As such, the student of national security wisely wonders whether, in light of the expansion of Soviet military power and the shifting correlation of forces it generates, the Soviet Union will be deterred from starting a war with the United States.¹² To evaluate the present state of deterrence, it is important to understand that deterrence is a state of mind which incorporates far more than the quantitative or even qualitative balance of weapons and military forces. Richard Betts has argued that:

Much of what passes for net assessment, however, is a narrow focus on static orders of battle—the observable and quantifiable constituents such as manpower and equipment—or dynamic simulations of combat engagement. The numerous subjective or intangible factors such as campaign strategy, operational doctrine, training, morale, or command competence receive shorter shrift, yet these factors (unless material imbalance is overwhelming) almost always do more to determine the outcome of battle than the numbers of troops and distribution of weapons. This point is illustrated by the

German campaigns of World War II, the Israelis in 1956 and especially 1967, and, more recently, the South Atlantic War, in which a numerically inferior force of British Marines with little fire support quickly rolled up the well-entrenched Argentinian garrison on the Falkland/Malvinas Islands.¹³

Moreover, the military doctrines which govern the use of these forces and relate their capabilities to the political objectives they support depend on far more than static ratios. Deterrence also depends on numerous and, often, indeterminate nonquantitative considerations—the domestic and international political, economic and military vulnerabilities of the actors, and the uncertainties about one's own capabilities as well as those of an adversary. Former Army Chief of Staff (1955-59) and Chairman of the Joint Chiefs of Staff (1962-64) Maxwell D. Taylor in March 1983 noted the deterrent contributions of the:

... uncertainties that plague [Soviet leaders] ... such as 1) the unpredictable performance of their strategic weapons, which, like our own are of necessity incompletely tested; 2) the way an American president may react to a nuclear attack; and 3) the likely behavior of the Soviet people and unfriendly neighboring states under such circumstances. . . .¹⁴

From this he concluded that "non-military adjustments of deterrence are [equally] important and add substantially to the improbability of deliberate Soviet nuclear aggression."¹⁵ Historical experiences and national culture which color the prisms through which states view international events, together with the national will of the various key actors, are final elements that contribute to the often arcane and, generally, ambiguous interpretation of deterrence at any time. Without these views, a state's ability to pursue its national interests may be paralyzed irrespective of its aggregate raw military power.

The thesis of this essay is that when one views the potent military capability of the United States, its allies, and the PRC, and incorporates the nonquantitative factors noted above into the strategic equation, one may concur with General Taylor's assessment that the vulnerabilities and uncertainties confronting Soviet leaders and military planners will continue to provide powerful incentives to the Soviet Union to avoid war with the West.¹⁶ Rather, the best interests of the Soviet Union would be to maintain an atmosphere of peaceful (albeit, politically competitive)

coexistence with its political and military rivals. In reviewing the arguments below that support this conclusion, the reader is reminded that while serious domestic and international problems may face the Soviet Union, it remains a dangerous foe which is best deterred by Western vigilance and maintenance of a strong military posture. However, the reader also should acknowledge that the position of the United States and its allies is not nearly so precarious as some contend.

SOVIET DOMESTIC VULNERABILITIES

Except, perhaps in the view of the most brazen revisionist, national power is not an end in itself. Rather, it is a means to an end, or set of ends, which usually include such goals as the survival of the nation-state, its culture and its way of life; the improvement in the quality of life of its citizens; and the state's continued ability to increase its influence with other states in the pursuit of these goals. From this broader perspective, the national security of the Soviet Union is vulnerable to serious structural and systemic problems facing its industrial and agricultural bases as well as demographic trends which some believe threaten to interact to tear apart from within the last of the world's great multinational empires. The systemic roots of these problems, the bankruptcy of ideological exhortation, and political/bureaucratic constraints in dealing with these problems must make Soviet leaders far from sanguine in their evaluation of their future prospects.

Soviet Economic and Agricultural Vulnerabilities. The December 1982 Central Intelligence Agency (CIA) study of the Soviet economy came as a surprise to some who learned that between 1950-80, the standard of living in the Soviet Union tripled, and overall economic growth, evaluated at 4.8 percent, was not very different from the growth rates of the United States and the Western democracies.¹⁷ Nevertheless, these aggregate figures obscure the fact that the Soviet Union is facing unprecedented economic problems which have worsened since that time and show little prospect of improvement in the near future.

Numerous factors contribute to the recent and rather precipitous drop in the growth of the Soviet Gross Domestic Product (GDP) found below.¹⁸

Year	1978	1979	1980	1981	1982
GDP growth rate (in percent)	3.4	2.0	1.5	1.2	1.0

The Soviet Union's relentless military expansion has imposed a mammoth burden upon industrial production, investment and modernization. Military spending, which grew more rapidly than the growth of the Gross National Product (GNP) during the 1970's,¹⁹ retarded the development of the productive capital base. For instance, Soviet investment priorities during the 1970's decade favored heavy machine building needed for application in military production.²⁰ The expenditure of funds in this area came at the expense of investment in transportation, agriculture (which remains labor intensive, accounting for 23 percent of the Soviet workforce, as opposed to about 3 percent in the United States)²¹ and food processing, to name only a few critical areas whose deficiencies ripple through the Soviet economy. Furthermore, Soviet maintenance of a large military force robs the economy of manpower which, as we shall see, is becoming increasingly scarce and costly. Finally, the diversion of a large portion of that society's best minds from the civilian economy into the uniformed services along with the massive industrial efforts that support military research, development and acquisition are bound to result in an economy that functions at low levels of efficiency.

The deleterious effects of the Soviet military burden are only one of numerous *systemic deficiencies* that retard the economy and defy easy or rapid resolution. In short, many of the problems currently plaguing the Soviet economy result from the very nature of the over-centralized political and planning systems themselves. Hence, the calls by Andropov for general proletarian discipline, less corruption, more rapid mechanization and the linkage of wages to increased productivity are expected to bring little significance or long-lasting improvement.²²

At the heart of the Soviet economic malaise is what, at times, amounts to a deep hostility between the state planners who determine production goals and the managers charged with goal

fulfillment. The excessive demands of the planners, once described as extortive by Nikita Khrushchev, were cited recently by Secretary Andropov as a significant contributing factor to the waste, black market activities, and the hoarding of resources required for production of scarce goods, and the theft, poor quality control and the falsification of production records prevalent in the Soviet economy.²³ These reactions to unrealistic production goals, in turn, contribute to Soviet production shortfalls. The 34 percent underfulfillment of the transportation plan during the tenth Five Year Plan is the rule rather than the exception in the Soviet production process as illustrated in the table below.²⁴

	Planned (1976-80)	Actual	Achieved
<u>Millions of Tons</u>			
Steel	250	148	59.2
Oil	690-710	603	87.4
Natural Gas	680-720	435	64.0
Coal	1180-1200	716	60.7
Cement	233-235	124	53.0
Synthetic Fibers	3.1-3.2	1.17	37.7
Leather Shoes	900-1000	744	82.7
<u>Billions of Kilowatt Hours</u>			
Electric Energy	2700-3000	1296	48.0

The rigidly centralized Soviet economic planning production and distribution systems are a second structural vulnerability. This centralization, an artifact of the requirements from the rapid industrialization of 1920-30 and the alleged ideological imperatives, now interferes with the flexibility, incentives and innovation crucial to maximizing productivity. Such centralization is characterized by differentiated responsibility which, for instance, does not make those who transport raw materials responsible to those who

produce the finished product. In a country encompassing 11 time zones and lacking an efficient transportation infrastructure, it is not surprising that many production plants often lack critical resources while others have more resources than they can use effectively. Consequently, the Soviet economy is characterized by frequent and serious bottlenecks which undermine planning and coordination efforts as well as sabotage cost control efforts. A second problem associated with rigid oversight is the discouragement of innovation. Apart from the low funding of nonmilitary research and development (R&D) and the geographical and administrative separation of those who seek and develop new ideas from those charged with their implementation, experimentation and innovation usually are viewed as counterproductive because they divert resources from the plan's fulfillment and often result in immediate production shortfalls. Consequently, the short-term prospects of innovation threaten the careers of industrial managers whose advancement depends upon obedience and productivity rather than experimentation. Among the many shortcomings of this inflexible system are the production of shoddy merchandise which is not competitive in international markets (military goods and energy exports are the notable exception) and the subsequent limitation of foreign exchange earnings.²⁵ Furthermore, the rigid system is hard pressed to anticipate or to control wild production fluctuations resulting from various factors (such as an extraordinarily harsh climate)²⁶ which lie outside of the planning system. Hence, the Soviet economy is notorious for the frequent *post hoc* revision of its plans.

A third systemic problem, which greatly affects the Soviet economy, is the lack of investment in the neglected and woefully inadequate transportation system. The few paved roads²⁷ in the Soviet Union mostly are rendered impassible by rain, mud and snow three seasons each year. This "roadlessness," known as *rasputitsa*, hampers distribution of materials and goods and largely limits the ability to coordinate and to integrate the vast national wealth and efforts of the Soviet Union's far-flung citizenry.

Problems of motor transport place a premium upon water and rail transport. Many Soviet waterways, however, are frozen during 8 months of the year, thus precluding commercial transport. Soviet transportation shortfalls are hardly ameliorated by the railroads, which are underutilized. Vast regions of the Soviet Union,

including many areas rich in critical natural resources such as petroleum, remain unserved by rail transport. Moreover, the concentration of population in the European portions of the Soviet Union causes the inefficient use of many rail cars travelling toward the east. Fully loaded cars travelling in the opposite direction face severe delays at all six transshipment points that handle 80 percent of all Soviet rail freight.²⁸ This condition, in part, explains why as much as 30 percent of all agricultural production is lost in transit²⁹ and why the completion of the Baikal-Amur Mainline railroad will alleviate, but hardly resolve, the serious transport problems faced by the Soviet Union.

Extant demographic trends, which will not be overcome by planning, ideological exhortation or marginal adjustment, present additional problems for Soviet decisionmakers. These trends, which will be examined at length below, will affect the Soviet economy in numerous ways. Among the most salient trends in this regard are the aging of the entire population and the population flow away from the economically crucial but underpopulated eastern territory. The aging of the population increases the social welfare strain of monumental pension payments as well as slows down the expansion of the workforce.³⁰ Workforce expansion is particularly crucial to the Soviet Union, as its increasing allocation of national resources to the military obliges it to rely more upon increased labor assets than increased productivity for economic growth. Soviet labor shortages will not be reduced as long as the military continues to receive so large a percentage of the youth cohort and labor productivity of individual workers (who are given to alcoholism, sloth, and absenteeism) is not increased. These problems, which will become more serious toward the end of the decade, will continue to trouble the Soviet Union which already relies upon workers imported from allies to meet the annual demand for 700,000 new workers.³¹ A second demographic trend, the flow of people from the resource rich but inhospitable eastern regions to the urban centers, has not been reversed despite the Soviet establishment of salary and educational inducements for those working in these harsh regions.³²

Finally, the continuing problems of Soviet agriculture, which have not yet recovered from the brutal, forced collectivization and inefficient management of Stalin, place the Soviet Union in the unenviable position of many Third World countries. Despite their

intensive efforts, Soviet leaders are embarrassed that the country cannot feed itself. Having suffered its fourth consecutive poor harvest in 1982, the USSR is compelled to import vast quantities of grain from the very economies whose demise has been predicted by every Soviet leader since Lenin.¹¹

The facts that only 10 percent of the Soviet Union is arable, that 90 percent of its land mass lies north of the parallel demarcating the US-Canada border, and that the weather is harsh are not adequate to dismiss the system's inefficiency or low per capita output which is only 5-10 percent of that of the US farmer.¹⁴ Among the many systemic obstacles to agricultural self-sufficiency are, specifically: (1) the absence of adequate and stable agricultural and transportation investments owing to the military spending burdens; (2) ruthless exploitation of the land which is not offset due to problems with the production, packaging and distribution of fertilizers; (3) insufficient incentives to the individual farmer; and (4) the flight of rural manual and skilled laborers to the cities causing labor shortages and larger percentages of female and older farm workers.¹⁵ In an amazingly frank condemnation of his country's economy, I. N. Buzdalov, an economist with the Soviet Academy of Sciences, lamented that "... profitability, efficiency and quality play virtually no role in the work of state and collective farms."¹⁶ The absence of faith of Soviet workers in the agricultural system's validity is demonstrated vividly by the vast differences between state and collective farm productivity on one hand and that of the workers' private plots on the other. The appallingly low output of state farms is well known and a direct cause of the Soviet Union's dependence upon Western grain imports. Less well known, is the fact that the workers' one to several-acre plots, constituting only 1.4 percent of the available farmland, produce 61 percent of the country's potatoes, 54 percent of the fruit, 34 percent of the eggs, 30 percent of the vegetables and 29 percent of meat and milk!¹⁷ These figures suggest that Soviet deficiencies in agricultural organization and incentives, rather than the abilities of the workers themselves, account most readily for the deplorable food shortages throughout the country. Such figures also lead one to conclude that the implementation of a "... judicious (re)orientation and state agricultural policy" that improves rural housing, child care, educational opportunities and consumer services¹⁸—in short, an ultimately and revolutionary political, bureaucratic and economic

transformation that redirects military expenditures to the consumer and rural economies—the debilitating burdens of agricultural backwardness will continue unabated. Since many of the popular demonstrations have been related to food shortages, the concern of Soviet leaders with the continuing agricultural ossification is easily understood.

The Soviet Union has been forced to rely increasingly on hard currency earning enterprises because of: (1) the need to import vast amounts of agricultural goods; (2) the low level of industrial innovation and the need for Western technological “transfusions;” and (3) the need to subsidize the Eastern European allies (whose economies, like that of the USSR are similarly plagued and suffer dislocations due to the collapse of the Polish economy as well).³⁹ While foreign military sales are an important source of such income, energy sales constitute the lion’s share (72 percent) of their export earnings.⁴⁰ However, the Soviet Union’s ability to resolve its economic and political problems will be constrained by:

- rapidly falling commodity prices for petroleum and increased Soviet and East European energy consumption;
- growing exhaustion of easily recoverable assets and the inadequate infrastructure to exploit Siberian and the Eastern territorial riches (where 85 percent of the petroleum potential lies);⁴¹ and
- reduced access to and increased cost of Western technology.

Although the quality of life for the average Soviet citizen is the best ever, its current stagnation comes at a dangerous time according to Crane Brinton, author of *Anatomy of Revolution*, when continued material improvement is expected.⁴² It also comes at a time of (1) calls in the Soviet Union for a redistribution of wealth to the rapidly growing number of Muslims and Central Asians who reside east and south of the Urals, a development vigorously opposed by the Great Russians, Slavs and Balts living in European Russia; (2) a rapidly declining hard currency accounts balance⁴³ and a growing debt service burden,⁴⁴ and (3) heightened financial obligations and political deterioration throughout much of Eastern Europe. The Soviet Union could solve many of these problems by reducing its level of military spending and by rectifying the numerous systemic problems discussed above. Such prospects, however, short of a radical transformation of the Soviet politico-economic edifice, are highly unlikely.

Soviet Demographic Vulnerabilities. In the previous section, we observed the profound impacts of current demographic trends in the Soviet Union upon the availability of an adequate supply of labor manpower. Indeed, the impact of numerous demographic trends will ripple through every aspect of society and will cause unprecedented problems for Soviet leaders. These trends, analyzed perceptively by Murray Feshbach, the foremost US authority on Soviet demographics, so alarm the Soviet elite that they have refused to publish the details of the country's 1979 census.⁴⁵ Their silence is a striking departure from their publication of the 16 volume results of the 1959 census and the seven of 1970.

To understand the significance of these trends as well as the Kremlin's sensitivity to them, one must recognize the Soviet Union as the last of the great multinational empires. The Great Russians, the dominant ethnic group which comprises approximately 52 percent of the total population, control either directly or indirectly every aspect of national power: the Communist Party of the Soviet Union (CPSU), the national and republic governments, the military, the economy, education, the national academies, and the like.⁴⁶ The Great Russians have maintained their primacy through difficult times including internal instability, global war and intense postwar competition with the United States; however, their primacy has not gone unchallenged. Many of the more than 100 nationalities, speaking more than 150 languages and dialects, have revolted against Great Russian control; collaborated and fought with the Nazis against their masters during World War II; and stubbornly resisted and continue to resist linguistic and cultural Russification—which would establish national integration and homogeneity at the expense of the national identities of these groups.

The Russians (henceforth referring to the ethnic/cultural group) have repeatedly maintained that the nationality issue is artificial—a result of foreign intervention that would reverse the growing fraternal solidarity between all Soviet citizens. Because nationalism, according to Leninist doctrine, is a remnant and tool of reactionary capitalism, "bourgeois propaganda channelling nationalism into anti-Sovietism" is identified as the culprit.⁴⁷ While the Russians are alarmed by the nationalism and enmity of their Ukranian Slavic brothers and European countrymen (e.g., ethnic Poles and Germans, Latvians, Lithuanians and others), they are

most sensitive to the ferment in the Central Asian republics. They have stressed that:

... in their propaganda for the Soviet Central Asian republics, including the Turkmen republic, the imperialist centres of lies and disinformation pay particular attention to the preaching of Pan-Islam and Pan-Turkism, bourgeois nationalism and religious prejudice.¹⁸

Apparently, as a result of these "great efforts to introduce 'the flame of Islamic rebirth' into the Soviet Union and thus destabilize . . . the republics of Central Asia,"¹⁹ great interest in Islam, a system which offers a competing value system to official Marxism-Leninism has been maintained and according to some is growing rapidly. Indeed, Soviet leaders lament that:

... many misguided men and women, accompanied by their children, have paid homage to various graves and burial grounds . . . they make sacrificial offerings, pay homage to graves, . . . beseech the saints to grant one plea or another . . . and perform their prayers five times a day.²⁰

The four demographic trends identified below are vital to the interests of those who would retain their political *status quo* because the shifting patterns of population growth and distribution threaten to undermine the dominance of the Great Russians while imposing upon them unsavory economic and political dilemmas. And such vulnerability was acknowledged in September 1981 by the vice-president of the Academy of Sciences when he noted that "neither we nor our friends are immune to harmful influences and a certain revival of various prejudices."²¹

The most ominous demographic trend is the differential rates of population growth among the various nationality groups. As a result of higher fertility rates of the Central Asians and the higher Great Russia mortality rates (which have climbed 40 percent since 1964) due to alcoholism, increasing suicides, and so forth, the 1970-79 rate of increase of the Russians and other Slavs (+.7 percent) is substantially below the average Muslim rate (+2.7 percent), in general, and the Uzbek (+3.7 percent), and Tadzhik (+3.5 percent) rates, in particular.²² In short, these rates explain why the Russians, who comprised 54.6 percent of the total population in 1959, are expected to contribute only 46-48 percent of the population by the year 2000.²³

Second, males in the Soviet Union have failed to regain their pre-World War II and normal share of the population, usually estimated to be approximately 48.5 percent.

The current male percentage of the population is 46.7. The situation is substantially worse, however, for the Great Russians (46.0 percent) than it is for the Central Asians such as the Uzbeks (49 percent).⁴⁴ Furthermore, Soviet males, who live a full 10 years less than females, have the singular and dubious distinction among citizens of the world's developed states of a life expectancy rate which plummeted from 66 to 62-63 years between 1966-80.⁴⁵ Once again, alcoholism, suicides and inadequate health care, especially among the 20-44 year-old Russians are the major causes.

The uneven geographical distribution of the youngest population cohorts is the third demographic trend of import to the Russians. Specifically, the percentage of Russian 0-9 year olds (14.8 percent of the population) is less than the national average (16.8 percent) and far less than the Uzbeks (29.2 percent) and their Central Asian brothers.⁴⁶ Numerous reasons account for the decline of Russian youths in the Russian Soviet Federated Socialist Republic (RSFSR): (1) high levels of female alcoholism; (2) abortion as the principal form of birth control (the average number of abortions for Russian women is six, more than 12 times the rate for US women);⁴⁷ (3) the widespread use of artificial milk and crowded nurseries where the babies are placed when Russian women return to work; and (4) the trend of the European Slavs to have fewer babies than mothers in rural Central Asia. The result is a steep rise in Russian infant mortality and a drop in Russian youths relative to the Central Asian increases. Hence, by the year 2000, approximately 85 percent of all Soviet citizens below 9 years of age will be Moslems.⁴⁸ The long-term prospects for continued Russian primacy in the Soviet Union become highly uncertain in such a scenario.

Finally, as noted in the previous section, the Soviet population is aging. However, the phenomenon, which is tied to declining Russian birth rates and declining Central Asian mortality rates, is most notable once again among the Russians. Moreover, the figures in the table below demonstrate that the Russians' position relative to the Central Asians will continue to deteriorate.⁴⁹

Average Age by Year

Grouping	ALL USSR	RSFSR	UZBEKISTAN
1975	28.7	31.1	17.8
2000	33.1	37.1	21.7

Clearly, the Muslim population is increasing at a more rapid rate than other populations of the USSR. Between 1979 and 2000, the percent of the entire Soviet population made up by Central Asians will rise from 16.5 to 30 percent, while the percent of Great Russians will fall from 52.4 percent to 46-48 percent.⁶⁰

Some of the implications of these trends have been identified already: (1) increased pension costs which will divert money from needed investment; (2) increased adherence to Islam which will challenge the primacy of Marxism-Leninism; (3) demands from the Asian republics for a reorientation of investment and redistribution of wealth; and (4) severe manpower shortages in European Russia which will occur (despite the origination of 60 percent of the Soviet GNP in the RSFSR)⁶¹ because few Central Asians are inclined to move to the region where they do not speak the language, find the culture alien, and themselves the butt of racial antagonism. Such shortages will be exacerbated if the military continues to call up approximately 700,000 18 year-olds to maintain the 4.8 million man Red Army.⁶² In addition to these problems, military reliability and effectiveness are likely to decline, and serious constraints upon Soviet foreign policy may become evident.⁶³ Moreover, the Russians take little comfort from the knowledge that their traditional efforts to resolve the nationalities problem have been disappointingly slow and ineffective.⁶⁴

Political and Ideological Vulnerabilities. The economic, agricultural and demographic vulnerabilities described above confront the leaders of the Soviet Union with a particularly acute dilemma. The physical separation of resources from the bulk of the population, labor shortages west of the Urals and an inadequate transportation infrastructure to connect resources and capital assets with the future labor supply will force Soviet leaders to consider two basic options.⁶⁵ The first entails relocating existing industrial assets and building future industrial installations in Central Asia to exploit the abundance of labor, reduce

transportation costs and, ultimately, to lower production costs. The problem with this strategy has been understood by the Soviet leadership for decades. It will amount to a massive redistribution of wealth and probably would require a substantial redirection of investment monies from the military; no doubt a policy fraught with danger for its proponents. An "eastern" investment strategy would certainly incur Great Russian and Slavic resentment given these peoples' racial and religious hostility toward their countrymen as well as the increasingly resource-constrained environment.⁶⁶ Increasing investments in areas closer to contested and vulnerable border areas with the PRC complicates the Soviet Eastern strategy.

As another possibility, the Politburo could encourage its Muslim and Asiatic population to resettle west of the Urals. Such a labor relocation, however, would be unlikely for a number of reasons: the delay that would be imposed upon the access to and development of eastern natural resources; further reduced eastern agricultural production due to the heightened immigration of male farm workers; the unattractiveness of European Russia's religious and cultural environments to the eastern peoples; and the racial animosity toward and economic threat posed by the easterners to their western countrymen who traditionally have been *primus inter pares* in every institution of influence in Soviet life.⁶⁷ Moreover, the Soviet Union's decisions regarding this dilemma will be made within a context of (1) Great Russian chauvinism toward all other Soviet nationalities; (2) a debate among the Russians about whether future Soviet greatness is to be found within a western or a Slavophile context which extols the historical and cultural uniqueness of the country's Slavic elements; and (3) an apparent widespread sense throughout the Soviet Union that the ideology has lost its relevance and the government its efficiency and effectiveness in the increasingly complex and interdependent national and global environments.⁶⁸ This third context would be manifested by increased numerical and vociferous levels of the dissidents,⁶⁹ growing political apathy and a resurgence of interest in religion which is challenging Marxism-Leninism as the society's primary guiding force.⁷⁰

The difficult determination of the most economically efficient, yet politically feasible manner, of dealing with these problems will require innovative and flexible thinking by CPSU and government

leaders along with popular confidence in the correctness of their decisions. As noted above, it is unlikely that any government decision will meet with uncritical acclaim because of the country's political apathy and heterogeneity. Even if popular acceptance could be assured, the chances of an actual decision being made is uncertain.

In effect, the decisions to identify priorities and to redistribute wealth require some flexibility and decentralization. Yet this is hardly the first time that such needs have been prescribed. Lenin's New Economic Policy, Leibermanism in the 1960's, and the management by objective approach adopted by Alexei Kosygin in the early 1970's are the precursors of Yuri Andropov's current initiatives.⁷¹ The unhappy condition in the Soviet Union is that broad-based social change either is not implemented at all or it is done haltingly and inefficiently, at best.

There are several straightforward explanations of the Soviet Union's limited ability to reform. A major cause is the country's massive and rigid party and government bureaucracies. Their size and fragmentation contribute to inertia. Furthermore, the myth of the CPSU as the sole repository of truth and its status as the only party needed in a classless society to function as the vanguard of the proletariat places every national decision and development—no matter how trivial—under its aegis. Consequently, the CPSU must meddle in every matter, often imposing inappropriate "solutions" from the top and causing delay when questions are debated upwards through the hierarchy in accordance with the principles of democratic centralism.⁷²

Second, even a stultified and obstructed bureaucracy can be motivated to act by a strong leader. However, Soviet leaders no longer enjoy the omnipotence of Stalin. The acceptance by Khrushchev of a concensus-based Politburo, designed to prevent Stalinist abuses in the future, has been strengthened over the years. Consequently, the power of each successive first secretary and plenipotentiary has been reduced. Within this general trend, numerous reasons and hints indicate that Mr. Andropov, though powerful, has yet to consolidate his power and remains limited in the scope and depth of reformation he can pursue.⁷³ Furthermore, at 68 years of age and in frail health, his longevity at the pinnacle of the Soviet state, will be rather limited. Third, is the problematic nature of the data available to the decisionmakers. In the Soviet

Union, high-level party functionaries still remember Stalin's legacy to kill the messenger bearing bad news. Although no longer fearing for their lives in the event of mission failure, CPSU functionaries recognize that their own advancement depends on their mission success. Naturally, such pressures in the face of adverse economic, societal and cultural obstacles result in sycophancy and generate falsification of information by commission or omission throughout the chain of command. Furthermore, as one would expect in a garrison state with Russian cultural antecedents, every issue affects national security and, therefore, is shrouded in secrecy. The resulting compartmentalization of information means that in the Soviet Union, the left hand often is unaware of what is being done by the right. Moreover, the absence of a genuine loyal opposition precludes the attenuation of the distorted information problem.

Ideological considerations provide an additional set of constraints to flexibility in dealing with extant economic and social problems. Because Marxism-Leninism is viewed as a set of prescriptions, in addition to an explanation of current and past social developments, the Soviet Union is limited in the degree to which it can pursue certain palliatives such as greater economic decentralization. Also, due to the ideology's revolutionary ethos, Soviet leaders find it difficult to abandon obligations such as its \$9 million per day subsidization of the Cuban economy at a time when Soviet hard currency reserves are dangerously low.⁷⁴ Hence, the ideological gurus find difficulty in maneuvering since their orthodox interpretation of ideology justifies their own primacy within the CPSU, the primacy of the CPSU within the Soviet Union, and the primacy of the Soviet Union in the "progressive" world. In short, to acknowledge the limitations of the ideology would undermine the very *raison d'etre* and legitimacy of the Soviet hierarchy, Party and State.

Related to the above is the implication of change for Soviet dissidents and the Warsaw Pact allies. The Kremlin has long resisted substantial departures at home and within its alliance from its own mandated policies. To the extent that the Soviets permit reform at home or in East Europe, they acknowledge limits to the universality of their ideology, open the door to demands for more change and ultimately risk losing control of the Party, the State and the Empire. Interestingly, while Soviet leaders are obligated to limit reform at home and abroad due to ideological imperatives, their

endorsement of Basket 4 of the Helsinki Final Act of the Conference on Security and Cooperation in Europe (as well as greater interaction with the West) not only commits them to the observance of fundamental human rights but also gives the United States and its allies the formal right to critique Soviet performance in this regard. Once again, those in the Kremlin find it difficult to move in either direction.

Thus, the Soviet Union is beset with difficult domestic problems but lacks many of the means necessary to deal with them. Inasmuch as the traditional "muddling through" response is likely to prove unsatisfactory in the absence of major structural, ideological and military reforms (all of which are highly unlikely), one well understands why, at least with regard to the domestic situation; one analyst has concluded that from the crest, all directions are down for the Soviet Union.⁶ In any event, the combined effect of the domestic problems described above is likely to make the Soviet Union less, rather than more, interested in confrontation with the United States.

SOVIET MILITARY VULNERABILITIES AND UNCERTAINTIES

The disturbing military developments cited in the opening paragraphs of this essay and the 1981 and 1983 publications of *Soviet Military Power* leave little room to doubt the massive strength and potential of the Soviet military. The development of a strategic nuclear arsenal that is at least as powerful as that of the United States and the continuing modernization and augmentation of Soviet conventional forces in Europe, its blue-water navy and long-range power projection assets are troubling. When one views these developments through the prism of Soviet military doctrine that is characterized by an offensive orientation and an emphasis upon seizing the initiative with an overabundance of forces, the concerns of US national security planners appear well-founded. Specifically, some fear that in certain crisis scenarios, US decisionmakers may be forced to acquiesce to Soviet demands or be less capable of pursuing US interests with confidence. At worst, it is feared that Soviet leaders might be tempted to seize the initiative and exploit their military potential in a decapitating preemptive strike against the United States.⁷ Estimates in various nuclear

exchange scenarios that the United States would suffer more than twice the number of casualties than the Soviet Union, lend a frightening plausibility to these speculations and help to explain why the adequacy of the US defense posture is increasingly questioned by many.⁷⁸ On a less stark but equally important level is the concern in the United States that the Soviet Union, in an effort to exploit its only influential foreign policy instrument, will increasingly use its intimidating military capability to pursue its principal foreign policy objective: the estrangement of the United States from its allies. Such an objective would be achieved, in large part, by demonstrating that the correlation of forces increasingly favors the Soviet Union and by raising questions in the minds of American leaders and their allies about the ability and willingness of the United States to defend crucial US and Western interests.

Strategic Military Uncertainties. The military capability of the Soviet Union to threaten the United States and its allies with strategic and theater nuclear and conventional weapons has been analyzed in many fora. Without denying the potency and genuine threat emanating from the Soviet military arsenal, a growing body of literature has focused on the vulnerabilities of Soviet military power and the uncertainties which surely complicate the assessments of national security planners in the Kremlin.⁷⁹ With regard to Soviet strategic capabilities, Robert Kennedy of the US Army War College, and Benjamin Lambeth, a noted student of Soviet military strategy, have concluded, independently, that Soviet strategic planners who are better aware of their own vulnerabilities than American worst-case force planners (who must emphasize all plausible capabilities of their adversary), can hardly afford to feel sanguine about the prospects of a successful Soviet preemptive strike. Kennedy and Lambeth argue that the Soviet Union (1) has never fired a strategic missile at random or on short notice, many missiles at once or exploded a nuclear warhead at the end of a test flight; (2) maintains lower ICBM alert and reliability rates than the comparable US missiles; (3) has derived its missile data from unrepresentative tests (such as east to west test flights rather than the north to south trajectory required of an actual attack against the United States); (4) remains uncertain about its ability to coordinate the timing of the hundreds of warheads that would constitute a preemptive strike as well as the effects of electromagnetic pulse (EMP) and fratricide; and (5) confronts numerous additional complicating variables and imprecise

doctrinal questions about the initiation, duration, dynamics and controllability of nuclear war. Further, to support their position, Kennedy and Lambeth assert that the risks of miscalculation provide ample discouragement to the normally cautious Soviets. Indeed, they ask why should the Soviet elite—whose ideology has preordained their victory, who draw sharp distinctions between the desirable and the necessary, and who recognize that nuclear war might undo their advances toward the Communist millenium—contemplate such cataclysmic initiatives when patience is certain to deliver the millenium into their hands?⁴⁰

In addition to questions about Soviet strategic capabilities and doctrinal uncertainties, Soviet planners cannot be sure of the US response in a preemptive scenario. They know that the United States is undertaking numerous initiatives, partially in response to the Soviet Union's massive military expansion of the last two decades, to assure the command and control, survivability, and, therefore, assured retaliatory lethality of its strategic arsenal.⁴¹ They also know that even if a preemptive strike against US ICBMs were successful, they might have to contend with the two remaining legs of the triad:

- (with the deployment of the Trident D-5 missile) the mobile, relatively invulnerable and counter-silo capable SLBM fleet—which contains much of America's strategic nuclear arsenal; and
- the intercontinental bomber fleet—which, although currently capable of penetrating Soviet anti-air defense in great numbers, will become even deadlier with the deployment of air-launched cruise missiles and the stealth technology. Whether US ICBMs would be launched on warning; whether an American President would be driven by fear, desperation or vindictiveness to order a counter-value strike; and whether the potent US forward-based systems in Europe and other locations on the USSR's periphery, as well as the nuclear arsenals of the United Kingdom, France, and the People's Republic of China would be unleashed against Soviet military, other counterforce and key industrial targets are questions that are certain to bedevil Soviet strategists and urge them toward caution.⁴²

What the military and political leaders in the Kremlin do know is that the relatively low number of high-value Soviet military targets; the excessive concentration of Soviet industry (50 percent of the Soviet industrial output comes from less than 200 plants) and

transportation assets which could not be easily protected against a US bottlenecking strategy;⁴³ and, most importantly, the potential fragility of Great Russian control over the political, economic, social, military and cultural institutions of their vast multinational empire would be threatened by a retaliatory strike of even a small portion of US strategic warheads.⁴⁴ Despite the resources directed toward civil defense, Soviet planners cannot be certain that such efforts would allow them to escape the effects of US retaliation, maintain the integrity of the Soviet Union and continue to play a dominant role in the Communist world.⁴⁵ In the calculus of Clausewitz, the Prussian military theorist often cited by Lenin, Soviet military operations are not undertaken out of concert with political realities. From this perspective, a preemptive strike against the United States would violate the most elementary dictum of war.

Conventional Military Uncertainties. While not denying that the Soviet Union possesses the most frightening conventional military force ever assembled, it is important to acknowledge that the Red Army faces numerous problems and uncertainties that are bound to impose moderation even upon its most optimistic advocates.

Soviet military theory extols the virtues of speed, shock and surprise to achieve a quick victory. Nevertheless, John Mearsheimer has argued persuasively that the need to reinforce Soviet units comprising the Group of Soviet Forces-Germany (GSFG) precludes the USSR from achieving strategic surprise. He also maintains that the most gross Warsaw Pact advantages disappear when the static quantitative ratios comparing NATO and Warsaw Pact inventories—manpower, tank, artillery, and so forth—are translated into the more realistic armor division equivalents (which take mobility, firepower and survivability into account). Mearsheimer argues that ratios based on divisional equivalents do not give the Pact the necessary wherewithal to punch quickly through NATO forward defenses and rush to the Rhine, especially when the capabilities of the sizable French army are factored into the equation. Furthermore, force-to-space ratios created by urban sprawl, natural geographic features and prepared NATO defenses will force critical Warsaw Pact follow-on echelons and formations to mass, thereby becoming highly vulnerable to long-range conventional and nuclear weapons as envisioned by NATO strategy and the US military's new AirLand Battle concept.

These arguments are among those Mearsheimer marshals to conclude that, in the absence of delayed NATO mobilization, the Soviet Union cannot win quickly in Central Europe.⁶⁶ Because of a Soviet need to win quickly, Mearsheimer's conclusion supports the view of Lambeth, who argues below, that in light of certain advantages that occur to a defender, the denial of quick victory may be adequate to deter the Soviet Union.

... the chances of success are heavily bound up with the correctness of planning assumptions and opportunities for regrouping are likely to be few and far between. Countries on the receiving end that are politically bound to defensive and reactive strategies have options for flexibility generally denied to those who would start a war. In many cases, the defender might need only be capable of disrupting the attacker's designs to forestall defeat.⁶⁷

Additional problems and vulnerabilities confront Soviet military leaders (who also are likely to base their plans upon worst-case scenarios) which are likely to cause them to ponder their own assessments of the combat capabilities of their forces. Many of these problems are qualitative in nature and, therefore, not easily integrated into a force-level calculus. Their importance, nevertheless, was not lost to Stalin who identified the quality of commanders, stability in the rear, morale of the Army and the quality of divisions as four of the five permanently operating factors which affect the outcome of war.⁶⁸ Nor has the need for more frequent and realistic training, the abolition of alcoholism in the armed forces, better troop discipline and less rigid command and control been lost on current Soviet military officials—who recently have been allocating increased space to these concerns in *Krasnaya Zvezda* (*Red Star*), the official newspaper of the Soviet military.⁶⁹

Otto P. Chaney, Richard Clayberg, and Edward Corcoran, analysts of the Strategic Studies Institute and experts on Soviet and Eastern European militaries, have identified numerous nonquantitative considerations that bedevil Soviet and Warsaw Pact military planners.⁷⁰ In the area of training, they have identified the following as sources of problems: (1) the absence of troop initiative caused by over-supervision, rote learning and training exercises which rely heavily on simulators at the expense of real-time exercises;⁷¹ (2) little attention to map reading and basic land navigation skills that would be required in an unfamiliar and

fast-moving battlefield environment;⁹² (3) the absence since World War II of any combat experience against a sophisticated adversary; and (4) the dearth of combat training (and ammunition) given to Muslim and other nationality group troops who are considered unreliable.⁹³

The personnel area provides additional vulnerabilities that surely concern Soviet political and military leaders. Examples are high turnover rates, physical beatings of new conscriptees by senior troops, inedible food, absence of a professional NCO corps, and racially generated violence between Great Russians and various minorities. These characteristics of the Soviet Army are unlikely to inspire *esprit de corps* or confidence in the coordination of military operations among Soviet force planners and technicians.⁹⁴

Additionally, Soviet leaders probably anticipate problems involving command, control, communications and intelligence (C³I) which could well result from (1) the excessive concentration of authority at the top of the command structure;⁹⁵ (2) the inability of increasing numbers of recruits to communicate effectively in Russian (the sole language of command and control);⁹⁶ (3) the discipline of troops who have been beaten and abused;⁹⁷ (4) epidemic levels of drunkenness at all levels of rank;⁹⁸ and (5) the mutual distrust and, on occasion, antagonism between Soviet Army troops and their "fraternal" Eastern allies whose homelands stand to be destroyed in any future European conflict.⁹⁹ Such problems could well stifle the initiative and timeliness of Soviet responses; reduce Pact ability to exploit tactical advantages on the fast-moving and confused future battlefield; and leave Soviet C³I networks vulnerable to information deception and denial.

Finally, serious problems and vulnerabilities imposed by geography (e.g., the absence of natural borders; the threat of a two-front war; easily interdictable naval choke points), maintenance and resupply (e.g., lines of communication passing through Poland, Czechoslovakia and East Germany and the vulnerability of the Friendship Pipeline System and rail transshipment points to NATO interdiction), and logistics cannot be viewed with equanimity by Soviet leaders.¹⁰⁰ Evidence of concern with these and other problems is abundant in the pages of *Red Star* which suggests that Soviet military planners may concur with a conclusion of London's prestigious International Institute for Strategic Studies:

The overall balance continues to be such as to make military aggression a highly risky undertaking. Though tactical redeployments could provide a local advantage in numbers sufficient to allow an attacker to believe that he might achieve tactical success, there would still appear to be insufficient overall strength on either side to guarantee victory. The consequences for an attacker would be unpredictable, and the risks, particularly of nuclear escalation, incalculable.¹⁰¹

IMPLICATIONS AND CONCLUSIONS

A prominent student of Soviet affairs and military doctrine lamented recently that:

Most assessments of Soviet capability emphasize elements that contribute to Soviet strength. By contrast, vulnerability analysis remains undeveloped in strategic research.¹⁰²

There are good reasons for this state of affairs. US national security planners concerned with the capabilities of our adversaries to deny the basic national interests of and to bring physical damage to the United States is well founded. An overemphasis on Soviet vulnerabilities could well lead to an erroneous assessment: that the Soviet Union is not strong or dangerous enough to constitute a serious threat to critical US interests, and thus does not justify the expenditure of American defense dollars to maintain a secure and credible deterrent force.

In evaluating the domestic and military problems and vulnerabilities of the Soviet Union, various analysts have seized upon these shortcomings over the last 65 years to predict the demise of the Soviet state.¹⁰³ Yet, the speculation of Soviet dissident Andrei Amalrik about whether the Soviet Union will survive until 1984 can now be answered in the affirmative.¹⁰⁴ Corroboration is furnished by the CIA's recent analysis of the Soviet Union, which concludes that while problems certainly exist, they neither presage the "Decline of an Empire," nor attenuate the Soviet threat.¹⁰⁵ Those who would argue to the contrary would do well to reflect on the Russian proverb: "All that trembles does not fall." Indeed, rather than causing the Soviet leaders to abandon their military expenditures, forsake their national objectives, and decentralize the Soviet state with all its attendant revolutionary implications, these problems may have an opposite effect. They may encourage the

"hounded bear" to pursue its objectives more recklessly while it still possesses the initiative and most military requisites.¹⁰⁶ In short, American complacency stemming from an overemphasis on Soviet vulnerabilities would be imprudent and, potentially, cataclysmic.

Vulnerability analysis, however, is an important part of the strategic calculus. The recognition of Soviet weaknesses is crucial to the fashioning of sensible and realistic policies to deal with that superpower. Soviet economic and agricultural deficiencies must be considered in the determination of trade policy, and military weaknesses can guide the development of military operations and doctrine designed to deter a Soviet resort to force in a crisis situation. Simultaneously, vulnerability analysis may assure that the United States does not overreact to the threat.

Hence, the ultimate goals of US security policy must remain the maintenance of a military capability that deters the Soviet Union from using military force, directly or indirectly, in pursuit of its political objectives, and the development of stable and mutually beneficial bilateral US-Soviet relations.

As noted recently by Under Secretary of State Lawrence Eagleburger, the maintenance of deterrence is the country's most essential goal.¹⁰⁷ To this end, the continued vigilance of the Soviet threat as well as a number of current US initiatives to assure a military balance between the superpowers is necessary and well-advised. Improvements in the survivability and connectivity of the nation's nuclear arsenal and command structure; the deployment of mobile, survivable, and highly accurate strategic missiles such as the Trident D-5 SLBM; the creation of a rapidly deployable force to defend global US interests; the modernization of NATO's nuclear arsenal; and the continued modernization of the strategic bomber fleet will do much to ensure the potency of the US retaliatory force. Furthermore, these initiatives will discourage the Soviet Union from believing that the threat of military operations against the United States or its allies or a preemptive strike against the United States can ever result in anything but failure imposed with unacceptable costs. Such a realization would not be lost to the Soviet leadership which has a supreme appreciation for the roles of its military as a symbol and an element of national power.

Many of the initiatives described by Secretary Weinberger in his *Annual Report to Congress*¹⁰⁸ are designed to exploit many of the Soviet Union's vulnerabilities described above. For instance, the

development of weapons capable of destroying Soviet C³I facilities in a conventional war can capitalize upon vulnerabilities stemming from its rigid command and control structure and reduce the Soviet ability to execute planned operations. The development of the AirLand deep-strike concept also is designed to exploit Soviet vulnerabilities in the event of war by neutralizing the massed follow-on echelons crucial to Warsaw Pact military operations while bringing the battle to Pact territory. This latter thrust will impose a real cost upon the East European Pact allies and reduce their solidarity with the Soviet Union. To the extent that this new strategy can increase the divergence of interests between the Soviets and their allies and reduce Soviet confidence in the reliability of those allies, deterrence in Europe is strengthened.

At the strategic level, a targeting plan that aimed at the relatively few critical nodes of the Soviet Union's industrial, communications and transportation infrastructures and the elements of political and social control by the Communist Party, in general, and the Great Russians, in particular, might allow, in the words of Colin Gray:

... the centrifugal forces within the Soviet empire to begin to bring that system down from within.¹⁰⁸

Surely, the threat of the disintegration of their empire and the knowledge that the major upheavals in the USSR in this century occurred in the midst of wartime failures (Russo-Japanese War and World War I) would constitute powerful deterrents to those in the Kremlin who might contemplate the utility of military operations in pursuit of their interests.¹⁰⁹ In the same vein, deterrence could be strengthened by occasional and oblique allusions to a launch on warning in the event of a Soviet first-strike¹¹¹ along with constant reminders by US political and military officials that, while the United States recognizes the necessity to assure its ability to respond in the long as well as short-time frames to aggression at all levels of the conventional and nuclear continuum, war may not be controllable but instead could escalate to total and horrific proportions. Such statements will (1) demonstrate US resolve to protect its interests in all scenarios; (2) dispel any Soviet perceptions that they could achieve a victory worth having; and thus, (3) induce moderation and circumspection rather than boldness in military initiatives that could have disastrous

consequences in the event of miscalculation. Indeed, the Soviet Union is sensitive to the uncertainties and risks stemming from miscalculations and war, as Ye. Rybkin acknowledged:

In setting for oneself definite and concrete goals of defeating the enemy and preserving one's forces and placing society in a special situation with the beginning of military action, the opposing sides are frequently and unexpectedly faced with the fact that they have put into action processes which were undesirable. As a result, *war has a powerful reverse effect on the social processes long before victory or defeat, frequently counter to the design and plans instigated which unleashed the war.* [emphasis added].¹¹

The Soviet vulnerabilities described above as well as the current political climates in the United States and Europe make the present a propitious time to pursue arms control with the Soviet Union. The increasingly certain prospects of the deployment of 108 Pershing II and 464 ground launched cruise missiles on NATO territory¹² as well as the Soviet Union's expressed concern over the French, British and Chinese nuclear arsenals¹⁴ provide real incentives to negotiate nonstrategic, nuclear arms control agreements.¹³ Furthermore, projected demographic trends, especially those indicating manpower shortages, are certain to create great tension between the Soviet Army's manning requirements (qualitative and quantitative) and the labor needs of Soviet agriculture and industry.¹⁶ The Soviet Union is likely to find the manpower reductions proposed in MBFR talks conveniently attractive.¹⁷ Relaxation of border tensions with the PRC would further accommodate a Soviet manpower shortage, perhaps permitting a reduction in the number of 6 tank and 41 motorized rifle divisions deployed on the border area.¹⁸

Finally, the fact that Soviet leaders have demonstrated the willingness and the ability to spend whatever is necessary to develop and maintain a frightening strategic arsenal¹⁹ does not preclude the possibility that they will become more amenable to genuine and verifiable strategic arms control initiatives as Soviet economic and agricultural problems become more severe, the costs of maintaining their internal and external empires escalate, and the United States begins to deploy many improved weapons systems in its own strategic arsenal.²⁰

The Soviet Union appears to be faltering at the international, political and economic levels, thereby facilitating competition by

the United States and its allies with the Soviet Union in these settings. Throughout the Third World, Soviet ideology as a moral force and model of development increasingly is becoming impotent.¹²¹ Also, Great Russian chauvinism and repression of their own Muslim populations are well known in many Third World countries. The Soviet Union could well find the pursuit of "national liberation" abroad increasingly difficult, especially when internal deprivations are so evident in the Soviet state. Although the USSR has been a willing supplier of arms to Third World clients¹²² and an eager exploiter of local instability, the absence of Soviet economic aid as well as internal racism and political heavy-handedness have prevented the Soviet leaders from consolidating their advantages and fulfilling the Leninist anti-imperial destiny Khrushchev so smugly anticipated in the 1950's. Quite simply, many states in the Third World are loathe to buy what the Soviet Union is selling and when they do buy, they carefully guard the prerogatives of their hard-won national sovereignty.¹²³

In Europe, detente with the West has contributed to the increasing disunity within the Eastern bloc. While Soviet trade with Europe does provide the former with potential leverage, it also opens the Soviet leadership to certain problems including the drain on Soviet hard currency assets,¹²⁴ the reliance upon Western technology (at the expense of the further postponement of Soviet nonmilitary R & D developments), and the example viewed by increasing numbers of Soviet citizens that Westerners are neither evil nor made destitute by an allegedly-doomed economic system that cannot meet their most elementary needs.¹²⁵ Hence, with appropriate controls over the transfer of sensitive technology, it is in the West's and US interests to continue to compete with the Soviet Union in the political and economic arenas where the West holds most, if not all, of the advantages.

To this end, improvements in and augmentation of the training of US civilian and military personnel in the Russian language, as well as in Soviet political, economic and cultural subjects are critical though neglected US national security initiatives. Similarly, the continuation of cultural exchanges that allow Americans to develop a realistic understanding of Soviet weaknesses (as well as strengths) and which demonstrate American strengths (as well as weaknesses) will do much to stabilize Soviet-US relations in ways entirely amenable to US interests and those of the West.

Of course, these recommendations do not mean that the United States should abandon its scrutiny and criticisms of Soviet human rights abuses or cease to demand that the Soviet Union observe certain basic standards of national behavior.¹²⁶ After all, the Soviet Union represents the antithesis of many fundamental Western values and objectives. However, the Soviet Union is not without serious weaknesses and vulnerabilities which provide the United States the opportunity and ability to deter aggression while as Under Secretary of State Lawrence Eagleburger has argued: "We . . . work on our own and with our friends to build a world order compatible with our values and our interests."¹²⁷

ENDNOTES

1. Caspar Weinberger, *Soviet Military Power*, Washington: US Government Printing Office, 1983, pp. 36-37. There are also more than 200 older INF missiles (SS-4, SS-5) based opposite NATO Europe. Counting *only* warheads on launchers, there are *over 1000* warheads unquestionably in range of NATO Europe backed up with *over 750* additional SS-20 warheads on their "reload" or "spare" missiles. Counting the Eastern USSR (from which *Alaska* can unquestionably be reached), there are *altogether over 2000* INF warheads available to the USSR *all* within range of NATO. The *only* NATO country the USSR's INF missiles cannot reach from present bases is *Canada*.
2. Henry Kissinger, "The Future of NATO," *The Washington Quarterly*, Vol. 2, Autumn 1979, pp. 6-7.
3. Robert Komer, "Maritime Strategy vs. Coalition Defense," in *Foreign Affairs*, Summer 1982, pp. 1124-1144, provides an excellent analysis of the maritime-coalition debate. Also see Jeffrey Record and Robert Hanks, *US Strategy at the Crossroads: Two Views*, Foreign Policy Report, July 1982, Cambridge, Massachusetts: Institute for Foreign Policy Analysis.
4. Atlantic Council, "The Credibility of the NATO Deterrent: Bringing the NATO Deterrent Up To Date," Washington: May 1981. On December 12, 1979, the NATO ministers decided that the US INF missiles would be deployed in the absence of progress in INF arms control.
5. Josef Adamek, "Centrally Planned Economics of Europe," *Economic Overview 1982*, Amsterdam: The Conference Board Inc., June 25, 1982, pp. 31-37.
6. This figure, based on a Congressional Research Service study, was derived from data in Brad Knickerbocher's "US Overtakes Soviets in Arms Sales to Third World," *Christian Science Monitor*, April 19, 1983. The figures cited by Knickerbocher are consistent with those presented by the US Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers, 1975-1979*, Washington: US Government Printing Office, 1982, p. 118. During the 1970's, ACDA data indicates that arms represented about 15 percent of total Soviet exports.
7. See Otto Chaney, "The Soviet Threat to Europe: Prospect for the 1980's," in *The Defense of the West: Strategic and European Security Issues Reappraised*, Robert Kennedy and John Weinstein, eds., Boulder, Colorado: Westview Press, 1983. Also, see Joseph D. Douglas, *The Soviet Theater Nuclear Offensive*, Washington: US Government Printing Office, 1976; John M. Weinstein, "Soviet Civil Defense and the US Deterrent," *Parameters*, March 1982, pp. 70-83.
8. John Weinstein, "The Strategic Implications of Civil Defense" in *The Defense of the West*, 1983.
9. Lawrence S. Eagleburger, "Review of U.S. Relations With the Soviet Union," *Current Policy No. 450*, US Department of State, Washington, February 1, 1983.
10. John Williams, "Soviets Endanger US 'Forward Line of Defense' Reagan Says," *The Washington Post*, February 20, 1983, p. 1.
11. Alwyn H. King, *The United States Strategic Minerals Position in the 1980's and Beyond*, Futures/Long-Range Planning Group Report, Carlisle Barracks, Pennsylvania: Strategic Studies Institute, US Army War College, 1981.
12. Eagleburger, p. 2.

13. Richard Betts, "Conventional Strategy: New Critics, Old Choices," *International Security*, Spring 1983, p. 142. For other arguments supporting this thesis, see William Kincade, "Repeating History: The Civil Defense Debate Renewed," *International Security*, Winter 1978, pp. 99-120; and Arthur M. Katz, *Life After Nuclear War: The Economic and Social Impacts of Nuclear Attacks on the United States*, Cambridge, Massachusetts: Ballinger Publishing Company, 1982.

14. Maxwell D. Taylor, "Build Up the Forces We Really Need," *The Washington Post*, March 6, 1983.

15. *Ibid.*

16. Kincade; also see Gary Guertner, "Strategic Vulnerabilities of a Multinational State: Detering the Soviet Union," *Political Science Quarterly*, Vol. 96, Summer 1981, pp. 209-223; Benjamin S. Lambeth, "Uncertainties for the Soviet War Planner," *International Security*, Winter 1982/1983, pp. 139-166; and Keith A. Dunn, *Soviet Military Weaknesses and Vulnerabilities: A Critique of the Short War Advocates*, Strategic Issues Research Memorandum, Carlisle Barracks, Pennsylvania: Strategic Studies Institute, July 31, 1978, p. 12.

17. US Congress Joint Economic Committee, 97th Congress, 2d session, *USSR: Measures of Economic Growth and Development, 1950-1980*, Washington: US Government Printing Office, December 8, 1982.

18. Adamek, p. 33.

19. *Ibid.* On the other hand, Daniel Bond and Herbert Levine ("The Soviet Economy to the Year 2000: An Overview," Paper #12 of the Soviet Economy to the Year 2000 Symposium, sponsored by the National Council for Soviet and East European Research, Washington, May 19, 1982, p. 32) argue that modifications in the Soviet rate of military spending will not have a determinate ripple effect upon the Soviet economy.

20. Adamek, p. 34. Also, see the "Summary" of the National Council on Soviet and East European Research Symposium on the Soviet Economy to the Year 2000 (hereafter known as the *National Council Summary*), 1982, p. i.

21. Adamek, p. 34.

22. John F. Burns, "The Emergence of Andropov," *The New York Times Magazine*, February 27, 1983, pp. 24-29. Also, see note 71 (this paper) and *National Council Summary*, p. i.

23. Edward Crankshaw, *Khrushchev Remembers*, Boston: Little Brown, 1970, p. 232; James Ellis, "NATO Colloquium Sheds New Life on Economics of Eastern Europe and the USSR," in *NATO Review*, No. 3, 1982, pp. 20-24. Soviet industries are rewarded lately for fulfilling or over-fulfilling goals. However, such rewards are understated to the market and the bottlenecking tendencies of centralized economies are not mitigated by such payments.

24. Adamek, p. 32.

25. Of course, this argument could also be directed at the United States.

26. Ninety percent of the Soviet land mass lies north of the latitude bordering the continental 48 states of the United States.

27. See Dunn. In 1977, there was only one automobile for every 52 citizens and numerous factors impinge against the proliferation of automobiles in Soviet society. See M. Elizabeth Denton, "Soviet Consumer Policy: Trends and Prospects" in *The Soviet Economy: Continuity and Change*, ed. by M. Bornstein, Boulder, Colorado: Westview Press, 1981, pp. 172, 180. There were 109 million automobiles in use in 1976 in the United States, almost one for every two citizens. *The World Almanac and Book of Facts, 1982*, New York: Newspaper Enterprises Association, Inc.

28. T. Powers, "Choosing a Strategy for World War III," *The Atlantic Monthly*, November 1982, p. 109.

29. Thomas Land, "The Trouble with Soviet Agriculture," *International Perspectives*, Ottawa, Canada: September/October 1982, pp. 29-30; also Adamek, p. 32.

30. Murray Feshbach, "The Soviet Future: A Different Crisis," *Military Review*, June 1981, pp. 34-40; also *National Council Summary*, p. ii.

31. Dusko Doder, "Soviets Turning to Allies to Boost Their Workforce," *The Washington Post*, June 3, 1982, p. 1. Since so many women work full time and so many students work during holidays, the Soviet Union will be unable to increase its workforce by tapping these already employed assets.

32. "Soviet Asia," *Asia 1983 Yearbook*, Hong Kong: FEER, Ltd., 1983, pp. 246-251. Also, see John Burns, "Siberian Treasure Hunt Hits a Vein of Skepticism," *The New York Times*, April 5, 1983, p. 2. Burns notes that annual labor turnover runs at 30 percent despite salaries that are two to three times higher than those paid for similar jobs in the more temperate regions of the USSR.

33. Adamek, p. 33.

34. Land, p. 29.

35. *Ibid*; *National Council Summary*, p. ii.

36. Land, p. 30.

37. *The New York Times*, May 24, 1982, p. A3. Of course, part of the explanation for the large percentages of these crops grown on peasant plots is their suitability. Grain, for instance, is most amenable to production on large and mechanized farms in the Soviet Union as well as the United States. Potatoes and eggs, on the other hand, are amenable to "postage stamp" agriculture.

38. Land, p. 30.

39. John Kifner, "Warsaw Outlines Three-Year Plan," *The New York Times*, March 23, 1983, p. 3; David Binder "Czechoslovakia, The East's New Economic Disaster," *The New York Times*, November 8, 1981; Paul Pannkuk "Eastern European and Soviet Economic Outlook," *Weekly Economic Package*, Chemical Bank, New York, February 15, 1983, pp. 8-12.

40. Paul Pannkuk, "Soviet Union's 1982 Economic Prospects," *Weekly Economic Package*, Chemical Bank, New York, May 11, 1982, pp. 15-16.

41. *Ibid*.

42. Crane Brinton, *The Anatomy of Revolution*, rev. and exp. ed., New York: Vintage Books, 1965. The possibility of economic crisis for the Soviet Union is discussed in the *National Council Summary*, p. iii.

43. In 1981-82, the Soviet Union's debt service obligations to the West equalled 12 percent of its total trade with hard currency countries. Furthermore, its hard currency reserves in Western banks dropped from \$8.6 billion in 1980 to \$3.6 billion in 1981. See Adamek, p. 35. The Soviet trade deficit increased from -\$8 billion in 1980 to -\$5.1 billion in 1981 (and -\$6.5 billion in 1982) despite gold sales of \$2.5 billion and \$7 billion in arms sales. See Pannkuk, p. 16.

44. *Ibid*.

45. Murray Feshbach, "Between the Lines of the 1979 Census," *Problems of Communism*, January-February, 1982, pp. 27-37.

46. Helene Carrere d'Encausse, *Decline of an Empire: The Soviet Socialist Republics in Revolt*, New York: Harper Colophon Books, 1981.

47. Cited in "Soviet Asia," *Asia 1983 Yearbook*, p. 246.

48. *Ibid.*, p. 247.
49. *Ibid.*, p. 246.
50. *Ibid.*
51. *Ibid.*
52. Feshbach, "Between the Lines of the 1979 Census," p. 29.
53. *Ibid.*, p. 35.
54. *Ibid.*, p. 30.
55. *Ibid.*, p. 31.
56. *Ibid.*, p. 33.
57. Feshbach, "The Soviet Future," 1981, p. 36.
58. Feshbach, "Between the Lines of the 1979 Census," p. 33.
59. *Ibid.*, p. 34.
60. *Ibid.*, p. 35.
61. Feshbach, "The Soviet Future," 1981, p. 38.
62. *Ibid.* Feshbach notes "The Kremlin annually calls up about 1.7 million 18 year olds to replenish the 4.8 million men in its armed forces. But if it takes its usual quota, the army will conscript enough manpower in 1986 to equal six times that year's net increase in the labor force." For a different point of view of the (limited) impact of Soviet demographic trends upon military manpower requirements, see Ellen Jones, "Soviet Military Manpower: Prospects for the 1980's," *Strategic Review*, Fall, 1981, p. 65.
63. d'Encausse, pp. 266-277.
64. *Ibid.*, pp. 13-46.
65. Jeffrey Hahn, "Soviet Demographic Dilemmas," *Problems of Communism*, September-October, 1981, pp. 56-61.
66. To date, the Soviet Union has not undertaken a program of geographical dispersal and it is unlikely that such a program will materialize within the foreseeable future. See Weinstein, 1982.
67. See d'Encausse, Chapters I, III-VI; Guertner, "Strategic Vulnerabilities;" and Hugh Seton-Watson, "The Last of the Empires," *The Washington Quarterly*, Spring 1980, pp. 41-46.
68. Daniel S. Papp, "From the Crest All Directions are Down: The Soviet Union Views the 1980's," *Naval War College Review*, July-August 1982, pp. 50-68 (especially pp. 61-62); Burns, "The Emergence of Andropov," p. 27.
69. d'Encausse, pp. 165-190, 210-213.
70. Within the Muslim religion, powerful value systems and codes of behavior (such as provided by the Sufi brotherhood) increasingly challenge Marxism-Leninism. See d'Encausse, pp. 237, 261-262, 270.
71. See R. W. Davies, "Economic Planning in the USSR," pp. 7-28, in *The Soviet Economy: Continuity and Change*, Morris Bornstein, ed., Boulder, Colorado: Westview Press, 1981. See pp. 30-32 for an excellent discussion of reforms within the Soviet economic system. Also, see Burns "The Emergence of Andropov."
72. Democratic centralism is, in theory, analogous to decisionmaking in the US military. Decisions may be debated freely up the chain of command. When a decision is made, however, subordinates implement it obediently.
73. John F. Burns, "Rumblings in the Kremlin," *The New York Times*, December 13, 1982, p. 8.; Hedrick Smith, "Though Andropov is Back on Job, US Officials See Health Problems," *The New York Times*, March 31, 1983, p. A4; also see Burns, "The Emergence of Andropov."

74. See note 43. Of course, the Soviet Union can "bend" the ideology to fit reality, as it has done often in the past. Such ideological gymnastics undermine the myth of the universal applicability and scientism of Marxism-Leninism and undermine the Soviet claim to primacy in the "progressive" world.

75. See Burns, "The Emergence of Andropov."

76. Papp.

77. For instance, see Richard Pipes, "The Soviet Strategy for Nuclear Victory," *Commentary*, Vol. 64, July 1977, pp. 21-34; Leon Gouré, *War Survival in Soviet Strategy*, Coral Gables: Center for Advanced International Studies, University of Miami, 1976. For an excellent counterargument that maintains that US deterrent forces are still secure, see Jack H. Nunn, "A Soviet Disarming First Strike: How Real is the Threat?," *Parameters*, March 1983, pp. 69-79.

78. See Joseph Kraft, "Russia's Winning Streak," *The Washington Post*, May 4, 1978; Richard Pipes, "Why the Soviet Union Thinks It Could Fight and Win a Nuclear War," *Commentary*, July 1977.

79. For an excellent analysis of the Soviets' military vulnerabilities, see Richard P. Clayberg, *The Problem of Soviet Vulnerabilities*, Special Report, Carlisle Barracks, Pennsylvania: Strategic Studies Institute, December 30, 1977.

80. See Lambeth; Robert Kennedy, "The Strategic Balance in Transition," in *Soviet Armed Forces Review Annual*, ed. by David Jones, Gulf Breeze, Florida: Academic International Press, 1980.

81. For a discussion of US initiatives to improve its arsenal, see Emma Rothschild, "The Delusions of Deterrence," *The New York Review of Books*, April 14, 1983, pp. 40-50. Also see Caspar Weinberger, *Annual Report to Congress, Fiscal Year 1984*, Washington: US Government Printing Office, February 1, 1983. It is interesting to note that the conclusions of the President's Commission on Strategic Forces repealed "six years of dogma about the growing vulnerability of fixed land-based missiles to a Soviet attack and the consequent doubts about American nuclear deterrent power." See Leslie H. Gelb, "Vulnerability and the MX," *The New York Times*, April 12, 1983, p. A1.

82. Henry Trofimenko, *Changing Attitudes Towards Deterrence*, University of California ACIS Working Paper No. 25, July 1980, p. 54. Trofimenko defines the major threats facing the USSR as: (1) from NATO, including British and French nuclear forces and US forward based systems (FBS); (2) from the US strategic arsenal; (3) from China; and (4) from large US naval units in forward deployment.

83. T. Powers, "Choosing a Strategy for World War III," *The Atlantic Monthly*, November 1982, pp. 82-110 (esp. p. 109).

The Soviets have 1,398 missiles in twenty-eight missile fields (including the test centers at Tyura Tam and Pletetsk with 300 command-and-control centers, 500 airfields with runways longer than 4,000 feet (suitable for intercontinental bombers), three submarine bases (Murmansk, Petropavlovsk, Vladivostok), 167 infantry and armored divisions, sixteen headquarters of PVO Strany (the Soviet air-defense command), and five naval fleet headquarters. Fifty percent of key Soviet industry is contained in 200 complexes. Only six Soviet rail trans-shipment yards load 80 percent of all empty railcars. There are twenty-six low-frequency radio transmitting stations that broadcast military traffic, and thirty-six stations of one type or another that handle communications with satellites. This comes to a total of 3,543 'targets.'

Moreover, in the Soviet Union, there are only 15 integrated iron and steel mills; 34 sizeable petroleum reserves; 8 copper refineries; 6 lead-zinc refineries; 17 meat-packing plants; 8 major shipbuilding works; 5 factories processing 5 percent of the USSR's aluminum, and so forth.

84. Nunn, "A Soviet Disarming Strike," p. 76.

85. Weinstein, "Soviet Civil Defense," 1982.

86. John Meersheimer, "Why the Soviets Can't Win Quickly in Central Europe," *International Security*, Summer 1982, pp. 3-39.

87. Lambeth, "Uncertainties," p. 155.

88. A fifth factor identified by Stalin was the quantity of divisions and their armament. See *Ibid.*, p. 156.

89. The amount of space critical of Soviet military morale and discipline increased 15 percent over the 1981 figure. See Table 7 in monthly editions of *Red Star*, translated by the Special Operations Division of the Office of the Joint Chiefs of Staff. This document can be obtained through the Defense Technical Information Center.

90. Otto P. Chaney, "The Soviet Threat to Europe," and Edward Corcoran, "Building a NATO Conventional Defense," both in *The Defense of the West* and also Clayberg, *The Problem of Soviet Vulnerabilities*.

91. Lambeth, *Uncertainties*, pp. 147-149; 157-158. See also Chaney, *Soviet Threat to Europe*, and Clayberg, *The Problems of Soviet Vulnerabilities*.

92. *Ibid.*

93. Viktor Suvorov, *The Liberators: Inside the Soviet Army*, London: Hamish Hamilton, 1981. Also, see Edmund Brunner, Jr., *Soviet Demographic Trends and the Ethnic Composition of Draft Age Males, 1980-1985*, Santa Monica: Rand Corporation, February 1981; S. Enders Wimbush and A. Alexiev, *The Ethnic Factor in the Soviet Armed Forces*, Santa Monica: Rand Corporation, March 1982; and Wimbush and Alexiev, *Soviet Central Asian Soldiers in Afghanistan*, Santa Monica: Rand Corporation, January 1981.

94. Wimbush and Alexiev, *The Ethnic Factor*. Also see Nathan Leites, *What Soviet Commanders Fear from Their Own Forces*, Santa Monica: Rand Corporation, May 1978; Kiril Podrabinek, "An Inside Look at Life in the Soviet Army," *Russia*, No. 3, 1981, p. 11; Alexiev Myagkov, *Inside the KGB*, New Rochelle, New York: Arlington House Publishers, 1976, pp. 86-112; and Richard Gabriel, *The New Red Legions: An Attitude Portrait of the Soviet Soldier*, Westport, Connecticut: Greenwood Press, 1980, pp. 151-182.

95. Lambeth, p. 158.

96. Wimbush and Alexiev, *The Ethnic Factor*; d'Encausse, *Decline of an Empire*, p. 155-164; Marshal of the Soviet Union N. V. Ogarkov, *Vseyda v Gofovnostik Zashchite Otechestva*, Moscow: Military Press of the Ministry of Defense of the USSR, 1982, p. 64.

97. Wimbush and Alexiev, *The Ethnic Factor*, pp. v, vi, 23; Myagkov. See note 94.

98. *Ibid.*

99. John Tagliabue, "4000 East Germans Dispute Official Defense Policy," *The New York Times*, February 15, 1982, p. A3. For a lengthy discussion of the reliability of the Soviet Eastern European allies, see Dale R. Herspring and Ivan Volgyes, "Political Reliability in The East European Warsaw Pact Armies," *Armed Forces in Society*, Winter, 1980, pp. 279-296.

100. Papp, pp. 52-55.
101. For instance, see *Red Star*, Vol. 2, No. 3, 1983, pp. 32-34; "The East-West Conventional Balance in Europe," *The Military Balance 1982/1983*, London: International Institute for Strategic Studies, 1982, p. 131.
102. Lambeth, p. 140.
103. For instance, see Max Eastman, *Stalin's Russia and the Crisis of Socialism*, New York: W. W. Norton, 1940; *Reflections on the Failure of Socialism*, New York: Devin-Adair, 1955.
104. Andrei Amalrik, *Will the Soviet Union Survive Until 1984?* (expanded and revised edition), New York: Harper Colophon Books, 1981. See Bond and Levine for a more positive assessment of the Soviet Union's future prospects.
105. d'Encausse; Eagleburger, p. 1-4.
106. Papp, p. 67. Also, see Myron Rush, "Guns Over Growth in Soviet Policy," *International Security*, Winter 1982/1983, pp. 167-179. Especially see p. 178; Lambeth, p. 165. However, one must also acknowledge that the problems described herein are likely to interact to present the Kremlin with dilemmas which may be the most serious yet.
107. Eagleburger, p. 2.
108. Weinberger.
109. Colin Gray, "Soviet Strategic Vulnerabilities," *Air Force Magazine*, March 1979, p. 64.
110. Weinstein, p. 83; Guertner; Kincade.
111. "How MX Will Transform Nuclear Strategy," *US News and World Report*, April 25, 1983. Also see Hedrick Smith, "Colonel Stirs Questions on MX-Firing Doctrine," *The New York Times*, April 8, 1983, p. D15; Lambeth, p. 153-154.
112. Ye. Rybkin, "The Leninist Concept of War and the Present" (*Kommunist Voorzhennykh Sil*, trans. by US Joint Publications Research Service, JPRS, No. 60667, November 30, 1973, *Translations on US Military Affairs*, No. 987). Also see Lambeth, p. 151.
113. W. Perry Boyd, "The Once and Future Quest: European Arms Control-Issues and Prospects," in *The Defense of the West*, 1983.
114. See note 82.
115. Boyd.
116. Freshbach, 1981, p. 38.
117. Boyd. Also see Todd Starbuck, "China and the Superpower Balance," in *Defense of the West*, 1983.
118. *The Military Balance*, 1982-1983, London: International Institute for Strategic Studies, p. 14.
119. Rush.
120. See Richard Halloran, "CIA Analysts Now Said to Find US Overstated Soviet Arms Rise," *The New York Times*, March 5, 1983.
121. Robert Kennedy, "The Problems and Prospects of START," in *The Defense of the West*, 1983.
122. Michael Kaufman, "Soviet Groups Losing Ground at Third World Conference," *The New York Times*, March 11, 1983, p. 1.; Robert J. Lilley, "Constraints on Superpower Intervention in Sub-Saharan Africa," in *Parameters*, September 1982, pp. 63-75.

123. In "Who Will Determine Africa's Destiny," *AEI Foreign Policy and Defense Review*, Vol. 1, No. 1, 1979, Gen. Olusegun Obasanjo, former Nigerian head of state noted, pp. 72-73:

In the context of foreign intervention in Africa, there are three parties involved. There are the Soviets and other socialist countries, the Western powers, and we the Africans. If the interests of Africa are to be safeguarded, there are certain considerations which each of the parties must constantly bear in mind. To the Soviets and their friends, I should like to say that . . . they should not overstay their welcome. Africa is not about to throw off one colonial yoke for another. Rather, they should hasten the political, economic, and military capability of their African friends to stand on their own. . . .

124. The Soviets expect to reduce their hard currency outflow with the sale of natural gas to Western Europe. The extent of their earnings will depend upon the stability of the price of natural gas and the Europeans' renegotiation rights in the event of a substantial price change, a change in consumption levels, and so forth.

125. Drusilla Brown, "Psychological Operations (PSYOP): United States-Soviet Union," *Military Intelligence*, October-December 1982, p. 46-49.

126. Eagleburger, p. 2.

127. *Ibid.*, p. 4.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This memorandum examines Soviet weaknesses and vulnerabilities. It is the author's opinion that there can be no doubt that the Soviet Union is and will continue to be the principal adversary of and threat to the United States. The massive, unrelenting, and ominous buildup of Soviet conventional and nuclear forces undermines deterrence, destabilizes international security and, there- fore, cannot be viewed by US political leaders and military planners with equanimity.		

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However, it is important to recognize that deterrence is a state of mind that must incorporate more than quantitative force balance and asymmetries. Indeed, the calculus of deterrence also depends upon the political, economic and military weaknesses and vulnerabilities of each superpower. These are important because they set limits to the options a state can pursue in hostilities and what it can expect to achieve. A state's vulnerabilities also provide a framework which can guide its opponent in fashioning effective political and military policies to deter aggression in the first place.

The body of this paper examines various economic, political, demographic and military vulnerabilities and weaknesses of the Soviet Union which affect its domestic and international priorities and potentially constrain its options vis-a-vis the United States. Vulnerability analysis is an important element of the deterrence calculus. However, one must avoid the error of inferring from the Soviet Union's numerous and debilitating problems that it will not continue to threaten the United States. Furthermore, Soviet vulnerabilities in no way reduce the necessity for continued American vigilance of the Soviet threat or the implementation of the crucial defense initiatives undertaken by the Reagan administration to maintain the credibility of America's deterrent.

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