

THE U.S.-SOVIET LONG-TERM MILITARY COMPETITION VOLUME I - CONCEPTS

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This three-volume report examines the nature of the U.S.-Soviet long-term military competition and sets forth improved means for developing and implementing strategies for this competition. This research encompasses broad national strategy as well as specific military missions and is directed at planning concepts and methods, rather than at devising specific strategies. Volume I describes the rationale for continuing to compete with the USSR in a time of reduced tensions with the USSR and defines planning concepts that are essential for strategy development. This volume then reviews U.S. and Soviet competitive actions. It concludes with a discussion of Soviet economic, technological, and operational planning weaknesses and the implications for the role of technology in U.S. competition planning.				
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SUMMARY

Volume I describes planning concepts that are needed for development of U.S. competition strategies, illustrates these concepts with examples of U.S. and Soviet competition actions, and develops an approach to technology applications that can exploit Soviet economic, technological, and operational planning weaknesses.

During the last few years, East-West tensions have virtually disappeared as Mikhail Gorbachev seeks to make major political, economic, and social reforms in the USSR. The Soviet Union appears to be retrenching in the military competition, at least for a time, and the form and venue of the competition is shifting, with public diplomacy, arms control, and R&D elements playing a stronger role relative to weapon system production, forward-deployment of troops, and large active-duty forces.

The Soviet threat is seriously reduced compared to that at the height of the cold war and the USSR would need many years, if not decades, to pose a threat of that magnitude again. But the Soviet Union is still a major military competitor of the United States. Moreover, even as a reduced threat the Soviet Union is capable of military actions that are contrary to U.S. interests and could become a more powerful threat in the future.

Chapter 1 discusses why competition planning is more important than ever for the United States, coming to three conclusions:

- The United States should maintain an effective competitive posture toward the Soviet Union, emphasizing research and development and arms control. Doing so does not necessarily mean large overseas forces, high defense spending, or jeopardizing improved relations with the USSR. But keeping the

Soviets aware of U.S. strength as a military competitor will promote cooperative behavior. Further, maintaining the U.S. competitive posture will keep pace with the Soviets in areas where they are still competing (e.g., strategic forces, research on advanced technology weapons, and perhaps naval forces) and will hedge against a resurgence of the Soviet threat.

- The United States should also protect its competitive position in the multipolar security environment of the 1990s and beyond, where a U.S. balance of power strategy probably will supplant containment of communist states. America needs to be concerned with states that now compete militarily against its interests (e.g., North Korea), with those that in the future could become military competitors with the United States (e.g., India), with those that can affect the U.S.-Soviet military competition (e.g., Germany), and with military competitions between other countries like the Arab states and Israel that could affect U.S. interests.
- Explicit U.S. competition planning is needed in order to realize these objectives in a period of shrinking defense resources and security problems that are becoming more complex and assuming a longer-term character.

The U.S.-Soviet competition fundamentally is a contest for power and influence in world affairs. The competition has political, ideological, economic, technological, and military dimensions, but currently the military dimension dominates the competition. Through the 1960s, the U.S.-Soviet competition was primarily a two-sided vying for power. Now, however, this contest is played out in a multipolar world, as the postwar alliances on both sides are wearing thin and new challenges from elsewhere are confronting the United States and the USSR. Chapter 2 examines the nature of the military competition and its relation with Western security.

The essential concept in the peacetime military competition is to safeguard or restore U.S. and allied military

advantages over the USSR by building on U.S. and allied strengths and exploiting Soviet weaknesses in more explicit, systematic, and institutionalized ways than in the past. Competing effectively involves looking forward several moves, making past Soviet military investments obsolete, and influencing future Soviet military investments in ways that improve the balance of power and enhance stability. This is to be done through a variety of means, including technology developments, weapon system developments and production, improvements in force deployments and support, changes to operational concepts for force employment, public diplomacy, and arms control negotiations.

Broad U.S. objectives in competition planning are the same as in more traditional planning approaches: deterrence, reassurance of allies, peaceful resolution of crises, and defense of U.S. and allied territory and interests should deterrence fail. In addition to supporting these traditional objectives, U.S. competition planning should use available DoD resources to improve both the military balance and America's military competitive position, to steer the competition in less threatening directions, and to ensure that the current extended era of peace continues. This entails explicit consideration of how the USSR plans its force posture in order to influence that planning; use of a planning horizon of two or more decades to consider U.S. and Soviet moves and countermoves; and evaluation of alternative military investments in terms of U.S. and Soviet strengths and weaknesses.

Chapter 3 discusses key concepts for U.S. planners to use in support of competition strategy development. These concepts are used throughout this report to help describe the military competition.

The totality of the U.S.-Soviet military competition is too large and complicated to be addressed as a whole. One key

planning concept is to break the competition down into more manageable subareas. We favor a predominantly regional approach to defining subareas of the military competition (e.g., the intercontinental region, Europe, East Asia, and the Middle East/Southwest Asian area). At least one "business area" (to use a term from corporate strategic planning) should, however, be included among the subareas of the competition: technology, which is a particularly important area of military competition in the 1990s.

Within each subarea, several concepts are important for competition planning and analysis:

- Prizes and goals: For what ultimate objectives is each side competing? What are the more immediate competition goals that each side is pursuing as they seek these ultimate prizes?
- Rivals and other actors: Who are the contending parties? What other parties affect the way the U.S.-Soviet military competition is carried out?
- Means: Through what specific means do the United States and the Soviet Union compete militarily?
- Rules and referees: What determines "legitimate" behavior in the peacetime military competition? What mechanisms enforce these behavioral norms?
- Centrality of moves and countermoves: How best to think about the dynamic interactions of the contending parties?
- Time horizon: What is the proper time horizon to use in military competition planning?

Determining competition goals and strategies -- i.e., where one should try to move in the military competition -- requires an understanding of what the current state of the competition is and what future states are feasible, which states the United States prefers, and who is ahead in the current state.

Therefore, chapter 3 concludes by developing three concepts to structure this understanding:

- States of the competition: How does one describe where the military competition stands today or what it might be like in the future? Here we develop the concept of describing the state of the military competition in terms of the military balance, the competitive positions of each side, and the state of achievement of more traditional U.S. objectives such as deterrence.
- Preferences for states: Which states are preferred by each side? How are preferences determined?
- Score: How does one assess which side is ahead in the military competition? We introduce the concepts of competitive advantage, competitive leverage, and competitive initiative to assist in determining who is ahead in various subareas of the competition.

Chapter 4 illustrates these planning concepts by applying them to the intercontinental, or strategic forces, subarea of the U.S.-Soviet military competition.

Chapter 5 further illustrates these planning concepts with historical examples from the U.S.-Soviet military competition. The chapter summarizes U.S. and Soviet strengths and weaknesses and describes examples of ways that each side has invested resources to convert strengths and weaknesses to actual competitive advantages (e.g., the Tomahawk Land-Attack Missile program, the B-2 bomber, Soviet submarine quieting, Soviet ICBM improvements, and Soviet Operational Maneuver Groups). Also important are U.S. and Soviet actions to improve their competitive positions (e.g., U.S. stealth R&D, the Strategic Defense Initiative, Soviet ballistic missile defense R&D and deployments, and increased Soviet access to airspace and bases outside the USSR).

To assist further in understanding competition planning concepts, chapter 5 goes on to discuss several examples of U.S. and Soviet competitive successes and failures:

- U.S. successes: ASW programs in the 1960s and 1970s, land-attack cruise missiles, tactical air capabilities, nuclear-powered submarine investments, theater nuclear forces in the 1960s and 1970s, the B-52 program, and development of satellite reconnaissance capabilities.
- U.S. failures: failure to understand until the late 1970s that the Soviet Union did not adhere to the doctrine of mutual assured destruction, failure to continue in the 1970s and 1980s to make strategic targets in the United States difficult for the USSR to attack, failure to reduce NATO's dependence on theater nuclear forces in the 1970s, and failure to make the sustained investments in armored force infrastructure necessary to challenge the Soviet lead in this area.
- Soviet successes: the combined arms ground and air force buildup in Europe, the reversal of the theater nuclear balance in Europe in the 1970s, armor and anti-armor programs, the anticarrier warfare program, the sustained Soviet program to make strategic targets in the USSR difficult for the United States to attack, the partitioning of Germany after World War II, and the high rate of military investment in the 1970s (a military success, but ultimately an economic failure).
- Soviet failures: the inability to develop effective ASW capabilities against U.S. SSBNs despite a large investment, the continued occupation of the Japanese northern territories (a political failure), the efforts to prevent U.S. deployment of Pershing II and GLCM in Europe, and the debilitating economic effects of high military spending.

Our review of U.S. and Soviet competitive successes and failures provides several lessons for competition planners. Perhaps the most important lesson is that one cannot achieve permanent advantages in the military competition. It takes continued planning and actions to sustain advantages once they are

gained. A related lesson is the importance of watching closely what the adversary is doing. Systematic observation of Soviet actions is needed, with analysis and feedback to U.S. competition planners. Further, it is important to examine the competitive environment periodically, to understand how trends outside the U.S.-Soviet military competition can affect U.S. and Soviet advantages and positions. Finally, policy makers must ensure that competition goals and strategies are consistent with the resources likely to be available to implement them.

Chapter 6 builds on these examples and lessons by analyzing Soviet economic, technological, and operational planning weaknesses, identifying connections among these weaknesses that the United States can exploit, and developing implications for U.S. applications of advanced technology in the military competition.

Historically, the Soviet Union has obtained most of its new technology from Western sources rather than from internal developments; this dependence on Western technology is as strong today as it ever was. This means that Soviet technology levels inherently lag behind those of the West in most areas. There are, however, important exceptions to this general finding, especially in technology areas that have high national priority for the USSR, such as some weapons programs and the space program.

Several factors account for the Soviet lag in technology:

- The lack of incentives for technological innovation in the centrally directed Soviet political, economic, and social system.
- The political and organizational barriers to diffusion of technology in the USSR.
- The risk-adverse approach of Soviet design bureaus to weapon system development.

- Western barriers to transfer of critical military technologies to the Soviet bloc.

Despite these limitations, the Soviet Union has built a large, modern military force that has gained superpower status for the USSR and that has seriously challenged the United States in the military competition. The USSR has been able to accomplish this feat by devoting a much higher percentage of its GNP to military spending than do Western nations; by according high priority to the military in allocating other economic resources; by tailoring its military research and development, production, and operational planning to achieve Soviet competition goals within the constraints of Soviet technology, industrial plant, and manpower; and by a large, centrally directed program to acquire Western technology to support Soviet military programs.

Nevertheless, the USSR is falling behind the West in most of the technologies that appear to be critical for the military competition in the 1990s. Earlier Soviet successes in the military competition were based on their strengths in heavy industries, complemented by adroit use of technology derived from the West. In some cases, the United States contributed to Soviet successes by failing to take full competitive advantage of Soviet limitations. But the military competition appears to be shifting into areas where heavy industry is less of an advantage and technologies of information, surveillance, signature control, and smart weapons are increasingly important.

The United States and its allies are strong in these areas and the Soviet Union is weak. Serious and systemic Soviet deficiencies in computers and microelectronics are a key limitation that affects many other areas of Soviet development and production of advanced weapons systems. The poor state of Soviet computer and microelectronics technology also retards their efforts to bring the

civilian economy up to Western standards. Gorbachev and other Soviet leaders recognize these problems. They are trying to reform the Soviet system to substantially upgrade its technology levels and economic performance without abandoning the fundamental precepts of Marxism and Leninism, and without losing political control over the country in the process. Whether they can accomplish this goal remains to be seen.

It cannot be assumed that a shift of the military competition into areas of advanced technology will automatically convey major advantages on the United States. The Soviet Union is trying to use arms control and public diplomacy to channel the competition in directions that favor the USSR, so trends in the competition could change. Even if the competitive environment continues to move in the direction of advanced technology, the combination of even modest improvements in the Soviet economic system, Soviet spotlighting of weapons developments for high resource priority, and relaxed Western restrictions on technology transfer in a time of declining threat perceptions may allow the Soviet Union to be competitive on an advanced technology playing field.

This analysis suggests that the general U.S. approach to military competition with the USSR in the 1990s should be through a "leapfrog" strategy -- described in chapter 7 -- that works within the tight DoD budget constraints that are likely to prevail over the next decade and that takes advantage of the breathing space that Gorbachev is achieving in this competition. In a leapfrog approach, the United States would forego a certain amount of near-term force modernization and perhaps even readiness, but would invest heavily in military research and development (with limited production) in order to be in a strong position if the Soviet Union successfully upgraded its technology and production bases and heightened the pace of the military competition in the

early twenty-first century. This approach to competition strategies would also serve to discourage the Soviet Union from actually returning to increased military competition by making clear that the United States can and will sustain its advantages and superior competitive position in the technologies that are important for modern combat operations. Further, it would also serve U.S. interests in future military competition with lesser powers.

Within this general leapfrog approach, the United States should plan skillfully and with vision for applications of advanced technology in the military competition of the 1990s. These applications should be selected to exploit Soviet economic, technological, and operational planning weaknesses, following these criteria:

- Apply technology in ways that influence Soviet views about the nature of future wars, with the goal of causing the Soviets to conclude that critical missions are becoming more difficult for them to carry out.
- Pose fundamental threats to the Soviet ability to maintain control over military situations in wartime.
- Emphasize combinations of technologies and military operational concepts that require Soviet counters to draw extensively upon advanced technologies that their system is especially poor in fostering (e.g., computers or microelectronics).
- Pursue technology applications that impose delays on Soviet counters by, for example, requiring them to enter into new weapons production or to develop new production processes, rather than to improve or scale up existing production means.
- Continue to seek restrictions on transfer of technologies to the Soviet Union that would materially enhance the Soviet position in the military competition in the 1990s.

Following these criteria would probably result in strong U.S. competitive emphasis in the 1990s in stealth technology; the technologies emerging from the SDI program; the combination of advanced surveillance technologies and smart weapons that underpins the Follow-On Forces Attack program; highly accurate, long-range cruise missiles; advanced conventional munitions that have tactical effects comparable to those of nuclear weapons; and laser and other directed energy weapons.

PREFACE

The term "competition" is commonly used to characterize the relation between the United States and the Soviet Union. Despite the recognition that the two superpowers compete in all the major dimensions of international relations -- political, military, economic, technological, and ideological -- there has been relatively little research on the nature of this competition and on systematic ways for the United States to improve its competitive position in this complex vying for power and influence.

There are many examples of effective U.S. competitive actions, but little attention has been given to explicit planning processes and strategies to help the U.S. Government compete more effectively with the USSR over a long period. In the late 1940s and early 1950s there were discussions of broad national strategies for the competition, especially at the RAND Corporation. But this line of questioning gradually died out by the mid-1950s. In 1969-1970, Andrew Marshall worked on a framework for analyzing the U.S.-Soviet long-term competition, concentrating on strategic forces. Under Marshall's leadership, the Department of Defense began in the mid-1970s to carry out studies of more general strategies for the military competition, drawing on business concepts for strategic planning. In 1986, the Secretary of Defense established the Competitive Strategies Initiative, which addresses specific military missions or tasks.

As part of the DoD examination of how to compete more effectively with the Soviet Union, Science Applications International Corporation (SAIC) has been under contract since 1985 to carry out research on the nature of the U.S.-Soviet long-term military competition and on improved means for developing and implementing strategies for this competition. While the focus of our research is on the military dimension of the competition, it

also takes into account the political, economic, technological, and ideological dimensions. Moreover, our effort encompasses broad national strategy as well as specific military missions or tasks and is directed at planning concepts and methods, rather than at devising specific strategies. Thus, the SAIC work has sought to improve the context and methods for DoD competitive strategies development, but does not duplicate planning efforts being carried out by the Department of Defense.

SAIC's research on the U.S.-Soviet long-term military competition was funded and guided by the Director of Net Assessment in the Office of the Secretary of Defense. The contract was administered by the Defense Nuclear Agency.

The results of SAIC's research are contained in three volumes:

- Volume I describes the general nature of the U.S.-Soviet long-term military competition, including concepts useful for understanding what is important in this competition and for developing strategies to compete effectively.
- Volume II describes a structured process for devising and implementing strategies for the long-term military competition, evaluates current analysis tools in terms of their adequacy to support competitive strategy development, and recommends improvements.
- Volume III contains case studies and other background papers that supplement volumes I and II.

Although these three volumes collectively describe the SAIC research, each is designed to be read independently of the others.

Dr. J. J. Martin was the Principal Investigator for SAIC's research on the U.S.-Soviet long-term military competition,

and is the primary author of this volume. Gregory Weaver drafted an earlier version of parts of volume I. Christopher Makins was a contributing author of chapter 2.

Conversion factors for U.S. Customary to metric (SI) units of measurement

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angstrom	1.000 000 X E -10	meters (m)
atmosphere (normal)	1.013 25 X E +2	kilo pascal (kPa)
bar	1.000 000 X E +2	kilo pascal (kPa)
barn	1.000 000 X E -28	meter ² (m ²)
British thermal unit (thermochemical)	1.054 350 X E +3	joule (J)
calorie (thermochemical)	4.184 000	joule (J)
cal (thermochemical)/cm ²	4.184 000 X E -2	mega joule/m ² (MJ/m ²)
curie	3.700 000 X E +1	giga becquerel (GBq)*
degree (angle)	1.745 328 X E -2	radian (rad)
degree Fahrenheit	$T_K = (T_F + 459.67)/1.8$	degree kelvin (K)
electron volt	1.602 18 X E -19	joule (J)
erg	1.000 000 X E -7	joule (J)
erg/second	1.000 000 X E -7	watt (W)
foot	3.048 000 X E -1	meter (m)
foot-pound-force	1.355 818	joule (J)
gallon (U.S. liquid)	3.785 412 X E -3	meter ³ (m ³)
inch	2.540 000 X E -2	meter (m)
jerk	1.000 000 X E +9	joule (J)
joule/kilogram (J/kg) (radiation dose absorbed)	1.000 000	Gray (Gy)
kilotons	4.183	terajoules
kip (100 lbf)	4.448 222 X E +3	newton (N)
kip/inch ² (ksi)	6.894 757 X E +3	kilo pascal (kPa)
knap	1.000 000 X E +3	newton-second/m ² (N-s/m ²)
micron	1.000 000 X E -6	meter (m)
mil	2.540 000 X E -5	meter (m)
mile (international)	1.609 344 X E +3	meter (m)
ounce	2.834 952 X E -2	kilogram (kg)
pound-force (lbf evoldupois)	4.448 222	newton (N)
pound-force inch	1.129 848 X E -1	newton-meter (N-m)
pound-force/inch	1.751 268 X E +2	newton/meter (N/m)
pound-force/foot ²	4.788 026 X E -2	kilo pascal (kPa)
pound-force/inch ² (psi)	6.894 757	kilo pascal (kPa)
pound-mass (lbm evoldupois)	4.535 924 X E -1	kilogram (kg)
pound-mass-foot ² (moment of inertia)	4.214 011 X E -2	kilogram-meter ² (kg-m ²)
pound-mass/foot ³	1.601 846 X E +1	kilogram-meter ³ (kg/m ³)
rad (radiation dose absorbed)	1.000 000 X E -2	Gray (Gy)**
roentgen	2.579 780 X E -4	coulomb/kilogram (C/kg)
shake	1.000 000 X E -8	second (s)
slug	1.459 390 X E +1	kilogram (kg)
torr (mm Hg, 0° C)	1.333 22 X E -1	kilo pascal (kPa)

* The becquerel (Bq) is the SI unit of radioactivity; 1 Bq = 1 event/s.

** The Gray (Gy) is the SI unit of absorbed radiation.

TABLE OF CONTENTS

Chapter	Page
SUMMARY.....	iii
PREFACE.....	xv
CONVERSION TABLE.....	xviii
LIST OF FIGURES.....	xxii
LIST OF TABLES.....	xxiii
1. IS THE MILITARY COMPETITION OVER?.....	1
1.1 The Changing Security Environment.....	1
1.2 Maintaining an Effective Competitive Posture Toward the USSR.....	4
1.2.1 Changing Nature of Military Competition with the USSR.....	5
1.2.2 Alternative Soviet Futures.....	10
1.2.3 Maintaining the U.S. Competitive Posture.....	15
1.3 Protecting the U.S. Competitive Position in the Multipolar World.....	18
1.4 U.S. Competition Planning Needed More Than Ever.....	20
2. PEACETIME MILITARY COMPETITION: MOVING BEYOND TRADITIONAL PLANNING APPROACHES.....	27
2.1 Nature of the Military Competition.....	27
2.2 The Competitive Environment.....	32
2.2.1 The Soviet Union.....	33
2.2.2 Non-U.S. Actors.....	34
2.2.3 Other U.S. Actors.....	40
2.3 Hallmarks of Competition Strategies.....	41
3. KEY COMPETITION PLANNING CONCEPTS.....	45
3.1 Breaking the Military Competition Down into Planning Subareas.....	46
3.2 Structure of Military Competition.....	53
3.2.1 Prizes and Competition Goals.....	54
3.2.2 Rivals and Other Influential Actors...	55
3.2.3 Means through Which the Peacetime Competition Is Exercised.....	57
3.2.4 Rules and Referees.....	58
3.2.5 Centrality of Moves and Countermoves..	59
3.2.6 Time Horizon for Planning.....	65

TABLE OF CONTENTS (CONTINUED)

Chapter		Page
3.3	States of the Military Competition.....	66
	3.3.1 Describing States of the Competition..	67
	3.3.2 Preferences for States.....	71
	3.3.3 Scoring the Military Competition.....	74
3.4	Concepts Needing Methodological Research.....	78
4.	SAMPLE APPLICATION OF PLANNING CONCEPTS: INTERCONTINENTAL SUBAREA.....	83
	4.1 Prizes at Stake in the Intercontinental Subarea.....	83
	4.2 Competition Goals.....	85
	4.3 Key Actors in the Intercontinental Subarea of Competition.....	87
	4.4 Important Competitive Instruments in the Intercontinental Subarea.....	89
	4.5 Trends in the Strategic Balance.....	91
	4.6 Competitive Positions in the Intercontinental Subarea.....	94
	4.7 Issues for U.S. Strategy Development in the Intercontinental Subarea.....	96
5.	INFLUENCING THE STRATEGIES AND ACTIONS OF THE ADVERSARY.....	99
	5.1 Strengths, Weaknesses, and Competitive Advantage.....	99
	5.1.1 Enduring and Temporary Strengths and Weaknesses.....	99
	5.1.2 Actions to Take Better Advantage of Strengths and Weaknesses.....	106
	5.2 Actions to Improve Competitive Positions.....	111
	5.3 U.S. Competitive Successes and Failures.....	121
	5.4 Soviet Competitive Successes and Failures....	131
	5.5 Lessons For U.S. Competition Planners.....	140
6.	SOVIET ECONOMIC, TECHNOLOGICAL, AND OPERATIONAL PLANNING WEAKNESSES.....	147
	6.1 Soviet Economic Weaknesses.....	148
	6.1.1 Systemic Economic Problems.....	148
	6.1.2 Military Sector of the Soviet Economy.	151
	6.1.3 Gorbachev's Reforms.....	154

TABLE OF CONTENTS (CONCLUDED)

Chapter	Page
6.2 Soviet Technological Weaknesses.....	158
6.2.1 Trends in Soviet Technology.....	159
6.2.2 Soviet Gains in the Military Competition despite Technological Limitations.....	168
6.3 Soviet Operational Planning Weaknesses.....	175
7. IMPLICATIONS FOR U.S. COMPETITION STRATEGIES.....	183
GLOSSARY.....	193

LIST OF FIGURES

Figure

1. Soviet Response Means.....

LIST OF TABLES

Table	Page
1. Soviet Force Levels.....	7
2. Three Fields of U.S.-Soviet Competition.....	35
3. Alternative Approaches to Subareas of the U.S.-Soviet Military Competition.....	48
4. Subareas of the U.S.-Soviet Military Competition.....	50
5. Subareas of the Competition, Unified and Specified Commands, and the Theaters of Military Operations.....	51
6. Soviet Response Times to U.S. Actions.....	61
7. U.S. and Soviet Enduring Strengths and Weaknesses.....	100
8. U.S. and Soviet Temporary Strengths and Weaknesses.....	103
9. Notable U.S. Competition Successes and Failures.....	122
10. Notable Soviet Competition Successes and Failures.....	132
11. Technological Comparison of Selected Soviet and Western Industries (1955-1975).....	161
12. Comparison of Soviet and U.S. Applied Science (Mid-to- Late 1980s).....	165

1. IS THE MILITARY COMPETITION OVER?

The image of competition frequently has been used to characterize the postwar relationship of the United States and the Soviet Union, to the point where, until recently, it has been a truism among journalists and academics. Some of these authors simply took note of the ongoing competition; others disapproved of it and urged diplomatic initiatives or arms control negotiations to reduce it; a few recommended ways for the United States to gain advantages; and recently it is being asserted that the Soviets have dropped out of the global competition with America, that the contest is over. This chapter examines the question of whether military competition should concern the United States in the security environment of the 1990s.

1.1 THE CHANGING SECURITY ENVIRONMENT

There always has been an element of cooperation between the United States and the Soviet Union in the postwar competition. Now, at the start of the final decade of the twentieth century, events present the opportunity to resolve the problems of two world wars and over four decades of East-West tensions. The profound economic, political, and social difficulties of the USSR, Gorbachev's reform policies, the dramatic changes in Eastern Europe, and the great reduction in East-West tensions mean that U.S.-Soviet military competition has markedly diminished.

There is a pronounced tendency in the academic literature and the media to extrapolate these trends further and to conclude that the military competition is in fact over. Soviet initiation of the unilateral force reductions promised by Gorbachev, internal discussions of a shift in Soviet military doctrine toward defensive sufficiency, progress in the Conventional Forces in Europe (CFE) arms control negotiations, and the likelihood of bringing the

Strategic Arms Reduction Talks (START) to a successful conclusion are all somehow translated into accomplished fact, with the conclusion that U.S.-Soviet relations are almost certain to continue to evolve in the direction of cooperation, provided only that the United States does nothing to jeopardize this trend.

Indeed, even some U.S. government officials have concluded that the Soviet military threat has greatly diminished and that reform in the Soviet Union is largely irreversible. The Director of Central Intelligence testified before Congress that even a major change in Soviet leaders and policies would be unlikely to return the Soviet power structure to the threat it once was. The Joint Chiefs of Staff and the Defense Intelligence Agency reportedly agree with this assessment.¹

The Soviet threat is seriously reduced compared to that at the height of the cold war and the USSR would need many years, if not decades, to pose a threat of that magnitude once again. But this does not preclude Soviet military actions that are contrary to U.S. interests, even in the near future. It does not mean the United States can forgo concerns about major increases in the Soviet threat over the next two decades. And it does not mean that military competition is of no interest to the United States.

To the contrary, we come to the following conclusions, based on arguments developed below:

- The United States should maintain an effective competitive posture toward the Soviet Union, emphasizing research and development (R&D) and arms control means for competing. Doing so does not necessarily mean large overseas forces, high defense spending, or jeopardizing improved relations with the USSR, although it does involve at least limited production of advanced systems to prove technologies and sustain the military production base. Keeping the Soviets aware of U.S. strength as a military competitor will promote cooperative behavior. And

maintaining the U. S. competitive posture will keep pace with the Soviets in areas where they still appear to be competing (e.g., strategic forces, research on advanced technology weapons, and perhaps naval forces) and will hedge against a resurgence of the Soviet threat.

- The United States should also protect its competitive position in the multipolar security environment of the 1990s and beyond, where a balance of power strategy probably will supplant containment of communist states. America needs to be concerned with states that are now military competitors (e.g., North Korea), with those that in the future could become military competitors with the United States (e.g., India), with those that can affect the U.S.-Soviet competition (e.g., Germany), and with military competitions between other countries like the Arab states and Israel that could affect U.S. interests.
- Explicit U.S. competition planning is needed now more than ever in order to realize these objectives in a period of shrinking defense resources and of security problems that are becoming more complex and assuming a longer-term character.

The distinction between threats and competitors is important in connection with these conclusions, since we are arguing that, while the Soviet threat is declining, the USSR is still a military competitor and that some nations which do not threaten the United States now could choose to become competitors in the future. In order to be a threat to the United States, a nation must have interests opposed to those of America and its allies, must have a current military capability to endanger U.S. interests, and must have the willingness to use military force for this purpose if the circumstances are appropriate. To be a military competitor with the United States, a nation must also have opposed interests. But its military capability to jeopardize U.S. interests may currently exist or may only be emerging. Similarly, the willingness to use this force in wars that affect U.S. interests may not currently exist, although there must be the clear potential for the country to use its military capability in

peacetime in ways that are contrary to U.S. interests in order to qualify as a competitor, as well as the future possibility that it would be willing to use its forces in wars that adversely affect the United States.

Thus, competitor is the more inclusive concept: a military competitor can also be a current threat, like the Soviet Union, or it may not be a current threat, like the People's Republic of China. The difference lies in both the military ability to harm U.S. interests and in the intent to use force against America or its allies. The United States is concerned about current competitors or countries that may choose to compete in the future to the extent that they may become actual threats; effective U.S. competition with such adversaries can, in fact, keep them from becoming threats.

1.2 MAINTAINING AN EFFECTIVE COMPETITIVE POSTURE TOWARD THE USSR

Much of the rationale for the continued importance of military competition for U.S. security interests has to do with the Soviet Union.

The key question is whether the Soviet Union really is on a path along which at some point it gives up the military competition with the United States and its allies or is merely seeking a breathing space in the competition. The evidence at this stage is conflicting, suggesting that the USSR is seeking a breathing space while continuing to compete militarily with the United States, but in different ways and at lower intensity than in the past. The Soviets have let go of Eastern Europe and show many signs of reducing the size of their armed forces, but even after the CFE and START agreements are implemented the Soviet Union will have formidable military forces, and it continues to pursue advanced weapons research and development. The answer may well be

that, at this stage, the Soviet leadership itself has not determined the degree to which it wants to continue to compete militarily with the United States.

Perhaps the USSR is on a course that will lead to permanently cooperative relations with the West. Perhaps Soviet leaders are currently pursuing this course, but will find themselves compelled in the future by domestic conditions or by the state of the multipolar security environment to adopt policies that increase the military competition with the United States. They may find that circumstances demand a mixture of cooperative and antagonistic relations with the West. Or perhaps the current leaders will be replaced by Slavic nationalists or other authoritarians who will more actively pursue the military competition. It may be that the Soviets are not on a track to abandoning the military competition, but are seeking to regulate and direct it in order to make it more predictable for their planners. Yet another possibility is that the current leaders are following a breathing-space strategy, forsaking immediate competitive advantages in order to improve the Soviet economy, lull the United States into a state of substantially reduced competitive activity, gain greater access to Western technology, and emerge at some time in the future in a superior competitive position to that of the United States. Given these possibilities and the record of Soviet return to greater competition with and hostility toward the West after periods of accommodation in the 1920s and the 1950s, we cannot conclude that the USSR has ceased competing. Nevertheless, changes are taking place.

1.2.1 Changing Nature of Military Competition with the USSR

While there is considerable uncertainty about whether the USSR will cease competing in the future, it is clear that the pace of the military competition has slowed markedly and that its

nature is changing. The political, economic, and ethnic problems of the USSR seriously undercut its ability to compete at high intensity with the West, and this is likely to remain so for some time to come. The movement of Eastern Europe out of the Soviet camp seems virtually irreversible and materially increases the difficulty of a Soviet invasion of Western Europe. Moreover, several factors are reducing the level and pace of U.S. competition actions, most notably the rising pressures to finally reap a "peace dividend" and to encourage the safe passage of the USSR through its sea of troubles to become a cooperative state that is fully integrated into the modern world.

The U.S.-Soviet military competition already is concentrated more heavily on arms control, public diplomacy, and R&D programs than on large active-duty forces, forward deployment of troops, and production of new weapon systems. The competition is still active in the areas of intercontinental forces, strategic defenses, military uses of space, and research on advanced technology weapons; it is slackening in the areas of Europe, security assistance, and other forms of support in the Third World.² These trends in the competition are likely to continue for the next several years, and perhaps longer. The competition may moderate even further by the mid-1990s.

One reason for uncertainty about the pace of the military competition in the future is that, even after conclusion of CFE and START, the Soviet Union will have a formidable military force, as summarized in Table 1. Should Soviet leaders choose to increase the military competition, this force will provide an important means for doing so.

Table 1. Soviet global general purpose force levels before and after CFE agreement.

	AFTER CFE	
	BEFORE CFE (1989)	UNDER NATO PROPOSAL ^a UNDER WTO PROPOSAL ^b
TANKS	53,000	32,000 36,000
ARMORED TROOP CARRIERS	65,000	35,000 41,000
ARTILLERY	53,000	39,000 45,000
COMBAT AIRCRAFT	9,300 ^c	5,600 8,700

a. NATO's CFE proposal includes a "sufficiency rule" that would limit the forces of any one nation to no more than 30 percent of the total allowed all nations in a category of equipment.

b. WTO's CFE proposal sets the sufficiency rule percentage at 35-40 percent. These figures reflect potential Soviet forces at the 40 percent level.

c. Includes fighter-interceptors for strategic defense and training aircraft.

Soviet strategic force levels before and after START agreement.

	BEFORE START (1988)	CEILINGS AFTER START ^a
STRATEGIC NUCLEAR DELIVERY SYSTEMS	2,500	1,600
DEPLOYED NUCLEAR WARHEADS	10,800	6,000
BALLISTIC MISSILE RVs	6,900	4,900
HEAVY ICBM RVs	3,080	1,540

a. Note that the 6,000 cap on deployed nuclear warheads counts only ballistic missile warheads at a one-to-one rate. Bomber warheads are discounted, with two ALCMs counting as one warhead and sixteen gravity bombs counting as one warhead. A legal Soviet START force could reach as high as 9,900 nuclear warheads.

Another reason for uncertainty is the change taking place in Soviet military doctrine. In a major departure from the offensively oriented approach to military operations that characterized the Red Army for much of the postwar period, the Soviet Union has announced a shift to a defensive doctrine. What this means in detail, however, is far from clear. Soviet leaders and staffs are involved in what may be a protracted process of elaborating the concept of defensive sufficiency. It is possible that this concept (and the acceptance by the Soviet military of numerical parity in the CFE negotiations) reflects changing perceptions about the nature of a future war in Europe rather than a fundamental change in Soviet military objectives in such a war.³ In particular, the Soviets may see force quality, mobility, and the massing of precise, long-range conventional fires as replacing to some extent massed troops on the ground. In this case, the loss of Eastern Europe may not be an insurmountable barrier to future Soviet threats to Western Europe.

Further, it is not clear whether, in the context of advanced technology weaponry, the Soviet concept of defensive sufficiency is really analogous to NATO's doctrine of defending one's territory without offensive operations on the opponent's soil or whether the doctrine of "defensive" operations would be used to mask Soviet capabilities for an invasion, to lull the West into reducing its military capabilities and readiness. It would, therefore, be incorrect to conclude that this doctrinal shift means the Soviet Union has given up the military competition. Rather, it would appear, the Soviet military is seeking to develop a new doctrine around which to build future Soviet forces.⁴ Whether this effort will be tempered by the course of reform in the USSR remains to be seen.

Despite these uncertainties, events appear to be imposing change on the paradigm underlying the U.S.-Soviet military balance,

change that will affect the military competition. Both the United States and the Soviet Union are moving in the direction of needing more time to prepare for large-scale military operations, in the future perhaps even years. Thus, the military paradigm is beginning to move away from one of high readiness in forward-deployed forces to one of mobilization. This means that less-publicly visible components of the military balance such as naval forces, reserves, strategic mobility, technology bases, industrial bases, and mobilization capabilities are becoming more important in the military competition, with forward-deployed ground and air forces, high production rates for new weapons, and perhaps even overseas bases becoming less important.

To use our earlier distinction between threats and competitors, the Soviet threat is declining in terms both of the apparent intent of Soviet leaders to use force and in the immediate ability of Soviet military forces to endanger U.S. and allied interests. Avoidance of war is an essential part of the Soviet strategy of perestroika at this time, but not necessarily in the future. The decline in immediate Soviet capabilities to jeopardize U.S. interests is not irreversible. Soviet military officers, in their writings and discussions with Westerners, still sound like they are competing with the West. Moreover, many Soviet interests remain opposed to those of the West. There is still a fundamental difference between the U.S.-Soviet relationship and that of the United States with Western countries such as Britain and France. The relationship between the United States and its allies has elements of competition and tension, but America does not feel threatened by West European nations, even though many of them are heavily armed and some are nuclear powers. Our basic interests are not opposed and, therefore, the United States does not feel the need to negotiate arms control agreements with Britain and France. Until there is a fundamental change of this sort in the

relationship of the Soviet Union with Western States we cannot dismiss the USSR as a military competitor.

But what of the possibilities that the civilian leadership will rein in the competitive tendencies of the Soviet military? Or that political change in the Soviet Union will eliminate the opposition of U.S. and Soviet interests or reduce them to the point where differences between U.S. and Soviet interests are no greater than those between the United States and its allies? Is it even possible that trends in the multipolar security environment could result in commonality among some U.S. and Soviet interests? To understand the relevance of military competition to U.S. policy, we must look beyond conditions today and examine alternative future courses for the USSR.

1.2.2 Alternative Soviet Futures

There is an astonishingly wide range of political, economic, social, and military possibilities for the Soviet Union over the next two decades. Which of these alternative futures actually comes to pass will have important influence on the extent to which the USSR is a military competitor of the United States in the 1990s and beyond, as well as on the possibilities for the Soviet Union once again to be a major threat to U.S. interests. Thus, consideration must be given to alternative Soviet futures in order to understand how seriously the United States should regard the matter of military competition and to develop specific U.S. competition strategies.

Three different periods in future Soviet developments are important in this regard: the next several years, when survival of the current Soviet state may be the dominant issue; a period of restructuring, which could last one to two decades or more; and the postrestructuring period.

During the next several years conditions in the Soviet Union may become so extreme that survival of the Slavic core of the USSR would be the goal dominating the decisions of the Soviet leadership. The degenerating economy, the lack of an adequate distribution system for food and other basic needs, increasing ethnic unrest and separatist movements, growing dissatisfaction among various factions of the Soviet power structure, and a general and deep despair in the Soviet common man could bring about a crisis or succession of crises in the USSR. Under such conditions the overriding goal of the leadership probably would be to hold the Slavic republics of Russia, Byelorussia, and the Ukraine together. The general strategy would be one of survival, designed to avoid civil war; to try to keep the border republics, but not if doing so put the Russian state in serious risk of collapsing; to prevent foreign exploitation of Soviet internal vulnerabilities; and to seek massive external assistance from the West, but not at the cost of permanent foreign dependencies.

Soviet maintenance of a strong military institution, even if smaller, probably would be a key element in a survival strategy, as well as an important part of the longer-term program to restore the power of the nation. During the next several years, Soviet military forces could be used to put down insurrections and to suppress separatist movements. Soviet leaders could see the need for a variety of moves to strengthen their nuclear or conventional forces as a form of competitive action to fend off perceived foreign exploitation of the USSR or to put pressure on the West for increased economic assistance. Soviet leaders might even consider threats of military operations outside the USSR -- or actual use of force -- in an effort to restore some sense of national unity or to deal with perceived foreign exploitation of such problems as Muslim unrest.

Under such conditions the Soviet Union might change its policy by reestablishing a full command economy and seeking to reverse the decline in its military power by restoring the military's high claim on national resources. This could even help the consumer goods situation, since Gorbachev's vacillations and halfway reform measures have caused the economy to perform even more badly than before perestroika was introduced. While such changes would not remove the massive impediments to innovation and technological progress inherent in the Soviet command economy, it could result in a significant increase in the Soviet military threat in the near term.

A Soviet Union that sees its very survival threatened in this way could be dangerous. U.S. policy should seek to avoid this extreme, should respect the legitimate interests of the USSR, and should not even appear to be trying to take advantage of the situation. There is, however, little the West can do to solve the internal problems of the Soviet Union. Therefore, U.S. policy should also seek to dissuade Soviet leaders from taking dangerous or destabilizing actions, in part through U.S. competition strategies that keep the Soviets aware that America will be a determined military competitor if Moscow's policies move once again in the direction of confrontation.

Assuming some form of Soviet state persists through the next several years and settles into prolonged reform, the period of restructuring would pose a somewhat different set of problems for the USSR. Survival of the Soviet state, or at least the Slavic core, would still be a major objective, but a restructuring period would differ from the earlier survival period by the reduced likelihood of internal crises and a shift from survival as the basis for national decisions to restoration of Soviet power through political, economic, and social reform.

This period probably would be characterized by a marked Soviet reluctance to use military force (although the military would still be an important institution), a strategy designed to secure maximum external economic assistance over the short term, and an attempt to forge more extensive global political, economic, and technological links over the longer term. While less likely than in the immediate future, internal crises would still be possible during the restructuring period, including, for instance, a dramatic reversal of Gorbachev's initiatives through his removal; civil war; or dissolution of the USSR into a smaller Russian-based nation or a loose confederacy of republics. Also possible would be a transition of the Soviet Union to a less authoritarian state, to a stronger economy, or to substantially more cooperation and interdependence with the West.

U.S. policy in a period of Soviet restructuring should encourage movement of the Soviet system toward stable and cooperative relationships with the West, but should also hedge against the possibility of destabilizing crises in the USSR and against a return of the USSR as a more intense military competitor, if not as a threat, after restructuring is completed.

The postrestructuring period could be as much as several decades away and may never arrive if the USSR is unable to achieve fundamental reforms. But current U.S. policy generally, and U.S. competition efforts specifically, should take into account the long-term possibility that the USSR emerges from its troubles as a stronger, more cohesive nation. Soviet decisions in a post-restructuring period would proceed from quite a different basis than in the earlier periods. Soviet goals, strategy, and dominant policy concerns would depend on what kind of country the USSR had become and on the state of the world at the time, but presumably would be more concerned with Soviet power and influence in the world at large than in the earlier periods. There are many

alternatives. A globally-interdependent USSR primarily concerned with trade and prosperity is one. Another is an economically strong USSR with modernized military forces sitting astride the heartland of Eurasia, opposed by Germany and Japan. A third is a strong, stable Slavic state motivated by traditional Russian objectives and fears.

The alternatives in the postrestructuring period are too varied and too distant to make even general statements about what direction U.S. policy should take at that time. But U.S. policy today should take into account the possibility that the Soviet Union could return to more intense military competition with America in the future.

Thus, several quite different lines of Soviet political, economic, social, and military development are possible. One not unlikely extrapolation from today's situation is a path in which conditions inside the USSR deteriorate so seriously that the leadership is focused strongly on survival of the Slavic state, with dangerous possibilities for the West. Another not unlikely line of development is that Gorbachev succeeds in staving off the worst crises and that the USSR moves gradually, but haltingly, along the path of reform, with serious failures in executing reformist policies -- a kind of prolonged muddling through. This path is perhaps least dangerous for the West.

Yet a third kind of future development is a path in which reform succeeds, with eventual improvement in the Soviet economy. This might be accompanied by major political reform as well, in what has been characterized by sovietologist Jerry Hough as a renewal of the process of democratization in the USSR that was halted when the Bolsheviks came to power in 1917.⁵ Alternatively, the economy might be reformed by a regime or succession of regimes that retained an authoritarian character or that reverted to

authoritarianism after a period of liberal rule. This alternative could include a strong and modern Soviet military force and aggressive propensities by the early twenty-first century. Numerous variants are, of course, also possible, but these alternatives encompass the range of futures that bears on the issue of whether the military competition is over. Obviously, more intense competition could occur in a number of the alternatives.

1.2.3 Maintaining the U.S. Competitive Posture

Based on the above analysis, the military competition with the Soviet Union should continue to be of concern to the United States, in part because -- while Soviet competition efforts have become less visible -- they have not vanished and in part because the USSR could become a more intense and effective military competitor in the future. There are precedents in Soviet history for such reversals. When Soviet leaders felt their country was weak and under stress in the past they became less aggressive in their foreign policy and less dogmatic internally. When the USSR regained its strength, Soviet leaders took a much harder line, both internally and externally. These weak-strong (cooperative-aggressive) cycles generally lasted about thirty years, with the cooperative stage being less than a decade. Previous periods of Soviet openness and greater accommodation occurred in the 1920s and the 1950s. In both these periods there were major reductions in the Soviet armed forces and substantial changes in military doctrine to adapt to new conditions, followed by significant increases in the size and capabilities of the Soviet military.

Today, rather than phasing out of the competition, the Soviets may be pursuing a more subtle strategy, one in which they retrench for some years while seeking to reduce U.S. competitive advantages through a process of improved international relations and arms control negotiations; to strengthen the Soviet economy

through internal reforms, divestiture of the external empire, and increased access to Western capital and technology; and to emerge eventually as a more powerful military competitor to the United States. While Gorbachev himself may be too much of a short-term pragmatist to pursue such a Machiavellian strategy, it may well be an approach that motivates Soviet military leaders and hard-line civilians in the Soviet government.

The Soviet Union recognizes the importance of manipulating Western threat perceptions and already is making this a stronger part of its competition approach in the 1990s through arms control proposals and public diplomacy. The USSR can sustain its advantages in the military competition or achieve new ones by increasing its military strength, by facilitating decreases in Western military strength, or by a combination of the two approaches. The tendency in the West is now to emphasize Soviet military retrenchment. There is less attention given to the parallel phenomenon of Western military retrenchment, which also affects the military balance and tends to negate the beneficial effects of what the Soviets are doing. Foreign Minister Shevardnadze has, in fact, been quite explicit on the point that successful competition with the West involves reducing Western threat perceptions, which would have the effect of reducing the cost to the Soviet Union of competing militarily.

A U.S. military establishment that is postured to expand its competitive activities should the Soviets do so is the most effective way to discourage the USSR from such a course of action. U.S. strategy should be designed to encourage a Soviet outlook in which avoidance of war becomes a permanent objective, not merely a tactic to advance perestroika, to promote Soviet progress toward cooperative behavior, and to both discourage reversals and cope with them should they occur, recognizing that it may be decades

before we can be confident of the enduring transformation of the Soviet Union.

Therefore U.S. competition planning should be directed toward the following goals related to the USSR:

- Reinforce Soviet incentives to forego military competition.
- Encourage the Soviet Union to move in the direction of permanently cooperative relations with the West.
- Protect U.S. interests in those areas of military competition that the Soviets continue to pursue.
- Hedge against Soviet reversion to more intense military competition in the future.

This is not to say that the peacetime competition must be characterized by high tensions and belligerency or that U.S. maintenance of its competitive position will jeopardize reform in the Soviet Union or stimulate an arms race. New leaders, effective diplomacy, arms control negotiations, and improved economic, scientific, and cultural ties already are changing the shape of the military competition and mitigating its intensity. A U.S. approach to the military competition that emphasizes research and development (R&D), diplomacy, and arms control can protect U.S. interests within lower defense budgets and without acting at cross purposes with the NATO allies. What is needed is rational spending of reduced defense funds, skillful crafting of U.S. arms control positions, and actions that have low public visibility, all guided by an explicit long-range competition planning process.

While the U.S.-Soviet rivalry is still the most prominent military competition of concern to America, it increasingly is being carried out in a multipolar arena. Moreover, U.S. strategy

must also pay attention to other nations who may in the future be military competitors or affect the military competition.

1.3 PROTECTING THE U.S. COMPETITIVE POSITION IN THE MULTIPOLAR WORLD

U.S. policy makers and planners have relatively little experience with multipolar security issues because the four decades after World War II were largely dominated by the historical anomaly of the bipolar superpower competition. Now the security environment is returning to its normal multipolar condition and military competition will do the same. Hence, U.S. policy should not only address U.S.-Soviet military competition in the multipolar arena, but should also consider the likelihood that U.S. interests will be affected in the 1990s by some forms of military competition from or between nations other than the USSR.⁶

Some countries increasingly will affect the U.S.-Soviet competition, not necessarily in ways favoring U.S. interests. Notable examples are China, Japan, and the unified Germany, who, for example, can help the United States balance the Soviet threat (all three countries), can undercut U.S. force modernization moves (e.g., Germany in regard to theater nuclear force modernization), or can provide advanced weapons technology to the Soviet Union (Japan or Germany). Some countries will be direct military competitors to the United States and its allies. North Korea has been a direct competitor for some time; China has been a competitor in the past, it now competes with U.S. interests through its arms sales, and it could become a more active military competitor in the future. The future could even see India or a unified Korea competing in some ways with the United States in the military field. And other countries compete with one another in ways that affect U.S. security interests positively or negatively. Examples

are China and the Soviet Union, India and Pakistan, the Arab states and Israel, and North Korea and South Korea.

U.S. competition planning for the 1990s and beyond should consider the possibilities of military competition from countries other than the USSR, in part because reducing U.S. force levels and changing the structure and deployments of U.S. forces in response to reductions in the Soviet threat could leave America vulnerable to other competitors and threats that may emerge in the future. In the past, U.S. military forces that were able to meet Soviet threats also provided substantial capability against other threats, although not completely. We have begun to understand the fallacy of the "lesser included threat," to wit: being prepared for a large war in Central Europe does not guarantee that the United States is also prepared for smaller wars on NATO's flanks, in Southwest Asia, or in East Asia, or for low intensity conflict in various regions of concern to America.⁷ Even when they were larger and deployed more widely around the globe than is likely to be the case in the 1990s, U.S. forces designed only to counter Soviet threats were not well suited to deal with many "lesser" threats. As the Soviet threat weakens, it is even more important that U.S. long-range security planning consider explicitly other potential adversaries.

Because we have relatively little experience with multipolar security issues, it is not clear that we even know what the right questions are, let alone have the definitive answers. For example, the identification of adversaries is more difficult and ephemeral than in the days of the cold war. Economic competition will be more closely mingled with military competition than was the case in the 1960s and 1970s. And it is more difficult to define even broad U.S. security goals in the multipolar context than in the bipolar superpower competition. Is stability, defined as the absence of major wars, the dominant goal? Is it the maintenance of U.S. freedom of action in key regions, the ability

to exert strong influence on political-military affairs? Is it prestige? Economic well-being? Will some power balances in the multipolar world be dangerously unstable unless the United States is prepared to weigh in? The fundamental character of these unresolved issues signifies the importance of systematic competition planning for U.S. interests in the security environment of the next several decades.

1.4 U.S. COMPETITION PLANNING NEEDED MORE THAN EVER

To sum up, the United States should continue to regard seriously the military competition with the Soviet Union. It should develop strategies and carry out actions to protect its interests and positions in areas of the military competition where the USSR is still active, should promote Soviet movement toward permanently cooperative relations by making clear that America can and will compete effectively if the USSR returns to more intense military competition with the West, and should hedge against a future reversion to greater military competition by a more powerful USSR. Further, the United States should give increasing attention to other countries in the military competition: to their roles in the U.S.-Soviet competition, to their capabilities for direct military competition with the United States, and to the effects on U.S. interests of their military competition among themselves.

It is, however, not enough for U.S. officials merely to take note of the military competition. As we show in subsequent chapters, competing effectively is sufficiently different from more traditional DoD planning approaches that special efforts focused on the military competition are needed.⁸ In fact, explicit planning for the military competition is needed for the 1990s, even more than in the past, for two reasons. First, U.S. defense budgets, force levels, and forward deployments will be substantially lower in the 1990s than in the past, requiring

difficult decisions about resource allocations and a host of other matters. These decisions should be guided by a vision for the future that takes the military competition seriously into account. Second, while DoD budgets and force levels are declining, the security problems and opportunities facing the United States are becoming more complex and taking on a longer-term character: the shift to a multipolar security environment as Soviet power declines, the nature of the contingencies the United States will have to deal with in the future, the closer and more detailed relationship between economic competition and military competition, and the prospects for seriously advancing Western security interests through arms control. Many of these problems and opportunities will be related to the ongoing military competition involving the Soviet Union and other countries, and explicit competition strategies and planning are needed to help understand U.S. security interests and goals in this new environment and how best to use available resources to advance them.

Several objections to this line of argument may be raised, objections that we believe are ill-founded or misunderstand what we are recommending. We already have noted that U.S. strategies and actions in the military competition need not be confrontational or destabilizing, need not result in a renewed arms race, need not be counter to arms control goals, do not necessarily require the high levels of defense spending and forces that we have had in the past, and do not have to put Soviet internal reforms in jeopardy. What we spend, what we seek to accomplish in the military competition, and what instruments we use are all matters to be worked out in the development of specific competition strategies and plans, in coordination with other elements of U.S. and allied policies and within the constraints of the environment of the 1900s.

It may, however, be asked why the United States should do military competition planning now, when it won the cold war without explicit competition planning. The answer is that we are moving into a more complex security environment than the cold war, one in which there are fewer defense resources, less coherence in U.S. alliances, and less public support for a strong military. Moreover, in this environment the United States could lose the competitive advantages it gained in the cold war if it is not careful to protect its competitive position. A chess-like approach to security, which is the essence of competition planning, is more important than ever.

Or it may be argued that the Soviet capacity for military competition will be curtailed for such a long time that the United States can wait to deal with competition with the USSR until it returns in the distant future, if it ever does. As discussed, however, the USSR has not totally abandoned military competition even today. Further, it could return to more intense competition sooner rather than later. Even to hedge against a resurgent Soviet Union several decades from now requires that the United States take actions to maintain or enhance its current competitive position relative to both the USSR and other competitors in the multipolar world. And, perhaps most importantly, the clear U.S. ability to compete effectively at more intense levels will help discourage the Soviet Union from returning to increased military competition.

More narrow questions may also arise. For example, one might argue that long-range planning is pointless, since Americans focus only on the short term. Not only are such broad generalizations patently false, but the main point is that the future security environment requires longer-range planning than has been the practice in the Department of Defense. Explicit competition planning efforts are one way of turning the attention of DoD bureaucracies to longer planning horizons.

A more serious objection may be that the executive-congressional structure of the American government prevents the country from acting as a single entity in the military competition. But the rapidity and decisiveness of actions implied by the unitary actor model are not essential conditions for competing effectively in the global military arena. The United States has competed effectively in the past and can do so in the future within the institutional framework of its government. DoD competition planning must, however, be structured to take account of the roles of Congress and of other parts of the executive branch. Similarly, the objection that strategic planning is impossible because there is no central planning authority below the president is not a fatal flaw, since the secretary of defense is the central planning authority within the Defense Department and coordination between him and other cabinet members can be effected through a variety of means.

Despite the common use of the term competition, this complex striving between the United States and the Soviet Union for political, ideological, economic, technological, and military advantages is not well understood, at least not in the West. Even less well understood is military competition in the multipolar security environment. We seek to expand this understanding in the following chapters. Volume I develops a conceptual framework for thinking about military competition. It describes the nature of the competition, develops a number of key planning concepts, and, using U.S. and Soviet examples, describes means through which various sides may influence the strategy and actions of others in the military competition. We then analyze Soviet economic, technological, and planning weaknesses and describe the current state of the U.S.-Soviet military competition. We draw on this material to conclude volume I with recommendations for a general approach to competition strategy in the 1990s and beyond.

Even more important than one person's suggestions about a competition strategy is the development of systematic methods for competition planning and analysis. In volume II we discuss these methods, describing a layered competition planning approach, defining analysis requirements to support competition planning, and evaluating current analysis tools and techniques in terms of their ability to meet these requirements. We end volume II by describing in greater detail several analysis methods that are essential for systematic competition planning.

Volume III contains military competition case studies and other appendices.

ENDNOTES TO CHAPTER 1

1. "Joint Chiefs 'accept' reform as irreversible," Washington Times, March 12, 1990, p. 6.
2. See U.S. Joint Staff, 1990 Joint Military Net Assessment (Washington: U.S. Department of Defense, 1990), for an overview of U.S. and Soviet military balance trends related to the competition.
3. William A. Cockell and Gregory J. Weaver, "Defensive Sufficiency and Military Reality," Disarmament, vol. 12, no. 1 (1990), pp. 5-21.
4. Stephen R. Covington, "NATO and Soviet Military Defense," The Washington Quarterly, vol. 12, no. 4 (Autumn 1989), pp. 73-81. For similar cautions over interpreting changes in Soviet military doctrine as the rejection of an offensive military posture, see Stephen M. Meyer, "The Sources and Prospects of Gorbachev's New Political Thinking on Security," International Security, vol. 13, no. 2 (Fall 1988), pp. 124-63.
5. Jerry F. Hough, "Gorbachev's Politics," Foreign Affairs, vol. 68, no. 5 (Winter 1989/90), pp. 26-41.
6. See chapter 2.2 for more detailed discussion of military competition in the multipolar world.
7. For elaboration of this point, see Fred C. Ikle and Albert Wohlstetter, Discriminate Deterrence, Report of the Commission on Integrated Long-Term Strategy (Washington: U.S. Department of Defense, January 1988), pp. 33-34.
8. See especially chapter 2.3.

2. PEACETIME MILITARY COMPETITION: MOVING BEYOND TRADITIONAL PLANNING APPROACHES

Americans have a certain instinct that it is important to compete effectively against the Soviet Union, but the nature of the U.S.-Soviet competition is not well understood. For example, what elements of the competition are most important? How does one side influence the actions of the other in this complex relationship? What are the goals of each side in the competition? How does one assess who is ahead? What does competitive advantage mean? How should we develop effective strategies? This chapter sets the stage for detailed discussion of these issues by describing the general nature of the military competition, discussing the broader environment for military competition, and identifying the distinguishing characteristics of competition strategies.

2.1 NATURE OF THE MILITARY COMPETITION

A point of departure for an improved understanding of the U.S.-Soviet competition is the appreciation that it fundamentally is a contest for power and influence in world affairs. This global competition has several dimensions: political, ideological, economic, technological, and military. While the United States and the Soviet Union competed actively in all these dimensions through the mid-1960s, currently the military dimension dominates, and it is the focus of this report. Further, the U.S.-Soviet competition was primarily a two-sided vying for power through the 1960s. Now, however, the U.S.-Soviet contest is played out in a multipolar world, as the old postwar alliances on both sides are wearing thin and new challenges from elsewhere are posed to both the United States and the USSR.

The relation between the global competition and the military competition needs further explanation. The military competition is a subset of the broader global competition, and both influences and is influenced by it. Our focus in this report is on the military competition, which is a kind of shadow-boxing in which U.S. and Soviet warfighting capabilities are prepared, deployed, and exercised. These warfighting capabilities are also applied more directly in support of the opposed interests of the two sides in military sales, use of proxy forces, support to insurgencies and counterinsurgencies, and other ways that affect the fighting capabilities of other countries.

While many instruments used in the military competition are military in nature, such as weapon systems developments and overseas basing of forces, other important instruments are nonmilitary in nature and are usually associated with the broader global competition even though they can be applied to the military competition. These include arms control, diplomacy, propaganda, and technology drawn from the civilian economic base. Thus, while our focus is on the military competition, U.S. strategies for pursuing this competition need not and should not be confined to using only military means.

The essential concept in the peacetime military competition is to achieve, safeguard, or restore U.S. and allied military advantages over the USSR by building on U.S. and allied strengths and exploiting Soviet weaknesses in more explicit, systematic, and institutionalized ways than in the past. Competing effectively involves looking forward several moves, making past Soviet military investments obsolete, and influencing future Soviet military investments in ways that improve the balance of power and enhance stability. This is to be done through a variety of means, including technology developments, weapon system developments and production, improvements in force deployments and support, changes

to operational concepts for force employment, conduct of public diplomacy, and negotiating arms control agreements.

In planning for the peacetime military competition, broad U.S. objectives are the same as in more traditional planning approaches: to deter Soviet attacks, to reassure allies, to be able to resolve crises peacefully to the U.S. advantage, and to be able to defend U.S. and allied territory and interests in the event of war. But, in today's conditions, America can no longer afford the rich man's strategy of buying enough military forces to have insurance against all plausible Soviet actions, if indeed it ever could afford such a strategy. The United States must take more explicitly into account the fact that it is in an extended era of peace with the USSR, but not necessarily an era of relations that are always harmonious or devoid of competition. The Department of Defense must manage those resources that the country makes available for national security by building on U.S. and allied strengths and Soviet weaknesses, in order most effectively to ensure that this extended era of peace continues, to maintain an adequate balance of power with the USSR, to steer the military competition in less threatening directions, and to be prepared to fight effectively should war come.

Consequently, strategies for the peacetime military competition with the Soviet Union should not be limited to traditional planning of forces to deter or to fight in wartime contingencies. They should also seek ways to improve the U.S. and allied competitive position, as well as to improve the military balance; give explicit consideration to how the USSR plans its force posture in order to influence that planning; use a planning horizon of two or more decades to consider U.S. and Soviet moves and countermoves; and evaluate alternative military investments in terms of U.S. and Soviet strengths and weaknesses. Thus, advantages are to be gained in the military competition by long-

term pursuit of broad military enterprises such as strategic bomber or armored superiority, not just by investing in a specific weapon system such as the B-2 bomber or the Abrams main battle tank.

Many of these things have been done in past U.S. military planning; what is needed is to be more explicit and systematic about planning for the peacetime competition in order to use available resources to maximum advantage. In this sense, competition strategies are an additional dimension to past approaches, not the abandonment of planning concepts that have worked well in the past.

As is discussed in chapter 3, it is not entirely clear what it means to "win" or prevail in the U.S.-Soviet competition, or even how to gauge who is ahead, given the complex, multidimensional character of the competition. While euphoric claims that "The cold war is over, and we have won" are too simplistic, a case can be made that the United States is holding its own in the competition and perhaps even that the United States generally has prevailed over the last four decades.

In the late 1940s and in the 1950s, the Soviet Union appeared to challenge the United States in all dimensions of the competition: political, ideological, technological, economic, and military. By the end of Brezhnev's regime, however, it was clear that military power, and the political pressures the Soviet Union can bring to bear when backed by military power, was the sole dimension in which the Soviet Union seriously challenged the United States. The following assessment by George Kennan is representative of the U.S. literature in the last few years:

I saw at that time [1946] . . . an ideological-political threat emanating from Moscow. I see no comparable ideological-political threat emanating from Moscow at the present time. The Leninist-Stalinist ideology has almost totally lost appeal

everywhere outside the Soviet orbit, and partially within that orbit as well.... On the other hand, whereas in 1946 the military aspect of our relationship to the Soviet Union hardly seemed to come into question at all, today that aspect is obviously of prime importance.

Even in the third world, where in the 1960s and 1970s the USSR achieved an impressive series of political-economic-ideological successes and the position of the United States and its allies declined rapidly, the Soviet Union and its socialist allies now have a comparative advantage over the West only in military power. In most cases, Soviet political successes were temporary and reversible. Their use of economic means to affect third world policies is seriously hampered by the poor performance of the Soviet economy and the relatively minor role of the USSR in the international economy. The foreign policy utility of Soviet ideology has been diminished by the loss of Soviet Marxism's revolutionary appeal. Ironically, the ideological influence of Marxists from Latin America and Western Europe is much stronger in the third world than that of Soviet writers. In cultural matters, the world largely ignores the Soviet Union, while America and its allies have immense cultural impact.²

The West currently prevails over the Soviet Union in the political, economic, technological, and ideological dimensions of the struggle for power and influence, although it must sustain the effort to remain dominant in these areas against both the USSR and other competitors. More to the point for the military competition, the United States can compete effectively with the Soviet Union in the political, economic, technological, and ideological dimensions so long as it checks effectively the military power of the USSR.

And, in fact, the Soviet Union is retrenching in the military dimension of the competition, at least for a time. The West does not completely understand what motivated Gorbachev and

other Soviet leaders to relax tensions with the West, to initiate bold arms control moves, to undertake unilateral force reductions, to give up the Eastern European satellites, and to set in motion a remarkable series of internal political and economic changes. A case can be made, however, that the sustained competitive actions of the United States and its allies are in part responsible for the current beneficial state of affairs. As Robert Ellsworth recently put it:

The economic and political power of the American/West European/Japanese international "system", NATO's robust and steady military strength, and the geopolitical resistance of America, Western Europe, Japan and China have, beyond doubt, helped bring the USSR to the point where it is willing to face the facts of its systemic failure.³

The U.S.-Soviet military competition does not, however, have a well-defined stopping point in the manner of a football game or a tennis match. That the United States is holding its own or prevailing now in no way guarantees that it will continue to do so, especially at a time when the Soviet Union appears to be trying to change the character of the military competition to its advantage and when changes in the competitive environment are taking place independently of the Soviet Union that are complicating U.S. strategy as compared with earlier periods in the competition.

2.2 THE COMPETITIVE ENVIRONMENT

The context in the outside world for the peacetime military competition can be termed the competitive environment: all those aspects of the world situation that can affect the U.S.-Soviet military competition or other military competitions of interest to the United States and that are not controlled directly by the defense planning process within the executive branch of the

U.S. government. Three parts of the competitive environment should be distinguished from one another: the Soviet Union, third countries and other non-U.S. actors that affect (and may participate in) the competition, and U.S. actors outside the defense planning community in the executive branch.

2.2.1 The Soviet Union

The Soviet Union is, obviously enough, the principal competitor, but that is not its only role. To one degree or another, U.S. and Soviet policies over the past thirty years have had as a goal, and at least at times as a practice, an element of mutual cooperation. For most of this period, the Soviet view of this cooperative element could be summed up by the phrase "peaceful coexistence," a concept that implies pursuit of the goals of the peacetime military competition by means that do not directly involve Soviet military operations. Even so, cooperation with the Soviet Union has influenced the options available for U.S. competition strategies, for example, by giving prominence to the issue of arms limitation.

The events of the last several years raise the question of whether the classic Soviet concept of peaceful coexistence is still appropriate in the conditions of the 1990s and beyond, and whether the Soviets are moving toward a concept that provides more explicitly for cooperation as the term might be understood in the West.

The Soviet debate on this matter is not over and may in the long term lead to no significant "new thinking," let alone new patterns of behavior, in Soviet security policy. Whatever the outcome, the fact that the Soviets have consistently envisaged a measure of at least tactical cooperation with the United States is an aspect of the competitive environment that will continue to

shape the options open to the United States. If the Soviet view of the role and goals of that cooperation should become more far-reaching, U.S. options could be substantially affected.

While this might apply primarily in the nonmilitary areas of the competition, even in the military area Soviet behavior could become such that to characterize their goals as still solely, if more selectively, competitive would be misleading. Any approach to planning for the competition must allow for an appropriate range of possible levels of noncompetitive or uncompetitive Soviet behavior. These considerations make even more important a sound and up-to-date U.S. understanding of all aspects of Soviet policy toward the peacetime military competition.

2.2.2 Non-U.S. Actors

The role of other countries is more complex than that of the Soviet Union. For much of the period after the second World War it was fashionable to speak of a bipolar world dominated by the U.S.-Soviet competition. In reality, the bipolar world of the 1950s and 1960s was less bipolar than is often implied. During that period the U.S.-Soviet peacetime competition was played out on three different "fields" (see Table 2). The first, and perhaps most important, was the field on which no other actor was involved and on which the primary yardstick of success was military, especially nuclear, power. But even at this level the competition was by no means only military. Economic and ideological factors were widely seen, both in the Soviet Union and in the United States, as of great significance to the longer-term future of the competition.

Table 2. Three fields of U.S.-Soviet competition.

Field 1.	United States vs. Soviet Union (no other actors)
Field 2.	U.S. bloc vs. Soviet bloc
Field 3.	U.S.-Soviet competition in the third world

The second field of competition was that on which the two superpowers played with allies and friends -- the level that is often referred to, with only approximate accuracy, as the bloc-to-bloc competition. There are two distinguishing features of the competition on this field. Each superpower was aligned with other countries that, with varying degrees of conviction, shared the view that there was an East-West peacetime military and ideological competition. But, and this is the second distinguishing feature, none shared exactly the same interests as the superpower with which it was aligned.

Until recently, the allies of the Soviet Union have been less able or inclined to differ from the Soviet view of how to prosecute the competition than have the allies of the United States differed from the U.S. view. But the difference has not been absolute -- the Soviets soon lost two of the allies with whom they started out in the post-war period (Yugoslavia and China) and now effectively have lost the rest of Eastern Europe for purposes of the military competition. The West Europeans, although always quite independent in their attitudes, nevertheless generally followed the main lines of U.S. policy toward the East-West competition, at least until the height of the Gaullist period in the mid-1960s; many of them have continued to follow the U.S.

policy lead since. The same is generally true of the major U.S. allies in Asia.

On this second, bloc versus bloc, field, the existence of an economic and political competition alongside the military competition and of pressures to develop less competitive and more cooperative relationships are even more apparent than on the first field.

The third field is that of indirect competition between the superpowers in the third world. The competition on this field has been intense, although its military dimension has generally been less prominent than the political and economic ones. There have always been military aspects of it, but, by contrast with the first and second fields, the competition on this field has mostly been more subtle, reflecting the fact that third world countries did not for the most part share the superpowers' views of the competition. The struggle was therefore primarily one for U.S. and Soviet political influence in situations in which many local states increasingly saw their incentives as being not to align themselves too closely with either superpower's world view.

The bipolar world, therefore, was more multipolar than is often implied. In attempting to gauge how future changes in the competitive environment are likely to affect the competition, it is important to have an accurate view of this bipolarity.

What, then are the changes in the competitive environment that are leading to an even more multipolar world? This report is not the place to discuss these changes in detail. But it is useful for the development of the planning process that is our main subject to sketch some of the more important likely directions of change.

The number and importance of countries on the second and third fields whose policies and behavior will have a direct impact on those of the superpowers is increasing. At some stage this process could result in the emergence of one or more powers that would be more serious military competitors to the United States or the Soviet Union than either currently faces. Alternatively, the United States could seek incentives for other countries to align their goals with those of the United States and cooperate in competing with the USSR. The issue for planning is to foresee and assess accurately how the growth of the economic, military, and diplomatic strengths of other countries will affect -- either by expanding or contracting them -- the options open to the United States and the Soviet Union in pursuing their peacetime military competition.

In the wake of their respective experiences in Vietnam and Afghanistan, both superpowers are likely to be more cautious about direct military intervention in third world conflicts and conceivably may even play down indirect military means for pursuing the competition in the third world.

The salience of international conflict may diminish in the third world, due to a reduction in the number of active border disputes and an increased awareness of the uncertain nature of gains in modern war. The Iran-Iraq war may be an important example of the latter point. This may be a transient phenomenon, but were this shift to occur, economic strength as a measure of national importance would increase.

Legal and illegal international dealings beyond the realm, and often beyond the effective control, of governments will continue to grow. This change may be a more potent factor in transforming the options of the governments of the superpowers (and

others) than shifts in these countries' relative military and economic importance.

These changes are likely to be reflected on each of the three fields shown in Table 2.

On the first field, both superpowers already have domestic reasons for wishing to channel their military competition, if not to restrict it significantly, and to give a greater place to cooperative behavior in both the military and the nonmilitary dimensions of the competition. This does not mean that the military competition will cease to be important. Among other things, the high-level superpower military balance will always cast a dark, if somewhat uncertain, shadow over the second and third fields of competition. But it would substantially change the context for U.S. planning. In particular, since the threat of falling further behind the United States technologically is likely to remain an important sanction on Soviet behavior, more limited U.S.-Soviet competition on the first field would tend to increase the competitive value of U.S. defense-related R & D programs.

On the second field of competition, the future is likely to see a continuation of the trend toward greater independence of thought and action among the allies of the two superpowers. The competition at this level will become more like that on field three, namely a contest for influence within a pool of independent and more loosely aligned states onto which both the United States and the Soviet Union will be trying to devolve greater responsibility for their own defense. Such a devolution would inevitably be accompanied by greater independence of thought and action by those countries assuming greater responsibility for their own security.

This could have at least two consequences. First, it could make it harder for the United States to secure allied agreement to competition strategies and actions that were assessed as highly desirable by the U.S. planning process, perhaps resulting in independent U.S. actions. Second, it could create a situation in which economic competition among the western allies could make it harder to come to agreement on common policies in the defense area for the pursuit of the competition.

On the third field of competition, the emergence of a growing number of states with significant military potential, nuclear as well as nonnuclear, and strong political institutions will tend to reinforce for the superpowers the lessons of their recent experience: that direct military intervention in third world conflicts is a high-risk venture that increasingly will require use of their first-line weapons systems. Yet, in terms of economic strength, the quest for influence and access in the third world may become even more important to both superpowers than it is today. While this trend might increase the importance of the military component of the U.S.-Soviet competition in the third world, it could at least as easily reduce it.

The essential conclusion is that political, economic, and military changes in the third world may increasingly shape the superpowers' peacetime resource allocations, to some degree change their competition goals, and affect the extent of third party cooperation with, or leverage over, U.S. or Soviet pursuit of their competition. The relationships among third world countries, peaceful or not, and the growing economic, military, and political strength of countries like India, Brazil, and Iraq, among others, are likely to shape -- mostly by constraining, sometimes by expanding -- superpower options and policies more than they do now and to make the third world even less susceptible to superpower influence, let alone control.

It should be apparent from the foregoing that these and other potential changes in the competitive environment impose significant demands on the planning process. Planners will need to be even more acutely sensitive to shifts in the relative military, economic, and political weights of different countries and to those countries' judgments about the important elements of the U.S.-Soviet competition than they had to be in the bipolar period, when the superpowers' influence was relatively greater. The Commission on Integrated Long-Term Strategy, through its Working Group on the Future Security Environment, made one attempt to create a framework for thinking about this kind of change.⁴ Such assessments will need to become a larger part of the planning process than in the past, as discussed in more detail in volume II.

2.2.3 Other U.S. Actors

The third part of the competitive environment that needs to be mentioned briefly is the United States itself beyond those elements of the executive branch that compose the defense planning process. This part of the environment is not discussed in detail in this report. Suffice it to say that the ability to command support in this country, both in the Congress and in the population as a whole, for any policy toward the peacetime military competition with the Soviet Union is a vital component of success, as is the ability to sustain this support over the period of time appropriate to the successful implementation of the different elements of that policy. However well conceived a strategy may be in terms of its competitive value, if it cannot attract enduring support, the United States might be better off to pursue a different approach, one less effective in competitive terms, but one that could command sustained support.

2.3 HALLMARKS OF COMPETITION STRATEGIES

We have discussed the general nature of the military competition and the way it is affected by multipolar trends in the security environment. Yet another way to understand this competition, one that focuses more directly on planning approaches, is ask what are the distinguishing characteristics or hallmarks of strategies that seek explicitly to advance U.S. interests in the military competition. There are at least five ways in which a competition strategy differs from more traditional defense planning approaches. These differences make clear that competition strategies are both a distinctive approach to strategic planning and a particular way of analyzing military balances.

First, a competition strategy should have a planning horizon that goes well beyond the Five-Year Defense Plan (FYDP): two decades, and longer if possible. The cycle from initial research and development of a weapon system, through its production, deployment, and operations, until it is retired can be as long as four decades. Not only should a competition strategy guide development, production, and operation of U.S. weapon systems, it should also take into account plausible moves and countermoves by the adversaries. Thus, a planning horizon measured in decades is needed. Given the increase in uncertainty as one looks further into the future, two decades may be the outer limit of a feasible planning horizon except in unusual cases.

Second, a competition strategy should explicitly focus on the Soviet Union or other adversaries, rather than on generic defense capabilities such as deterrence of attacks or the ability to project power overseas. The strategy should explicitly consider the likely competition goals and strategy of the adversary; his strengths, weaknesses, and competitive position; and a plausible range of adversary initiatives and responses during the planning

horizon.⁵ By focusing on specific adversaries, the planning process will be forced to consider ways in which U.S. programs and actions can influence the adversary's goals, strategy, programs, operational concepts, and other competition actions.

A third hallmark of a competition strategy is a clear statement of specific U.S. competition goals that the proposed actions are intended to accomplish. These goals should be formulated with the Soviet Union or other adversaries in mind and be developed from an assessment of the current state of the military competition with these adversaries.

Closely related is the fourth distinguishing characteristic. A competition strategy should provide a plausible explanation of how the actions proposed in the strategy will accomplish the goals of the strategy. More specifically, this explanation should address the means by which the proposed actions will render Soviet weapon systems obsolete, impose costs on the Soviet Union, encourage the USSR to retain forces that are easy to defeat, protect U.S. investments, improve the U.S. competitive position, or otherwise advance U.S. interests in the military competition, taking into account a plausible range of adversary moves and countermoves.

The final hallmark of a competition strategy is an explicit evaluation of proposed U.S. goals and actions in terms of U.S. and adversary strengths and weaknesses, their current competitive advantages, and their competitive positions. The explanation of how the proposed actions will accomplish the proposed goals, discussed in the previous paragraph, addresses the feasibility of the strategy in a chess-like competitive context. The evaluation of the proposed goals and actions that is the final hallmark addresses the "competitiveness" of the strategy in the sense of whether it would make the best use of available resources

to advance U.S. interests, given the current state of the military competition.

To summarize this chapter, the essence of the military competition is to build on U.S. strengths and weaknesses to influence the adversary's goals, strategy, and force posture to the advantage of the United States. The U.S.-Soviet contest is the primary military rivalry that America has been concerned about, but this competition increasingly is being carried out on a multipolar field, and other countries may also become military competitors of the United States in the 1990s. Strategies for advancing U.S. interests in the military competition differ from past approaches in several important ways. Understanding what these distinguishing characteristics are not only will render ineffective efforts of the DoD bureaucracy to promote traditional programs with the rhetoric of competitive strategies, but it yields additional insights into the nature of the military competition and of competition planning. More is needed, however, to advance the understanding of how to think about and plan for the military competition. Accordingly, the next chapter develops detailed competition planning concepts.

ENDNOTES TO CHAPTER 2

1. George F. Kennan, "Containment Then and Now," Foreign Affairs, vol. 65, no. 4 (Spring 1987), p. 888. Kennan does not, however, conclude that the United States must compete more effectively in the military dimension with the Soviet Union, calling instead for containment ". . . of the weapons race itself." For a view more sympathetic to competing militarily, which also concludes that the Soviet Union is not now a serious political, economic, or ideological competitor, see Zbigniew Brzezinski, Game Plan (Boston: Atlantic Monthly Press, 1986), pp. 8-12, 145.
2. Robert S. Litwak and S. Neil MacFarlane, "Soviet Activism in the Third World," Survival, vol. 29, no. 1 (January/February 1987), pp. 21-39. See also Daniel Pipes, "Fundamentalist Muslims Between America and Russia," Foreign Affairs, vol. 64, no. 5 (Summer 1986), pp. 939-59, which analyzes the fundamentalist Muslim perception of Soviet and U.S. threats and influences.
3. Robert F. Ellsworth, "The Future of U.S.-European Relations," Survival, vol. 31, no. 3 (May/June 1989), p. 198.
4. Andrew W. Marshall and Charles Wolf, Jr., The Future Security Environment, Report of the Future Security Environment Working Group, submitted to the Commission on Integrated Long-Term Strategy (Washington: U.S. Department of Defense, October 1988).
5. See chapter 3 for more detailed discussion of such planning concepts as competition goals and competitive positions.

3. KEY COMPETITION PLANNING CONCEPTS

The U.S.-Soviet military competition is a complex phenomenon involving strategic, technological, operational, and political considerations, touching on most regions of the world, and having consequences that extend well into the future. Even to begin thinking systematically about this topic demands the introduction of certain concepts to organize the material, to provide a common terminology for discussion and analysis, and to help move the development of competition strategies out of the realm of instinct and intuition into a more structured planning system that can be used by the Department of Defense.

The term competition has enough currency among people who are trying to characterize the peacetime struggle between the United States and the Soviet Union that the definition of this word offers a point of departure. A survey of dictionary definitions shows that competition refers to a condition in which:

- Two or more rivals are seeking to gain the same object simultaneously.
- Not all the rivals can gain this object, so there are losers as well as winners inherent in the notion of competition.
- The vying of the rivals is governed by some sort of rules.

This definition suggests some concepts that can be used to describe systematically the U.S.-Soviet military competition: rivals, prizes, notions of "winning" and "losing," and rules governing the competition. While fundamental, however, these four concepts are not sufficient to describe the military competition. Examination of examples of competitive behavior in other arenas, such as sports, business, individual career

rivalries, and competition between bureaucratic organizations, leads to a richer set of concepts for describing the U.S.-Soviet long-term military competition that is described in this chapter:

- Subareas of the military competition, which break the field down into pieces that are more tractable for planning and analysis.
- Key elements of the structure of the competition: Who competes? For what purposes? Through what means? Under what rules? Over what time period should moves and countermoves be considered?
- States of the competition, an understanding of which is needed in order to assess where the United States stands in the competition, to determine where it should want to move, and to develop strategies to get there.

These concepts are used in subsequent chapters of this volume to analyze selected aspects of the military competition in more detail and in volume II to develop a systematic approach to competition planning and analysis. The chapter concludes with a summary of issues on which further research is needed in order to improve the conceptual framework.

3.1 BREAKING THE MILITARY COMPETITION DOWN INTO PLANNING SUBAREAS

The totality of the military competition between the United States and the Soviet Union is too large and complicated to be addressed directly by planning and analysis. It potentially includes strategic, general purpose, and special operations forces; operations in regions as diverse as Europe, East Asia and the Pacific, Central America, and outer space; military technology developments, weapon system development and production, and arms control limits; and both current operations and force balances two decades or more into the future. As military competition becomes more multipolar in the 1990s, it will become even more complex.

Thus, to be manageable for purposes of planning and analysis, the military competition must be broken down into subareas. Exactly how this breakdown is made will influence the effectiveness of U.S. planning for the competition, because the form of the subareas will affect which DoD and other government organizations are involved and how people in these offices think about the competition. As is clear from the multiplicity of categorization schemes now used for defense planning, programming, and budgeting, no single scheme is obviously right for defining subareas of the military competition. Two somewhat contradictory sets of requirements are in play: the need to allocate resources and the need to address regional political-military situations and operations. This suggests two general approaches to breaking the competition down into subareas:

- A "business-area" approach (to use a term from corporate strategic planning) that reflects planning, programming, and budgeting system (PPBS) categories and mission areas for U.S. forces.
- A regional approach that reflects geographic areas of importance in the military competition.

Table 3 illustrates the subareas that might be included in each of these approaches.

Each approach has its merits. The primary advantage of the business-area approach is that it would facilitate interfacing competition planning with the PPBS and with the mission area system for categorizing DoD research and development. This approach would most closely align with the organizations of the services and the Office of the Secretary of Defense, and thus might be a more readily acceptable addition to current Pentagon planning processes. Moreover, since many current military balance assessments are structured along business-area lines, this approach could easily

Table 3. Alternative approaches to subareas of the U.S.-Soviet military competition.

BUSINESS AREA APPROACH	REGIONAL APPROACH
• STRATEGIC FORCES	• HOMELANDS OR INTERCONTINENTAL THEATER
• AIRLAND BATTLE FORCES	• EUROPE
• POWER PROJECTION	• MIDDLE EAST/SOUTHWEST ASIA
• NAVAL FORCES	• EAST ASIA
• SECURITY ASSISTANCE	• CENTRAL AMERICA
• TECHNOLOGY	• OUTER SPACE

draw on this important source of analysis for competition planning.¹

The regional approach to subareas of the military competition also has a number of advantages. By focusing on geographical regions rather than on types of military forces, this approach would encourage combined arms thinking in competition planning, which is likely to result in more effective strategies for any fixed level of resources. Further, a regional approach would help competition planners focus on strategic goals or ends, which will tend to be regional in nature, as well as on the means to accomplish those ends, which is more the focus of the business-area approach. Another advantage to the regional approach is that it parallels the Soviet approach to competition planning, which would encourage planners to focus on our primary adversary rather than on generic mission requirements for military capabilities. Moreover, the regional approach can be aligned with the U.S. Unified and Specified Command organization, which would facilitate the involvement of operational commanders in competition planning. Since some existing military balance assessments are carried out on a regional basis, this approach to subareas of the competition could also draw on this source of analytic support. Finally, a regional approach would facilitate the shift of U.S. competition planning to a multipolar framework.

The advantages of the regional approach appear to outweigh those of the business-area approach. Consequently, we recommend using the set of subareas shown in Table 4, which is primarily a regional breakdown. Table 4 also includes the business area of technology, which could be a particularly important area of military competition in the 1990s.

Table 4. Subareas of the U.S.-Soviet military competition.

- Homelands or the intercontinental theater (includes U.S. and Soviet intercontinental-range offensive forces and homeland defenses, but not general purpose forces based in the United States or USSR for employment in regional operations.
- Europe (including the northern, central, and southern regions)
- Middle East/Southwest Asia
- East Asia and the Pacific
- Central America
- Outer space
- Technology

Table 5 compares these competition subareas with the U.S. Unified and Specified Command structure and with Soviet theaters of military operations (TVDs).

A breakdown of the military competition into subareas should be a working tool for planners and analysts, not an immutable division of the world into mutually exclusive and exhaustive categories. Planners should have sufficient flexibility to change the definitions of subareas periodically, in order to focus on the most important regions or business areas for competition purposes at the time, just as the Soviet General Staff apparently changes the boundaries of their theaters of military operations to suit their evolving planning needs. For example, if Soviet aid and arms sales to countries in the western hemisphere were to decline, Central America might be dropped from the list of U.S. competition planning subareas. Or if India became an

Table 5. Subareas of the competition, unified and specified commands, and theaters of military operations.

<u>COMPETITION SUBAREAS</u>	<u>U.S. OPERATIONAL COMMANDERS</u>	<u>SOVIET TVDs*</u>
Homelands	CINCSAC	Intercontinental TVD
Europe	CINCEUR, CINCLANT	Western Theater (Northwestern, Western, Southwestern TVDs and related maritime areas)
Middle East/Southwest Asia	CINCCENT	Southern Theater (Southern TVD and related maritime areas)
East Asia and the Pacific	CINCPAC	Far Eastern Theater (Far East TVD and related maritime areas)
Central America	CINCSOUTH	?
Outer space	CINCSPACE	?
Technology	_____	_____

*Source: Soviet Military Power: Prospects for Change (Washington: U.S. Department of Defense, 1989), pp. 14-15.

important military competitor in the future, South Asia might be added.

While breaking the military competition down into subareas is necessary in order to carry out planning and analysis, competition strategies for each subarea should not be developed in isolation from one another. Volume II addresses questions related to planning across subareas, as well as planning within each subarea, but two general points should be noted here.²

The first is that there are strategic connections among subareas that should be taken into account in planning and analysis. For example, the world's oceans form a strategic connection among many of the subareas. Similarly, Eastern Turkey is close to Iraq and to Soviet invasion routes to the Persian Gulf, connecting the European subarea with the Middle East and Southwest Asia. The military competition in outer space is connected to virtually every other subarea. In formulating strategies for the military competition, such strategic connections between subareas should be taken into account and, if possible, taken advantage of.

The second point is that planning and analysis should seek competition actions that are likely to provide strong competitive leverage in more than one subarea. For example, because maritime operations play a significant role in almost every regional subarea and the seas are used to conceal a significant portion of both superpowers' strategic nuclear forces, investments in naval forces could yield significant competitive leverage.

Military space programs can also provide considerable competitive leverage across a number of subareas. Improved wartime survivability in space-based surveillance, communications, and navigation could significantly enhance U.S. military capability vis-a-vis the Soviet Union or other adversaries in almost any

conflict, as could the ability to deny the Soviets wartime access to space for similar purposes. Programs incorporating major technological advances, such as the B-2 bomber, may be strongly competitive if they are used to gain advantages in a number of subareas of the competition. Similarly, the research and development being undertaken in the Strategic Defense Initiative (SDI) program provides competitive leverage beyond the intercontinental or strategic forces subarea through technological spin-offs (e.g., rail gun technology, beam weapons technology, and sophisticated battle management and control software development) that could significantly affect other subareas.

3.2 STRUCTURE OF MILITARY COMPETITION

Several concepts are important for planning and analysis of the military competition in each subarea:

- Prizes and goals: For what ultimate objectives is each side competing? What are the more immediate competition goals that each side is pursuing as it seeks these ultimate prizes?
- Rivals and other actors: Who are the contending parties? What other parties affect the way in which military competition is carried out?
- Means: Through what instruments do countries compete militarily?
- Rules and referees: What determines "legitimate" behavior in the peacetime military competition? What mechanisms enforce these behavioral norms?
- Centrality of moves and countermoves: How best to think about the dynamic interactions of the contending parties?
- Time horizon: What is the proper time horizon to use in military competition planning?

3.2.1 Prizes and Competition Goals

Prizes are the ultimate objectives each side is seeking in the competition, while competition goals are stepping stones intended to lead to the ultimate prizes, tempered by the actions of the adversary, domestic politics, and the conditions of the competitive environment. In sports, the prize is to win the game or the league championship, while competition goals are steps toward these ultimate prizes, such as gaining position for a field goal in football. Career rivalries involve high-level jobs as prizes; more immediate competition goals might include gaining opportunities to demonstrate one's skills or to expose the weaknesses of opponents.

The ultimate prize for which the United States and Soviet Union are struggling in the peacetime military competition is the security of their respective territories and political, economic, and ideological ways of life. At the margins, so to speak, the competition has been particularly focused on control or influence over third parties (particularly the West European nations); on maintaining or expanding political, economic, ideological, and military freedom of action; on preventing armed attacks by the other side; and on having the ability to determine the outcome of crises or wars, should they occur.

These ultimate prizes in the peacetime competition are not the same as the immediate competition goals of each side in specific subareas of competition such as intercontinental offense and defense or Europe. Specific competition goals vary over time, and are related to the current state and trends in the competition. They should be sufficiently specific to guide military investments and operational doctrine, and should be related to such generic competitive functions as improving one's competitive position, imposing costs, or changing the military balance in some subarea.

Specific examples of competition goals are to make Soviet air defenses obsolete or to nullify the U.S. or Soviet investment in ballistic missiles.

While formulation of competition goals and strategies to achieve them should occupy much of the attention of those responsible for securing their country's interests in the peacetime military competition, the ultimate political-military prizes for which each side is contending must be kept in mind in order to decide among more narrow and immediate competition goals and actions.³

There are asymmetries in the prizes for which the United States and the Soviet Union are striving that stem from differences in the political and economic aims and philosophies of the two sides. For example, in East Asia, the Soviet Union probably seeks ultimately to prevail over China as a political-military rival, while the United States seeks to use China to divert Soviet investments from forces that threaten the United States and its allies.

3.2.2 Rivals and Other Influential Actors

To understand a competitive situation, one must know who the contending parties are. In some cases it is obvious, as in sporting events, many career rivalries, or bureaucratic competitions. In other cases, such as business activities or the military competition, analysis is needed to determine who the most serious rivals are and which actors can most powerfully affect competition.

Clearly, the primary rivals in the current military competition are the United States and the Soviet Union. However, from the Soviet perspective, China is a rival that conditions the

U.S.-Soviet military competition; depending on future political, economic, and military developments, China could also once again become a major rival of the United States. The allies of the United States and of the Soviet Union also affect the competition. Allies often constrain U.S. or (to a lesser extent) Soviet actions in the military competition and offer opportunities to the other side to influence one's competitive actions; over time, some allies might become rivals. In some specific areas of military competition, such as Southwest Asia or Latin America, nonaligned countries also influence the U.S.-Soviet competition.

As evidenced by even this brief discussion, the superpower competition increasingly is carried out in a multipolar arena in which other actors are influential, sometimes powerfully. Third parties increasingly affect regional manifestations of the U.S.-Soviet military competition, sometimes constraining one or both superpowers, sometimes providing opportunities for the United States or the Soviet Union to increase its competitive advantage over the other. Some third parties also compete directly with the United States (e.g., Japan, in the economic dimension) or the Soviet Union (e.g., China, in the political and military dimensions). These third party competitors -- or "third players" -- affect and complicate the U.S.-Soviet military competition, and of course pose independent challenges. The multipolar context for the U.S.-Soviet military competition affects the planning structure, the portfolio management aspects, and the analysis requirements of competition strategy development, as described in volume II.

Internal institutional structures can also be important for many areas of competition. For example, the U.S. Congress is a key party that affects the competitive actions of the executive branch in all subareas of the military competition. Gorbachev's

civilian advisors are emerging as actors who are not totally aligned with the Soviet military.

3.2.3 Means through Which the Peacetime Competition Is Exercised

To develop good competition strategies it is essential to understand what means or instruments are available for competing. In sports, the means are relatively few in number and obvious -- passing, running, and kicking in football, for example. In other forms competition, the available instruments are more numerous and complex.

The United States and the Soviet Union use a variety of means short of fighting with one another to seek to achieve their objectives in the military competition, to seize or maintain the initiative, and to influence each other's behavior. These means include military forces, military operations, and foreign policy actions.

Deployed military forces -- their size, their characteristics, and their peacetime stationing -- are, of course, primary instruments in the competition. Military research and development, technology applications, testing, prototype developments, and weapon system programs also are important, as are the size, rate of increase (or decrease), and allocation patterns in each side's military budgets.

Military operations short of direct U.S.-Soviet fighting constitute a second general means of competing. Such operations include exercises, covert actions, use of one's forces in third world conflicts, and use of one's forces in crises.

A third set of means for competing militarily is foreign policy actions. While not military in nature, foreign policy

actions are an important way to influence the military competition. These means include diplomatic actions in crises; security treaties and agreements; public statements; propaganda; arms control negotiations and other arms control actions (e.g., treaty violations, actions taken to enforce treaty compliance); foreign aid; military assistance programs; and the use of proxy forces in third world conflicts.

3.2.4 Rules and Referees

Obviously, the U.S.-Soviet military competition is not governed by a fixed set of explicit rules and enforcing mechanisms the way a football game is. Even the more complex rules governing business competition, enforced by customers, regulatory agencies, and courts, are not an appropriate analogy for the military competition, because -- while complex -- rules governing domestic business competition are explicit, change in explicit and open ways, and apply equally to each company. In the military competition, boundaries on legitimate behavior are fuzzy, frequently are tacit, change periodically without explicit announcements, and apply asymmetrically to U.S. and Soviet actions. Nevertheless, a variety of enforcing mechanisms do set boundaries on what constitutes legitimate behavior in the U.S.-Soviet military competition.

Probably the most powerful determinant of behavior in the military competition is the desire to avoid disastrous wars, especially nuclear wars. Another determinant is past patterns of behavior and bureaucratic mores, which acquire a certain momentum and tend to become the norm for military and civilian organizations that affect each side's competitive actions, unless they are upset by external events or new leaders. These two types of enforcing mechanisms channel both U.S. and Soviet behavior, although not necessarily in the same way.

Other mechanisms affect U.S. actions in the competition more strongly than they do Soviet actions. These include domestic politics, the views of allies and third players, and public opinion. The U.S. Congress and the western media operate uniquely to constrain U.S. behavior, but not Soviet behavior. Gorbachev's policy of glasnost is, however, opening opportunities for greater domestic influence on Soviet competition actions.

Both sides generally comply with international laws, international agreements, and domestic laws in the peacetime military competition. Each, however, seeks to exploit ambiguities in these legal restrictions to its advantage, and each side has been known to violate laws or agreements. But, domestic politics and the institutional structures of each side's government operate asymmetrically to give the Soviet Union greater opportunity than the United States to take advantage of legal and treaty ambiguities.

The rules governing the U.S.-Soviet military competition are too complex, fuzzy, and variable to attempt to set them forth here, and it probably is not helpful to do that in any event.⁴ What is important to understand is that both sides are not governed by a common set of rules and enforcing mechanisms. Asymmetric rules of behavior constrain the United States more than the Soviet Union in the long-term military competition. But, the USSR is subject to some limits on its behavior, and it is important to understand what these limits are.

3.2.5 Centrality of Moves and Countermoves

Since it is the essence of the notion of competition that each side will seek advantages through specific strategies and actions that take into account the other side's strategies and

actions, consideration of moves and countermoves by each side is central to the competition planning process. This is a primary reason why the game of chess is an appealing analogy for competition strategies.

Table 6 summarizes the case histories of four major U.S.-Soviet weapon system move-countermove cycles. Noted are the time the United States initiated an action, the time the Soviets apparently detected that U.S. action, the time at which the technology necessary to counter or emulate the U.S. initiative was first developed (anywhere, not just in the Soviet Union), and the time an actual Soviet countermeasure or equivalent capability first became operational.

Three points are worthy of note from the perspective of the military competition. First, as illustrated by the case of the announced American intention to deploy the XB-70 high-altitude strategic bomber and the subsequent Soviet deployment of the SA-5 surface-to-air missile (SAM) system in 1967 and the MiG-25 high-altitude fighter in 1970, the Soviets will sometimes deploy counters to U.S. systems that are themselves never deployed. Whether this is due to inflexibility in the Soviet weapons acquisition process or because the Soviets foresee other missions for such counters is not clear. This Soviet characteristic does, however, open possibilities for U.S. cost-imposing actions through R&D programs.

Second, Soviet responses to U.S. actions do not always take the form of countermeasures, in the strict sense of measures to nullify the operational effectiveness of the U.S. action. Sometimes, as in the case of U.S. quieting of its submarines, the Soviets choose to compete with American initiatives by acquiring the same capability for their own forces.

Table 6. Soviet response times to U.S. actions.

INITIATION OF US ACTION	SOVIET DETECTION OF US ACTION	TECHNOLOGY AVAILABLE	SYSTEM OR MOD OPERATIONAL	SOVIET TIME TO COUNTER US ACTION
LOW ALTITUDE BOMBER TACTICS 1959 - 1960	PUBLICLY ANNOUNCED 1959 FLIGHT IN 1960 (0 YEAR DELAY)	LOOK-DOWN RADAR: - INTERCEPTOR 1975 - AWACS 1975 (15 YEAR DELAY)	MIG-29 31 1984 SA-10 1985 SU-27 1986 MAINSTAY 1986	24 YEARS 25 YEARS 26 YEARS (24-26 YEARS)
SURVIVABLE ICBM LAUNCH CONTROL FACILITY (LCF): AIRBORNE LCF & ALTERNATE MINUTEMAN LCF 1966	LOOKING GLASS INITIAL OPERATING CAPABILITY (IOC) 1961 MM I IOC 1966 (0 YEAR DELAY)	APPROXIMATELY 1970 (4 YEAR DELAY)	SS-18 MOD 1979 SS-19 MOD 3 1979	13 YEARS
XB-70 HIGH-ALTITUDE BOMBER 1957	PUBLICLY ANNOUNCED 1956-57 (0 YEAR DELAY)	(7 DELAY)	SA-5 1967 MIG-25 1970	10 YEARS 13 YEARS (10-13 YEARS)
SSBN/SSN QUIETING 1962	(7 DELAY)	MID 1970s (7 DELAY)	OSCAR 1982 TYPHOON 1983	20 YEARS 21 YEARS (20-21 YEARS)

Third, some Soviet counters operate against a broader set of U.S. capabilities than the action that prompted them. U.S. efforts to deploy a survivable intercontinental ballistic missile (ICBM) launch control capability and the Soviet deployment of the SS-18 Mod 4 and SS-19 Mod 3 ICBMs are a case in point. When deployed in large numbers, these Soviet hard-target attack systems threatened not only the alternate Minuteman launch control facilities, but all U.S. silo-based missiles.

Understanding the variety of ways in which the Soviets might make moves or countermoves thus is as important as understanding the time constants for move-countermove cycles. Figure 1 depicts the range of ways the Soviets might respond to a U.S. competition action and the time each response technique is likely to take, based on historical experience and an understanding of current Soviet weapon acquisition and operational planning processes.

There are three basic types of Soviet competitive responses to American initiatives. The first is the acquisition and deployment of an entirely new Soviet weapon system. The second is the modification of an existing Soviet weapon system in a way designed to counter or match the U.S. initiative. The third is the development of new tactics or operational concepts designed to counter the American actions.

In cases where the Soviets choose to modify an existing system in their arsenal or introduce an entirely new one, there is another factor that affects the response time: the availability of the required technology. If the planned Soviet response can be made with technology that is already available to the Soviet arms industry, the response can be fielded significantly faster than if the required technology must be developed domestically or acquired from Western sources.

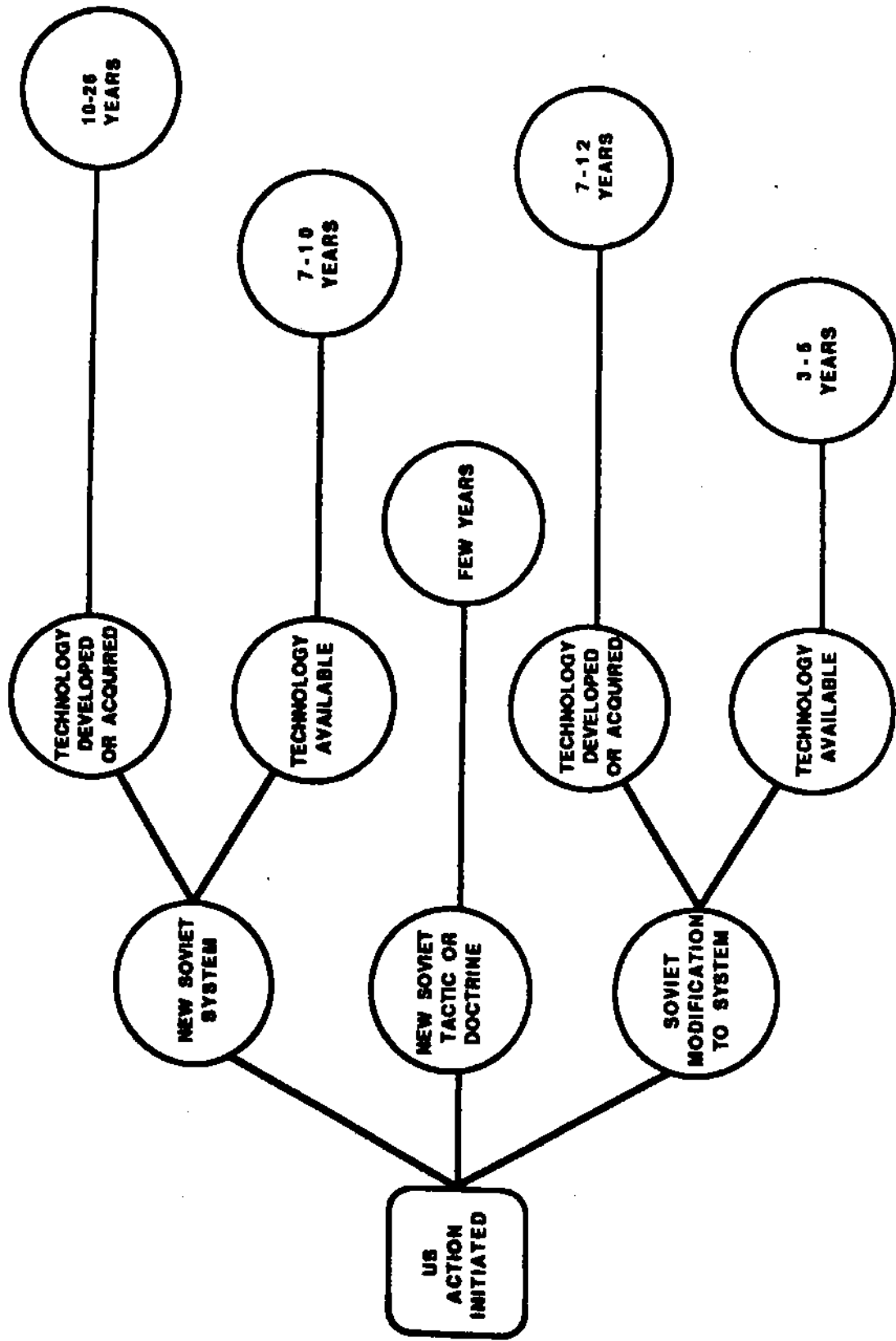


Figure 1. Soviet response means.

In the context of moves and countermoves, the best competition actions are those that impose the greatest temporal response burden on the Soviets relative to the time it takes to implement the U.S. actions. Thus, a proposed U.S. initiative that would take ten years to implement, but could be countered by a change in Soviet tactics in three to five years, is less desirable than a alternative ten-year initiative that would require the Soviets to deploy an entirely new weapon system based on their own technology, a task that would likely take them as long as twenty-five years to complete. Similarly, a U.S. initiative that could be countered relatively quickly were existing Western technologies applied to the task is less desirable than one that cannot be countered with any known technology, as Soviet acquisition of the Western technology in question could lead to a relatively rapid and effective Soviet response.

It should be remembered, however, that the Soviets often pursue more than one type of response to a particular competition action. For example, when faced with NATO's proliferation of antitank guided missiles (ATGMs), the Soviets first implemented operational and force posture changes (suppression of ATGM gunners with intense artillery fire coupled with a substantial increase in the number of deployed artillery batteries), followed by the deployment of a countermeasure based on technology acquired abroad (reactive armor, first developed by the United States and first deployed by Israel).

This discussion highlights the need for Soviet-style analysis in competition planning. The term "Soviet-style" is used to signify the importance for Americans to approximate as closely as possible the ways in which the Soviets would analyze a given situation or problem, as a guide to understanding how they might act. The need for Soviet-style analysis in U.S. military

competition planning arises from the many asymmetries between Soviet and Western analysis and planning methods. These asymmetries make it clear that mirror-image assumptions about Soviet competition initiatives or responses would be seriously misleading.

Uncertainty about future Soviet actions in the competition is a major problem for U.S. planners. The ability to anticipate likely Soviet actions -- or to make U.S. strategy robust in the face of a range of plausible future Soviet actions -- is critical to an accurate assessment of the advantages the United States can hope to gain from a given competition strategy. Soviet-style analysis is also important for an accurate appraisal of Soviet strengths and weaknesses and of ways in which the United States can exploit the latter (e.g., by threatening Soviet control of operational timelines or by affecting the correlation of forces at critical times and places).

The requirements for Soviet-style analysis are discussed in more detail in other chapters.⁵ At this stage, it is sufficient to note two points. First, the concept is an integral part of any sound approach to planning for the long-term military competition. Failure in this area is likely to lead to ill-considered actions and to great inefficiencies in the conduct of the competition by the United States. But, secondly, the task of anticipating likely adversary actions is extraordinarily complex and difficult.

3.2.6 Time Horizon for Planning

It is important to establish the most distant feasible time horizon for competition planning. Effective strategies for the competition are based in part on projections of trends in the international security environment and in the military and technological capabilities of the opponent. The use of unnecessarily short time horizons can result in the failure to take

into account significant trends. Unrealistically distant planning horizons will exceed one's ability to make confident projections.

U.S. competition planners should use at least a twenty-year planning horizon, with more distant planning limits set where feasible.⁶ There are a number of reasons for this twenty-year minimum. One superpower move-countermove weapon cycle historically takes between one and three decades, and a twenty-year planning horizon would cover most if not all of one cycle without unduly stretching the limits of our ability to foresee potential moves and countermoves confidently. A planning horizon of at least two decades is also important in order to take into account macroeconomic and demographic trends that can affect U.S. and Soviet military capabilities. Finally, international economic and political trends affect the future environment in which the U.S.-Soviet military competition will take place. Shifts in alliance structures, trends in the spread and contraction of ideologies and political systems, and changes in trade patterns and resource dependencies can have significant impacts on the superpower military competition. All are processes that take time to play themselves out. A twenty-year minimum planning horizon permits these factors to be taken properly into account.

3.3 STATES OF THE MILITARY COMPETITION

Determining where one should try to move in a competition requires, among other things, understanding what the current state of the competition is and what future states are feasible, which states the United States prefers, and who is ahead in the current state.

The state of the military competition at any particular time is determined by a complex set of interrelated political, economic, technological, and military conditions. It is analogous

to the combination of the score, the position of the ball, and the number of the down in football. Or, to use a linear algebra analogy, one can imagine a multidimensional state space in which each axis is a variable characteristic of the military competition. The current state of the competition is a single point in this space, and a good strategy is one that moves the state of the competition along a path in the state space that is preferred by the United States. Understanding and diagnosing the current state and determining toward what future state America wants to move the competition is important for selection of goals, strategies, and specific actions in the U.S.-Soviet military competition.

3.3.1 Describing States of the Competition

Understanding starts with the ability to describe. Thus developing succinct descriptions of past, current, and alternative future states of the competition -- descriptions that various parties engaged in formulating and implementing strategies can agree are accurate characterizations -- is an important ingredient to the planning process. Otherwise, issues about the proper strategy will become hopelessly confused with issues about what is the current state of the competition and toward what future state the United States should try to move.

Describing states is not easy because of the complexity and multidimensional character of the military competition. In particular, the state of the competition is too complex to be able to define even the axes of the state space in a formal, mathematical way. Nevertheless, a relatively succinct way to describe past, current, and future states of the competition is an important planning tool. At the minimum, state descriptions should address three dimensions of the military competition: the military balance, the competitive positions of the two sides, and the state of relevant elements of the competitive environment.

The condition of the U.S.-Soviet military balance is an important element of the state descriptor because it is a measure of the U.S. and Soviet abilities to fight effectively in time of war. The term military balance is used here in the sense of the military balance assessments carried out by OSD (Net Assessment): evaluations that include, in addition to force levels, the qualitative characteristics of weapons and forces; doctrine, operational concepts, and war plans; force deployments in peacetime or crises; warning time; C³I; readiness and training; and the critical force engagements that have strong effects in determining war outcomes.

The relative position of the two countries in the military and nonmilitary (e.g., economic, ideological, diplomatic) dimensions of the competition is a second important element of the state descriptor because it indicates how well each side can compete in various areas in the future. This includes consideration of how well each side has translated inherent strengths and weaknesses into actual advantages for pursuing the competition.

Competition state descriptors should also include, as a third element, the extent to which the United States is achieving its more traditional peacetime political-military objectives (e.g., deterrence, reassurance of allies, and the ability to resolve crises peacefully). This helps to relate the assessment of states to the more immediate concerns of the Department of Defense.

Third player considerations thread throughout all three of these dimensions of the state of the competition, and it could be argued that a dimension related to third players should be added to the description of the state of the competition. But consideration of Soviet goals, strategies, and actions also threads

throughout the above three dimensions. Rather than complicate state descriptions with additional dimensions, it seems more tractable to treat such factors as the Soviet Union and third players within the three dimensions outlined above.

Obviously, this apparently simple and clear-cut set of dimensions of the U.S.-Soviet peacetime competition will not in practice lead to a simple and clear-cut set of numbers or indicators of the state of the competition at any particular time. Narrative descriptions of states will probably be necessary. Moreover, breaking the military competition into subareas, as discussed above, makes it easier to describe the state of the competition by addressing the military balance, competitive positions, and achievement of more traditional U.S. objectives on a subarea-by-subarea basis.

Treating the competitive position of one side relative to the other as an element of the state of the competition distinct from the military balance is important for formulating goals and strategies. The current U.S. competitive position in various subareas is a major guide to specific actions that build on U.S. strengths and exploit Soviet weaknesses. Additionally, the United States can make investments to improve its ability to compete in various subareas in the future, even if these investments do not directly result in improved military balances. Technology investments are an important means for improving the U.S. competitive position; negotiating new or sustained access to overseas bases is another example.

By considering the competitive positions of each side in various subareas of the competition, as well as the military balances, the distinction between competing on a weapon-system basis and competing on what might be called an enterprise basis becomes apparent. One side may exert and maintain an advantage

over another by taking a perspective based on more than investments in particular weapon systems, and thus be able to sustain that advantage for a longer period than the advantage derived from the lead in a specific weapon. This kind of enterprise approach to the military competition is aimed at gaining and sustaining a superior competitive position in some area of competition.

For example, the U.S. failure to prevail over the Soviet Union in armor and anti-armor forces, which is discussed in more detail in chapter 4, is not due to a lag in some technology or to not moving a new system into production sufficiently quickly. Rather, the U.S. armor and anti-armor failure was in not sustaining the long-term infrastructure of doctrine, research, procurement, and industrial capability that could have produced innovative designs and operational concepts. We might compare this situation with that of the U.S. automobile industry. To defeat the Soviets in the armor and antiarmor area would have required the decades-long commitment to achieving a superior competitive position in a particular enterprise that Toyota made to beating Detroit's "Big Three."

Changes in the state of the military competition can occur in a number of quite different ways: through a long-term effort (like that of Toyota), more rapidly as a result of events in the competitive environment that may be beyond the control of the rivals themselves, or through innovation in weapon systems or operational concepts. Competitive advantage can be overcome or a superior competitive position reversed because the side that is at a disadvantage makes a long-term commitment of resources and gradually nibbles away at the other side. On the other hand, the competitive environment can change rapidly in ways that neither side controls. As a result, the basis for advantage and disadvantage can change in a relatively short period, and the current competitive position and strategy of one side or the other

may no longer be useful in the new environment and could even become a liability. The most striking example of this phenomenon is the political change in Eastern Europe that was not foreseen by either side until very recently. The new environment in Europe is rapidly altering the basis for military competition there, with immediate advantages for the United States, but with longer-term consequences that are less clear.

A third type of change in the state of the military competition is one that comes about from a sudden and significant innovation introduced by one side or the other. An historical example is the German introduction of the type XXI submarine just at the end of World War II. This submarine incorporated much of the technical and operational experience of the last three years and, if introduced earlier, could have changed the outcome of the Battle of the Atlantic. Both the United States and the Soviet Union copied the hull design and other features of the type XXI in their first postwar submarines. A second historical example is the German introduction of the ME-262 fighter in World War II, which in the opinion of some at the time could have significantly eroded the effectiveness of the combined bomber offensive had it been employed properly.

These German experiences also illustrate the difficulty of finding and exploiting a technological innovation to suddenly reverse competitive advantages, especially if one is in an inferior competitive position. The second-place player usually will not be able to exploit fully the potential of innovation if his competitive position is markedly inferior.

3.3.2 Preferences for States

Specific U.S. goals in the military competition should reflect U.S. preferences for future states of the competition.

Hence, understanding what states America prefers the competition to be in and what states the Soviet Union prefers is an essential step in characterizing the competition and formulating strategies for competing effectively.

Not only is the concept of preferences for states important for setting U.S. competition goals and understanding Soviet goals, but consideration of state preferences also introduces the important factor of time through the dynamics of moving the competition from the current state into some more preferred future state. For example, U.S. goals in some areas of the competition may call for moving rapidly to a new state; such judgments depend on how strongly future states are preferred over the current state. Alternatively, if the United States prefers the current state over feasible alternatives, a goal might be to keep the competition in its current state for as long as possible, despite Soviet efforts to change the state.

Another way that state preferences enter into strategy formulation has to do with unintended consequences of U.S. actions. Future states of the competition are determined by the actions of many parties, not just the United States, and the complexity of the competition makes prediction of these actions and their results difficult. Therefore, U.S. actions directed toward achieving a specific goal may result in a different state of the competition than that intended by the United States. For example, actions intended to make Soviet silo-based ICBMs obsolete by increasing the capability of U.S. strategic forces to destroy hardened silos may have had the unintended result of driving the Soviet strategic force posture to a much greater degree of mobility than in the 1960s. Is this better or worse for U.S. security than the Soviet ICBM posture of the 1960s, which consisted entirely of silo-based systems? In other words, which future state should we have preferred? U.S. planners should analyze and debate which of a

range of plausible future states could result from contemplated U.S. actions and whether any of those states are preferred to alternatives that might result from other actions.

In some forms of competition, preferences for states are obvious. In a football game, for example, the preferences of a team can be expressed in terms of the score and the field position. Preferences are more complex and subtle in career rivalries or business competition, but are still relatively simple compared with preferences for states of the military competition.

Clearly, there are formidable theoretical and practical problems in seeking to define a multidimensional, multiorganizational utility or preference function over the states of the military competition. This suggests that the determination of preferences for states at best will be a crude process, perhaps a simple ranking of plausible future states and the current state. Despite these problems, it would be a mistake not to address preferences explicitly. One reason is that uncertainties related to the U.S. ability to predict future states of the competition should be distinguished explicitly from uncertainties about U.S. preferences among plausible future states, since there are different techniques for managing each type of uncertainty. As an example, adaptive strategies that take actions, observe Soviet responses, then select further actions in light of those responses are a means of managing uncertainty about predicting future states; but an adaptive approach to competition strategies assumes the U.S. government is clear about which states it prefers.⁷

Another reason for addressing U.S. preferences for states explicitly is to permit competition goals to be formulated in light of these preferences. For example, U.S. preferences -- and therefore U.S. competition goals -- should relate to what is better or worse for U.S. national security. Hence, a point of departure

for addressing state preferences might be the ultimate prizes in the competition discussed above (e.g., influence over key nations or maintaining U.S. freedom of political, economic, and military action).

Another approach to determining preferences among alternative states is to evaluate states in terms of stability. The United States seems to prefer stable military balances in which neither side has overwhelming advantages and that permit political and military authorities to maintain control over forces in a crisis ("crisis stability"). Stability in a different sense may be a useful indicator of Soviet preferences for alternative states, since the Soviet Union seems to prefer "stable" conditions in which Soviet control over the course and outcome of political and military situations is assured.

In all of this, it should be noted that the ability to describe states of the competition succinctly is necessary in order to assign preferences to states.

3.3.3 Scoring the Military Competition

The notion of score, or who is ahead, is fundamental for the idea of any kind of competition. In the U.S.-Soviet military competition, assessing which side is ahead or currently has the advantage is important for several reasons. Not only should assessing who is ahead provide a means for achieving consensus about whether the United States should be satisfied with current trends and the current state of the competition, but scoring the military competition also can serve as a diagnostic tool to help understand why America likes or does not like the current trends and state. This sort of diagnostic analysis can, in turn, help to achieve a consensus about preferences for future states of the

competition by providing a sense of scale about the relative U.S. and Soviet standings in the competition.

Assessing which side is ahead is, therefore, closely related to understanding U.S. preferences for states by illuminating in some detail what is good or bad about the current state of the competition and suggesting preferred directions in which to try to move the competition in order to improve the U.S. advantage or reduce the Soviet advantage. But, by including diagnostics about why one side or another is ahead, the scoring or assessment process goes beyond establishing preferences and, properly done, should contribute to strategy development.

Thus, scoring is important, but the complexity of the military competition makes it difficult to assess in an overall sense which side is ahead. Making such assessments in each subarea of the competition will ease the problem, but, even when broken down into subareas, the military competition is still too complex to assess which side is ahead by exclusive use, or perhaps even primary use, of quantitative measures.

What factors to assess and how to assess them for scoring purposes are key research issues. Currently, the United States assesses the state of the military competition largely through the judgment of various officials and planning staffs, influenced strongly by a few canonical planning contingencies (e.g., nuclear exchanges, major conventional war in Europe); by perceived technological opportunities; and by organizational biases. In making these assessments, there is little systematic analysis of potential Soviet counters to U.S. programs or competition actions (the SDI program, which does examine Soviet countermeasures on a systematic basis, is a notable exception). Military balance assessment is a potentially important tool for scoring the

competition, but there currently is no formal system for the use of such assessments in competition planning.⁸

How the Soviet Union scores or assesses the military competition is only partially understood by the West, and this understanding is confined to a small number of experts. The assessment procedures of the USSR apparently start with the analysis of the nature of future wars on a theater-by-theater basis, followed by more detailed correlation-of-forces analyses. The Soviets apparently make some systematic effort to anticipate U.S. counters to their competition actions, but it is not clear how thoroughly they carry out such move-countermove analyses, since their preference is for high correlation-of-force ratios in their favor, which can make many Soviet competition actions relatively insensitive to U.S. counters.

At least three factors seem important to capture in U.S. evaluations of who is ahead. These factors are those discussed above in connection with describing the state of the military competition -- warfighting capabilities, the ability of each side to compete effectively in the peacetime military competition, and the impact of the military competition on more traditional U.S. peacetime objectives such as deterrence, reassurance of allies, and the ability to resolve crises peacefully.

Military balance assessments and contingency analyses to evaluate the outcomes of possible future wars can be used to assess current or possible future warfighting capabilities. The current competitive position, or ability to compete, of each side is also important for scoring purposes, because it indicates how readily each side can improve its standing in the competition. The current ability to compete is, however, a complex matter that is not easy to assess. Evaluation of competitive positions clearly should include the strengths and weaknesses of each side, but this is not

sufficient. For example, current competitive advantages should also be taken into account.⁹ A U.S. (or Soviet) competitive advantage is a benefit actually achieved in the competition by expending resources or taking other actions to convert one's strengths and the adversary's weaknesses into a tangible benefit. Competitive advantage is a dynamic concept; it can increase or diminish over time. Examples are the ease with which one side can offset competition moves of the other by producing more tanks or aircraft or by drawing on technology advances such as stealth that can nullify these moves.

A related concept for evaluating the U.S. and Soviet competitive positions is competitive leverage: making disproportionately large gains in the military competition relative to the resources expended. Leverage may be measured in terms of the adversary's cost to respond, his time to respond, or the stress imposed on his military or industrial establishments. A large gain could, for example, be measured in terms of how well the United States undercut past Soviet military investments or influenced Soviet military spending patterns or operational concepts. Leverage may be measured in terms of an adversary's cost to respond to an action or strategy, the time required to respond, or the stresses imposed by an action or strategy on an adversary's military or industrial establishment.

Competitive initiative is a third concept for assessing competitive positions. The side that is dictating the agenda or the pace in a subarea of the competition may be said to have the competitive initiative, since the adversary will be reacting to that side's actions, rather than undertaking initiatives of his own.¹⁰ The ability to dictate the agenda of the competition facilitates building on one's strengths and exploiting the other side's weaknesses by steering the competition into areas where the United States is stronger and by putting the other side in the

position of expending time and resources responding to U.S. moves rather than initiating its own moves.

Maintaining the competitive initiative in an area depends in part on having competitive advantages in the variables that are critical to success in that area, including such factors as mastery of basic technologies, having the required industrial base for production, and being able to use geography to advantage. For example, while India is developing ballistic missiles, it is very far from having a capability to execute a counterforce attack against China or the United States because it does not have the required technologies and production capabilities in guidance systems, rocket motors, and nuclear warheads.

To assess the relative effectiveness of U.S. and Soviet force postures in terms of peacetime political influence is less straightforward than evaluating warfighting capabilities or even competitive positions, but nevertheless is an important part of understanding who is ahead in the military competition. Competition planners should think in terms of measures or assessments of demonstrated military influence on world affairs in peacetime (e.g., actual crisis outcomes; constraints that one side's military postures place on the other side's freedom of action; or political problems with allies that military initiatives such as the planned U.S. deployment of enhanced radiation/reduced blast weapons in Europe have caused). By focusing on demonstrated military influence, perhaps greater rigor can be brought to the subject of peacetime political impact for purposes of scoring the competition.

3.4 CONCEPTS NEEDING METHODOLOGICAL RESEARCH

Several attributes of the U.S.-Soviet military competition should be taken into account in strategy formulation:

subareas of the competition, prizes and goals, rivals, means through which each side competes, rules and referees, moves and countermoves, time horizons, the state of the competition, preferences for states, and scoring. While research on the specifics of each attribute may be needed to develop particular strategies, most of the concepts are clear in a methodological sense. Three attributes are, however, both important for strategy development and poorly understood in a methodological sense. Research needs to be carried out on the following questions about these attributes:

- How to describe states of the competition objectively and succinctly?
- How to determine U.S. preferences among states and achieve consensus on specific determinations? Closely related is the need to improve U.S. understanding of Soviet preferences for states.
- How to assess which side is ahead in the military competition?

ENDNOTES TO CHAPTER 3

1. The role of military balance assessments in competition planning is discussed in detail in volume II. See especially chapter 4.
2. See chapter 1 of volume II.
3. Volume II, chapter 2, discusses the use of competition goals as planning tools and describes analyses that can assist in setting competition goals.
4. John Lewis Gaddis identifies five tacit "rules" that he argues regulate the superpower competition -- respect for each other's sphere of influence, avoidance of direct U.S.-Soviet military confrontation, reservation of nuclear weapons for use only in the extremity of total war, a preference for predictable anomalies in international arrangements over less predictable but more "rational" situations, and placing off limits any attempts to take advantage of the other side's leadership crises. See "The Long Peace: Elements of Stability in the Postwar International System," International Security, vol. 10, no. 4 (Spring 1986), pp. 132-40.
5. See volume II, especially chapter 5.
6. Volume II describes a layered planning system in which planning horizons are set for each layer. We recommend at least a twenty-year horizon for the layers dealing with the competitive environment and with a top-level U.S. competition strategy. The other layers, which are concerned with more detailed subarea strategies and implementing actions, would have shorter planning horizons.
7. Chapter 6 of volume II describes the use of competition planning games and military contingency analyses for determining preferences for future states of the competition and for reducing the risk of unintended consequences in developing competition goals and strategies.
8. For discussion of ways to use military balance assessments to assess and diagnose the state of the competition, see volume II, chapter 4.
9. Our use of the term differs from the one in common use, in which advantage is synonymous with strength. Thus, the statement that the United States should exploit its technological advantage in the competition is not consistent with our usage because it is too imprecise. The more helpful way of making the point is to say that the United States

should try to exploit its technological strength in order to realize specific competitive advantages.

10. The concept of competitive initiative, as defined here, should be distinguished from the DoD Competitive Strategies Initiative, where the term initiative means a new step or set of actions.

4. SAMPLE APPLICATION OF PLANNING CONCEPTS: INTERCONTINENTAL SUBAREA

This chapter illustrates the planning concepts developed in chapter 3 by applying them to the intercontinental or strategic forces subarea of the U.S.-Soviet military competition. It describes the prizes for which each side is contending, their current competition goals, the key actors in this subarea, and the major competitive instruments each side is using. The chapter then discusses two key elements of the state of the strategic forces competition: trends in the military balance and the competitive positions of each side. It concludes with issues to be addressed in developing a strategy for the intercontinental subarea of the military competition.

4.1 PRIZES AT STAKE IN THE INTERCONTINENTAL SUBAREA

The superpower competition in the intercontinental subarea is primarily focused on the strategic nuclear forces of the two countries. The state of the competition in this subarea has direct and indirect effects on the competition in most other subareas of the overall competition, in large part due to the sweeping nature of the prizes at stake for the two sides in the intercontinental subarea.

Both the United States and the Soviet Union seek to maintain their freedom of action in crises and regional wars through dominating the competition in the intercontinental subarea, while attempting to deny freedom of action to the other side. A historical example of how the strategic nuclear balance can be used in this way is the early postwar American declaratory policy of massive retaliation for aggressive Soviet actions taken below the nuclear threshold. Both sides have sought to shape the strategic nuclear balance so as to deny the other escalation dominance

through strategic nuclear superiority and to avoid self-deterrence of action due to the self-perception of nuclear inferiority.

A second prize sought by the United States and the Soviet Union in the intercontinental subarea is the attainment of influence over major allies of the United States. While the nature of this prize is essentially the same for each side, what each country views as influence over American allies is quite obviously diametrically opposite. The United States seeks influence over its allies in Europe and Asia by providing them with reassurance that the central strategic nuclear balance is being maintained in a state that will continue to provide them with the extended deterrent of the American nuclear umbrella.

The Soviets, on the other hand, have traditionally sought to influence the major allies of the United States in quite the opposite direction through their competitive actions in the intercontinental subarea. The Soviet strategic nuclear buildup is in part motivated by the goal of bolstering Western European fears (originally articulated by Charles de Gaulle) that the American nuclear umbrella is not credible, that the strategic balance is such that America would never risk losing Chicago for Bonn, so to speak. Success in this effort could lead to Western European accommodation of Soviet demands in a crisis and even to a drift toward neutralism by American allies who had lost confidence in the political will of the United States. In the competition for this prize success is more important to the United States than to the Soviet Union.

A third prize in the intercontinental subarea is sought only by the Soviet Union: the international perception of its equality in power and prestige with the United States. If the USSR is to be perceived by the world as "the other superpower," it must

at least equal the United States in fundamental military power, given its serious economic lag behind America and Japan. Since strategic nuclear arms can destroy the opposing society in a matter of hours, strategic nuclear equality with the United States has in some ways come to be seen as the primary measure of Soviet superpower status.

The final prize at stake for both sides is the capability to determine intercontinental war outcomes. While the two sides both see war outcome determination as a critical prize at stake in the intercontinental competition, they have different views of what constitutes an acceptable war outcome. Since the early 1960s, the primary emphasis of U.S. strategic force planning has been on deterring Soviet attacks through the threat of nuclear retaliation that would inflict unacceptable damage on the Soviet Union. In contrast, Soviet doctrine and actions emphasize the goal of favorable outcomes in a nuclear war, defined as the simultaneous limitation of damage to the Soviet Union and military defeat of the United States.

4.2 COMPETITION GOALS

In pursuit of the prizes outlined above, the two countries have more specific goals. These competition goals have been designed to counter those aspects of the other side's strategic nuclear forces that most threaten the achievement of the intercontinental prizes sought by each side. Current U.S. competition goals are to nullify Soviet investments in various elements of their strategic forces, to offset Soviet hardening of targets that must be threatened in order to deter a Soviet attack, and to preserve the viability of the U.S. ICBM force.

In its effort to nullify the Soviet investment in ballistic missiles, the United States is pursuing research and

development in the SDI program. Similarly, the U.S. cruise missile and B-2 bomber programs are meant to undercut large-scale Soviet investments in strategic air defenses. The United States is also seeking to nullify recent Soviet investments in mobile ICBMs through research and development aimed at finding ways of locating and destroying relocatable targets such as mobile missiles.

To offset Soviet target hardening, the United States is pursuing a variety of weapons research and development and deployment programs, including the Peacekeeper ICBM and the Trident II submarine-launched ballistic missile (SLBM). In a similar vein, the United States has deployed multiple independently targetable reentry vehicles (MIRVs) and carried out R&D on penetration aids designed to counter Soviet ballistic missile defenses in order to preserve the U.S. ability to destroy critical targets should the Soviets break out of or abrogate the Antiballistic Missile (ABM) Treaty.

The United States also seeks to preserve the viability of its own ICBM force as a competition goal. The American approach is a two-track one. While trying to reduce dramatically the Soviet threat to its silo-based missiles in START by demanding deep cuts in Soviet ICBMs that are capable of destroying hard targets, the United States also is developing a mobile ICBM in an effort to ensure American ICBM survivability.

The Soviets have a similar set of competition goals in the intercontinental subarea. They too seek to nullify their opponent's investments in various strategic force elements. But their use of arms control differs somewhat from that of the United States.

Soviet efforts to render U.S. strategic force investments obsolete are focused on three components of U.S. forces: accurate

MIRVs, ballistic missiles, and strategic force command, control, communications, and intelligence (C³I). The Soviets are deploying two new mobile ICBMs in an effort to counter U.S. accurate MIRVs, as well as continuing to harden critical fixed targets of interest to the United States. To nullify U.S. ballistic missile investments as a whole the Soviets are engaged in extensive research on ballistic missile defense and antisubmarine warfare (ASW) programs. Soviet counter-C³I programs are aimed at undercutting the entire U.S. strategic nuclear force investment.

Unlike the United States, Soviet use of arms control in the intercontinental subarea of competition has focused on preventing the incorporation of new technologies into deployed U.S. offensive and defensive forces, rather than on the elimination of existing U.S. systems. This is most readily apparent in Soviet attempts to limit the SDI program through arms control, even to the point of banning SDI research itself (an area in which, as noted, they themselves are heavily engaged).

4.3 KEY ACTORS IN THE INTERCONTINENTAL SUBAREA OF COMPETITION

The United States and the Soviet Union are themselves, obviously, key actors in the military competition in the intercontinental subarea. But other key actors, both inside and outside the politics of the two superpowers, must be taken into account by U.S. competition planners.

Within the United States there are three key actors that influence the competition in the intercontinental subarea: the national security establishment of the executive branch, the Congress, and the media. The nature of the influence of the national security establishment is clear: it is the primary source of thought and action regarding U.S. competition moves, including

budget planning, strategy formulation, doctrinal changes, and arms control negotiations.

Congressional influence on the intercontinental competition is considerable. While the constitutional powers of the purse and advice and consent to treaty ratification are the most apparent sources of congressional influence, there also are opinion leaders in Congress who shape the political debate on strategic nuclear forces in ways that influence the executive branch beyond the statutory powers of the Congress to do so. Thus, the executive branch must not only take into account whether or not it can secure the votes necessary to fund its strategic force initiatives and ratify any arms control treaty it might conclude, but also whether its explanation of American strategic nuclear doctrine and force plans can meet the test of public opinion in the face of congressional opposition.

The U.S. media's role in the intercontinental competition is similar to this latter congressional role. Opinion leaders in the media must also be dealt with by the executive branch, with an eye toward how a particular U.S. competition action will be perceived by the public through the filter of the media's presentation.

In the Soviet Union, the military and the Party leadership were the dominant actors in competition planning until recently. Now, however, the role of the military in policy decisions has been reduced and the power of the Communist Party is diminished. Gorbachev's civilian advisors, especially those in the foreign ministry and in some of the regional research institutes, increasingly are strong actors in the military competition.

There are two other key actors in the intercontinental subarea of competition: the People's Republic of China and the collective nations of Western Europe.

China's role derives from the threat its own strategic nuclear forces pose to the Soviet Union. While the Chinese arsenal is nowhere near a match for that of the Soviets, its existence is a potential wartime problem the Soviets must take into account. One reason the Soviets maintain the one active ballistic missile defense system allowed them by the ABM Treaty probably is to protect Moscow from a Chinese attack, rather than from a large U.S. strike (which it would be incapable of stopping).

The West European role is two-fold. First, the Europeans are one of the prizes the two superpowers compete for in the sense of influence over major U.S. allies. The political and military reactions of the Western European nations to the course of the U.S.-Soviet intercontinental competition can have wide-ranging impacts on the superpowers. West German Chancellor Helmut Schmidt's call for the deployment of American land-based intermediate nuclear force (INF) missiles in preparation for the conclusion of the Strategic Arms Limitation Talks II (SALT II) Treaty is a case in point. Second, France and the United Kingdom each maintains its own independent nuclear force, which the Soviets cannot ignore in their conduct of the superpower intercontinental competition.

4.4 IMPORTANT COMPETITIVE INSTRUMENTS IN THE INTERCONTINENTAL SUBAREA

There are eight primary categories of competitive instruments important for the competition in the intercontinental subarea. Sound competition planning must not only consider ways in which these instruments can be used to U.S. advantage, but also how each could be used by the Soviets.

The most obvious competitive instrument in this subarea is the deployed strategic offensive and defensive forces of the United States and the Soviet Union. Their role in the competition is primarily as a force in being, the baseline from which the rest of the intercontinental competition is conducted.

Directly related to the forces of the two sides are the deployed C³I and counter-C³I systems of the superpowers. They are a separate competitive instrument because even a superior force is potentially useless if the other side is able to overcome its adversary's ability to control and employ it. Despite the differences in how the United States and the Soviet Union perceive desirable intercontinental war outcomes, command and control over one's strategic forces is critical to each side.

The third set of competitive instruments in the intercontinental subarea is the strategic weapons R&D and procurement programs of the superpowers. This is in fact where most military competitive initiatives are to be found. The development and deployment of new strategic weapons systems, both offensive and defensive, is at the heart of the intercontinental competition.

Arms control negotiations and agreements constitute another important competitive instrument in this subarea. Arms control agreements bound the competition to the extent the two sides comply with them, potentially channeling future competition in more predictable directions. Arms control negotiations provide both sides with opportunities to limit the competitiveness of the other side while preserving one's own.

Closely related to arms control are public statements and propaganda issued by both sides in the competition. Such

statements and propaganda can be used by the Soviets to undercut the requisite public support for U.S. weapons programs or arms control proposals. Likewise, the United States can use these instruments to bolster domestic and allied support for the American position and, in the era of glasnost, to influence Soviet public opinion.

Another political-military instrument that can be useful in the intercontinental competition is the crisis behavior exhibited by the two nations. For example, alerting one's strategic forces during a regional crisis, as President Nixon did during the October 1973 war in the Middle East, can be used to reinforce the opponent's perceptions of one's strategic power, as well as to influence the regional crisis.

The strategic force employment concepts and plans of the two sides also are competitive instruments. The formulation of concepts and plans that threaten the other side's military effectiveness in key strategic and conventional force missions can be a powerful way to influence the opponent's future strategic force investments, provided the opponent is aware of these concepts and plans. Information on employment concepts can be conveyed in several ways, including official or semiofficial writings, public statements, and exercises. Exercises constitute an important competitive instrument in other respects, notably for shaping the other side's views on the character of future wars that might involve intercontinental forces.

4.5 TRENDS IN THE STRATEGIC BALANCE

A number of important trends characterize the current state of the intercontinental military balance. These trends are primarily technological, although several also involve the

strategic thinking of each side as it relates to the conduct of the competition.

The first and perhaps most long-standing trend is that of the United States dictating the terms of the competition between strategic bombers and air defenses. As the history of the B-52 program makes clear, the U.S. bomber force has consistently maintained a considerable lead over Soviet air defenses.¹ This trend is currently being continued by the U.S. B-2 bomber and Advanced Cruise Missile programs, both of which incorporate stealth technology.

The second important trend in the strategic balance is the sustained Soviet move to superiority in deployed ICBM forces. The Soviets have been dictating the terms of the ICBM competition since their acquisition of MIRV technology in the early 1970s. By the end of the 1970s, the Soviets had attained a clear advantage in ICBM capability and are continuing to compete robustly in this area with the introduction of two new mobile ICBMs in the late 1980s, the hardening of targets that U.S. ICBMs would attack, and continued improvements in the hard-target capabilities of their own ICBMs.²

The trend in the development and deployment of wartime C³I and counter-C³I capabilities favors the Soviets, but less so than it did several years ago. The United States traditionally has neglected this area of strategic force competition, particularly in the counter-C³I area, while the Soviets have maintained strong, long-standing programs in both. Recently, however, the United States has focused considerable attention and resources on this area, improving the long-term outlook.

As mentioned above, the two sides have divergent strategic doctrines. Despite doctrinal changes in U.S. strategic

force policy and targeting, concepts of Mutual Assured Destruction (MAD) still have an unduly strong influence on strategic force acquisition programs and arms control positions. The influence of MAD is clear among U.S. allies and within the U.S. Congress, but is implicit in many executive branch actions as well. This influence limits the types of intercontinental force initiatives the United States has chosen to carry out. For example, this MAD orientation contributed to U.S. neglect of the C³I and counter-C³I elements of the intercontinental competition, to the U.S. retrenchment on strategic defenses after the signing of the ABM Treaty, and to the difficulties in obtaining congressional approval of hard-target counterforce programs.

Soviet strategic doctrine, on the other hand, is based on an evolving set of counterforce and warfighting concepts. Despite Soviet public statements to the effect that a nuclear war cannot be won and must never be fought, there is no evidence that Soviet military planning is taking such declarations to heart, and considerable evidence to the contrary. This is not to say that the Soviets wish to fight a nuclear war, but rather that their actions in the intercontinental subarea of the competition are directed at improving their ability to prevail should such a war occur.

A fifth important trend in the intercontinental military balance is the continued Soviet emphasis on space warfare and military space programs. The Soviets started early in this area and have maintained their lead, both doctrinally and operationally. The United States has moved to catch up, including the establishment of the U.S. Space Command, but the trend in this area continues to favor the Soviet Union, due in large part to their considerable investment in military space programs and their advantage in space launch capacity.

In the area of ballistic missile defense the trends are mixed. Soviet operation, maintenance, and upgrade of the ABM system around Moscow is providing them with an expanding infrastructure of and increasing experience with ballistic missile defense. However, the American SDI program is pushing back the frontier of advanced BMD technologies, giving the United States a technological advantage.

Finally, the value of maintaining a significant, highly survivable force of SLBMs has led both sides to improve the security of their ballistic missile submarines and seek ways to detect and destroy those of the other side. The U.S. Trident program has continued the trend of high survivability for U.S. nuclear-powered ballistic missile submarines (SSBNs). The Soviets chose to combine new SLBM and SSBN developments with a change in operational concept (the bastion strategy) to secure their SLBM force. While both sides are actively pursuing ASW advances, technological trends appear to favor continued high survivability for SSBNs.

4.6 COMPETITIVE POSITIONS IN THE INTERCONTINENTAL SUBAREA

The U.S. and Soviet competitive positions in the intercontinental subarea can perhaps most readily be summarized in terms of who holds the competitive initiative. At present the United States holds the initiative in two respects, the Soviets hold the initiative in four, and both sides are exercising the initiative in two other regards.

The United States has the competitive initiative in the competition between American bombers and cruise missiles on the one hand and Soviet strategic air defenses on the other. The United States also holds the competitive initiative in the field of ballistic missile defense (BMD) technology as the result of the SDI

research program. The Soviets do have, however, an active BMD research program of their own, and it is unlikely they will limit their program beyond what is proscribed by the ABM Treaty, regardless of what the United States chooses to do with the SDI program in the future.

The Soviet Union holds the competitive initiative in ICBM development and deployment, as is evidenced by the ongoing deployment of the mobile SS-24 and SS-25 missiles. The Soviets also hold the initiative in the competition in wartime C³I and counter-C³I. Recent U.S. investments in this field have cut the Soviet lead, but the competitive initiative is still in Moscow.

The competitive initiative in deployed BMD systems also rests with the Soviets, although the importance of this absent a gross violation or abrogation of the ABM Treaty is debatable. Unless the Soviets go ahead with a much larger deployment than is allowed by the Treaty, their competitive initiative in this area may be of little advantage.

The Soviets also hold the competitive initiative in arms control proposals and related public diplomacy. Their repeated concessions to the U.S. in the INF and CFE negotiations and their surprising willingness to submit to verification procedures at which the United States has sometimes balked have seized the competitive initiative in this area away from the Americans. Bold new proposals in START that will capture the imagination of Western publics could, however, regain the initiative for the United States.

Both the United States and the Soviet Union are exercising initiatives in the fields of SLBMs and space warfare. American deployment of the Trident II with its hard-target-kill capability will provide the United States with a significant,

though probably fleeting, advantage in the intercontinental subarea. The deployment of large-scale space warfare capabilities is not imminent for either side, but both nations are seeking to exploit their respective competences in this field.

4.7 ISSUES FOR U.S. STRATEGY DEVELOPMENT IN THE INTERCONTINENTAL SUBAREA

The preceding review of the state of the military competition in the intercontinental subarea points to several issues that need to be addressed in U.S. competition strategy development.

Perhaps the most critical single issue is how best to exploit the competitive potential of the SDI program and its constituent technologies. The Strategic Defense Initiative promises to provide high leverage in the long-term competition, but its costs are considerable. The challenge for U.S. competition planners is to formulate competition goals for the SDI program that are affordable within likely future budget constraints. If such goals can be developed, then a strategy for fully exploiting the technological potential of the SDI program, including potential spin-offs in other subareas of the competition, should be formulated and implemented.

The second issue for U.S. strategy development is how to counter Soviet advantages in wartime C³I and counter-C³I capabilities. Improvements in U.S. wartime C³I are essential if the Soviet competitive goal of nullifying U.S. investment in this critical area is to be blocked. Enhancements in American counter-C³I capabilities will provide significant competitive leverage, as such programs would threaten Soviet control over the course and timing of an intercontinental war.

The Soviet advantage in ICBM capabilities should also be addressed by those developing U.S. strategy for the competition in the intercontinental subarea. The current Soviet monopoly in mobile ICBMs and large Soviet advantages in ICBM throwweight should be dealt with. Whether these problems can best be addressed through new U.S. ICBM deployments, the continuation of programs that can counter those Soviet capabilities (e.g., the B-2 bomber), or the conclusion of arms control agreements that eliminate or constrain these Soviet advantages is a question to be addressed by American competition planners.

The final issue arising from our analysis is the competitive role for nonnuclear weapons in the intercontinental subarea. Precision guidance technologies and nonnuclear warhead lethality are rapidly approaching the point at which they could be capable of performing strategic missions previously only achievable with nuclear weapons. The competition implications of and opportunities offered by such nonnuclear strategic weapons should be considered by those formulating U.S. strategy for the long-term competition in the intercontinental subarea.

ENDNOTES TO CHAPTER 4

1. See volume III, appendix B, for a review of the B-52 program.
2. Appendices G and I in volume III discuss U.S. and Soviet ICBM programs.

5. INFLUENCING THE STRATEGIES AND ACTIONS OF THE ADVERSARY

This chapter discusses historical examples of U.S.-Soviet military competition in order to illustrate the foregoing planning concepts. We first summarize U.S. and Soviet strengths and weaknesses that are relevant to military competition and give examples of the way that each side has invested resources to convert its strengths and the adversary's weaknesses to actual competitive advantages. These examples show that often it is easier for one side to make this conversion than it is for the other -- that is, one side has a superior competitive position in some subarea. We then use historical cases to illustrate how long-term investments can pay off with improved competitive positions. To further clarify the nature of the U.S.-Soviet military competition we give several examples of successful or failed competition enterprises or actions on each side. The chapter concludes with a summary of lessons from these historical cases for U.S. competition planners.

Some of the examples in this chapter illustrate ways in which the USSR is still actively competing with the United States in the military arena.

5.1 STRENGTHS, WEAKNESSES, AND COMPETITIVE ADVANTAGE

5.1.1 Enduring and Temporary Strengths and Weaknesses

Table 7 summarizes major U.S. and Soviet strengths and weaknesses relevant to the military competition that are likely to persist for at least the next twenty years and thus are "enduring."¹ These enduring strengths and weaknesses stem from comparatively unchanging conditions like geography and the funda-

Table 7. U.S. and Soviet enduring strengths and weaknesses.

	STRENGTHS	WEAKNESSES
UNITED STATES	<ul style="list-style-type: none"> • MARKET ECONOMY • TRADITION OF STATE/PRIVATE ENTREPRENEUR INTERACTIONS • YEAR-ROUND ACCESS TO OCEANS 	<ul style="list-style-type: none"> • SOCIAL/POLITICAL SYSTEM NOT WELL-SUITED FOR SUSTAINED COMPETITION AGAINST A CENTRALLY-CONTROLLED ADVERSARY • ECONOMIC DEPENDENCE ON OVERSEAS COUNTRIES • LIMITED DEPTH FOR MANEUVER IN WESTERN EUROPE
SOVIET UNION	<ul style="list-style-type: none"> • CENTRAL GEOGRAPHIC POSITION RELATIVE TO ADVERSARIES • CONTIGUITY TO MAJOR THEATERS OF CONTENTION 	<ul style="list-style-type: none"> • RIVALRY WITH CHINA • CENTRALIZED CONTROL PARANOIA • NO YEAR-ROUND OPEN-OCEAN ACCESS

mental natures of the U.S. and Soviet political, social, and economic systems.

Enduring U.S. strengths include its market economy and the well-established tradition of interaction between the Department of Defense and private industry that together foster technological innovation. These strengths can facilitate rapid movement of new technology into weapon, C³I, and surveillance systems, provided that U.S. acquisition policy and practices do not hinder such rapid movement, as they do today. An important U.S. geographic advantage of military significance is its easy access to the world's oceans on a year-round basis, a marked contrast to the Soviet lack of warm water ports that are free of ice at all times.

The United States has several enduring weaknesses in the military competition with the Soviet Union. The pluralistic social and political system of the United States fosters personal freedom and technological innovation, but it is not well-suited to the kind of long-range defense planning that is essential for competing effectively. The economic interdependence between the United States and overseas nations makes America more dependent on continued access to overseas resources and on sea lines of communication in wartime than the Soviet Union. A geographic weakness of military significance is the limited depth of maneuver for U.S. and NATO forces in Western Europe, which Soviet military planning can exploit so long as Western Europe is a potential battlefield.

The USSR has a major geographic advantage in its central position relative to its adversaries, most of whom are located around the Soviet periphery, permitting the Soviets the advantage of interior lines of communication. A closely related geographic advantage is the fact that Soviet-controlled territory, and

therefore Soviet military forces, lie closer than U.S. territory to key areas of contention between the East and West: Southwest Asia, Northeast Asia, and Western Europe.

A number of enduring Soviet weaknesses can be exploited by the United States in the military competition. While Sino-Soviet relations currently are improving, the deep-seated and long-standing Sino-Soviet rivalry probably will continue to divert Soviet resources from competing with the United States and its allies.

The strong penchant, if not paranoia, of the Soviet Union for centralized control is both an economic and a military weakness.² While central control in the economy allows Soviet leaders to spotlight selected sectors for special efforts, on balance it clearly is a weakness, at least as implemented in the Soviet Union, because it removes market incentives that are necessary for future growth of the Soviet economy and for technological innovation, a point we discuss in more detail in chapter 6. In Soviet military planning, excessive central control leads to a certain rigidity in military operations that can be exploited by the United States in the peacetime military competition by deploying systems and using operational concepts that undercut the confidence of Soviet leaders that they can maintain control over wartime operations (see the discussion of this point in chapter 6.3 for more detail).

Temporary U.S. and Soviet strengths and weaknesses -- those likely to persist for a decade or so, but not necessarily longer -- are summarized in Table 8. They relate to political, economic, and social conditions that could change over time and to the current military postures of the two sides.

Table 6. U.S. and Soviet temporary strengths and weaknesses.

	STRENGTHS	WEAKNESSES
UNITED STATES	<ul style="list-style-type: none"> • WESTERN TECHNOLOGICAL INNOVATION • LEAD OVER USSR IN MOST AREAS OF MILITARY TECHNOLOGY • AIRCRAFT/CRUISE MISSILE PROGRAMS • STEALTH PROGRAMS • MARITIME SUPERIORITY OVER THE USSR • SSBN FORCE 	<ul style="list-style-type: none"> • DOUBTFUL STAYING POWER IN MILITARY COMPETITION, ESPECIALLY IN PERIODS OF RELAXED TENSIONS • WESTERN EUROPEAN PREFERENCE FOR DETENTE POLICIES • TOLERANCE OF WESTERN PUBLICS FOR HOSTILE SOVIET ACTIONS
SOVIET UNION	<ul style="list-style-type: none"> • COMMAND ECONOMY • NATIONALISTIC PRIDE IN USSR AS WORLD POWER • DOMESTIC MECHANISMS FOR COERCIVE CONTROL • WEAPON ACQUISITION SYSTEM THAT EFFECTIVELY TAILORS AVAILABLE TECHNOLOGY TO MILITARY NEEDS • LARGE STANDING GENERAL PURPOSE FORCES • BALLISTIC MISSILE FORCES • AIR DEFENSES 	<ul style="list-style-type: none"> • SYSTEMIC ECONOMIC PROBLEMS • LITTLE TECHNOLOGICAL INNOVATION, EXCEPT THROUGH TECHNOLOGY TRANSFER FROM THE WEST • BUREAUCRATIC OBSTRUCTION TO CHANGE • EXTERNAL EMPIRE <ul style="list-style-type: none"> - POLITICAL INSTABILITY/ECONOMIC WEAKNESSES OF EASTERN EUROPE - OTHER COSTS OF EMPIRE • NATIONALIST RESENTMENT OF RUSSIAN DOMINATION <ul style="list-style-type: none"> - EXACERBATED BY DEMOGRAPHIC TRENDS AND <u>GLASNOST</u>

Among temporary U.S. strengths are the substantial amount of technological innovation among the United States and its allies and the lead they hold over the Soviet Union in most areas of technology, particularly those that promise high competitive leverage in a variety of military areas (e.g., microelectronics and computers). To be sure, development and production of advanced technology electronic components has moved overseas to a greater degree than may be advisable for U.S. security, but technological innovation is still a major U.S. strength and the United States is beginning to give attention to the problem of its declining competitiveness in electronics.

The United States has substantial advantages in certain aspects of the military balance that also count as temporary strengths in the competition. These include strategic and tactical air forces, air-launched and sea-launched land-attack cruise missiles, the emerging applications of stealth technology, the U.S. superiority over the Soviet Union in general purpose naval forces, and the SSBN force, which is quieter, safer, and more capable than that of the USSR.

Temporary U.S. weaknesses in the competition are social in nature. The American public, and especially the Congress, have the capacity to waver in their support over a long period for the military programs and other actions that seem necessary to compete effectively with the USSR. This tendency to be less than steadfast in supporting U.S. competition goals is particularly noticeable during periods of improved relations with the Soviet Union. This tendency is even more pronounced in Western Europe, where there is a strong preference for policies of detente, which is understandable given the history of two world wars and the cold war in the twentieth century, but which makes it more difficult for the United States to sustain effective political, military, diplomatic, and arms control actions that yield competitive advantages. These

weaknesses are related in part to the high level of tolerance that U.S. and allied publics have for hostile Soviet policies and actions.

The Soviet Union has a number of important temporary strengths, including its command economy that allows Soviet leaders to concentrate enormous resources in the military sector when they choose to. Gorbachev's restructuring policies have not reduced this capability to date. Other Soviet strengths include the nationalistic pride that many Soviet citizens (especially Russians) take in the USSR as a world power and the extensive means available to Soviet leaders even in this era of glasnost and perestroika for coercive control of their population, enhancing the freedom of action of the Soviet government in the military competition. The Soviet weapon system acquisition process has proven to be adept at tailoring the technology available to the Soviet Union to the operational needs of the military, often getting adequate technology into deployed military systems faster than the United States is able to field its technologically superior weaponry, to the net advantage of the USSR. The Soviets also have substantial advantages in today's military balance, notably their large active duty and reserve general purpose forces; their programs for ICBMs and SLBMs; and their extensive, highly capable air defense system.

Many of these Soviet strengths may turn more and more into weaknesses over the next decade under the twin pressures of the domestic problems of the USSR and American military competition, adding to the substantial number of significant temporary weaknesses the USSR has today. One of these weaknesses is the serious, systemic problems in the Soviet economy, which produces little technological innovation except through technology transferred from the West. These problems have spurred social disruption in the USSR and have caused the Politburo to reduce the resources allocated to the military sector. Closely related to the

problems of the economy is the lack of incentives in civilian bureaucracies to change, which is impeding Gorbachev's efforts to improve Soviet economic performance.

Another major temporary weakness that is receding but will continue to hamper the Soviet ability to compete for some years into the future is the burden of the external Soviet empire: the residual military and economic costs of political instabilities and economic problems in Eastern Europe and the substantial economic support that continues to go to Cuba and Vietnam. Another serious weakness that may or may not be diminished by Gorbachev's reforms is the resentment of Russian domination by nationalist groups throughout the USSR, which is exacerbated both by glasnost and the demographic trends that are making these groups more powerful.³

5.1.2 Actions to Take Better Advantage of Strengths and Weaknesses

It is not sufficient to have inherent strengths or for the adversary to have inherent weaknesses. For effective impact on the military competition resources must be committed and actions taken to convert one's strengths and the opponent's weaknesses into actual advantages. We illustrate this concept by describing examples of U.S. actions to take better advantage of its strengths and of Soviet weaknesses, to reduce temporary Soviet strengths, and to reduce temporary U.S. weaknesses. We then discuss examples of ongoing or potential Soviet actions intended similarly to achieve competitive advantages for the USSR.

The Tomahawk Land-Attack Missile (TLAM) program is an example of applying U.S. strengths to undercut some temporary Soviet strengths, making Soviet investments obsolete and probably imposing costs on the USSR. More specifically, the United States has strengths in the maritime balance of forces and in land-attack

cruise missile technology and programs, while the Soviet Union has strengths in theater military balances ashore in Europe, Southwest Asia, and Northeast Asia. The nuclear TLAM/N and the conventional TLAM/C and TLAM/D programs build on these U.S. strengths to provide a survivable ability to attack fixed targets at long range and with high confidence of penetrating today's Soviet air defenses. By holding at risk Soviet fixed targets such as air bases and air defenses that are vital for theater operations, and doing so in ways that the Soviets are not currently able to counter easily, the TLAM program undercuts current Soviet investments and diminishes a current Soviet strength.

Since the Soviets probably feel compelled to attempt to nullify these effects of the TLAM program, Tomahawk probably also is imposing costs on the USSR, both in the diversion of naval forces from other missions to counter TLAM ships and submarines and in the expenditure of additional funds to improve air defenses against TLAM missiles and otherwise to reduce theater vulnerabilities to TLAM attacks. In this way, the TLAM program is achieving competitive advantages for the United States, probably with high competitive leverage, since the TLAM program cost is probably modest compared with the cost of Soviet efforts to counter it. However, to better estimate the competitive leverage of Tomahawk, as well as to understand better how to sustain its competitive leverage, an examination of plausible future Soviet counters to TLAM needs to be undertaken.⁴

The TLAM program, along with other U.S. cruise missile programs, is beginning to impose stresses on Soviet air defenses. But these programs only hold Soviet fixed targets at risk, and Soviet air defenses probably can be improved over time to reduce the penetration probabilities of the first generation U.S. land-attack cruise missiles. Much greater competitive advantage is being provided by the B-2 bomber, which is the first long-range

bomber to incorporate stealth technology in its basic design and which can impose tremendous stresses on Soviet air defenses. Moreover, the B-2, with its large payload, long range, and high survivability at both high and low altitudes, provide the ability to attack movable (as well as fixed) targets with conventional or nuclear weapons.

If the mission of the B-2 bomber were expanded from its current strategic nuclear mission to include support to theater operations with advanced technology conventional weapons, the United States and its allies could gain even greater competitive advantages. This action would build on two U.S. strengths -- stealth technology and technology for advanced conventional weapons -- and would undercut current Soviet strengths in theater military balances ashore in Europe, Southwest Asia, and Northeast Asia. This would make a number of major Soviet investments in air defenses and general purpose forces obsolete and impose major costs on the Soviets to counter this new threat to their theater forces, with high competitive leverage for the United States.

A somewhat different example relates to possible future U.S. efforts to make targets in the United States more difficult for Soviet strategic forces to attack. Today, most of these targets are fixed and are sufficiently soft that current or near-future Soviet ballistic missiles can destroy them with high probability. In this way, the United States has allowed the Soviets to turn their strength in ballistic missiles into a competitive advantage. However, America can take actions that make the target set in the United States substantially more difficult for the Soviets to attack, raising the cost to the Soviets of holding these targets at risk, reducing the military effectiveness of a Soviet missile force that is likely to be constrained by agreements resulting from the Strategic Arms Reduction Talks, and reducing a temporary U.S. weakness. These actions include making

part of the target base mobile (especially U.S. ICBMs and some C³I targets); hardening of elements of the target base (e.g., some C³I facilities and ground control elements of U.S. space systems); and deploying ballistic missile defenses.

Yet another example is found in the rate at which the United States moves advanced technology into deployed weapon systems. This is a case in which the United States has not done as well as it could in turning its strength in technology to actual advantage in the competition. The current U.S. weapons acquisition system impedes the movement of technology into deployed weapons through its unresponsiveness, its discouragement of risk-taking with advanced technology weapons, and its tolerance for long program acquisition times. The result is increased opportunities for the USSR to operate within U.S. acquisition timelines and to field counters to U.S. advanced technology systems soon after their deployment -- or occasionally even before the new U.S. weapon systems are deployed. Thus, the United States is failing to convert an important strength into its full potential competitive advantage. The acquisition reforms recommended by the Packard Commission and the Commission on Integrated Long-Term Strategy would help correct this problem.⁵

The Soviet Union is, of course, seeking to convert its strengths and U.S. weaknesses to competitive advantage, to undermine U.S. strengths, and to reduce its own weaknesses, just as is the United States. The following examples of such Soviet efforts illustrate the point that U.S. competition planning must take into account Soviet initiatives, as well as Soviet responses to U.S. initiatives.

Perhaps the Soviet action that has the greatest potential leverage in the 1990s is the quieting of their submarine force, aided by Western technology, some of which has been acquired

