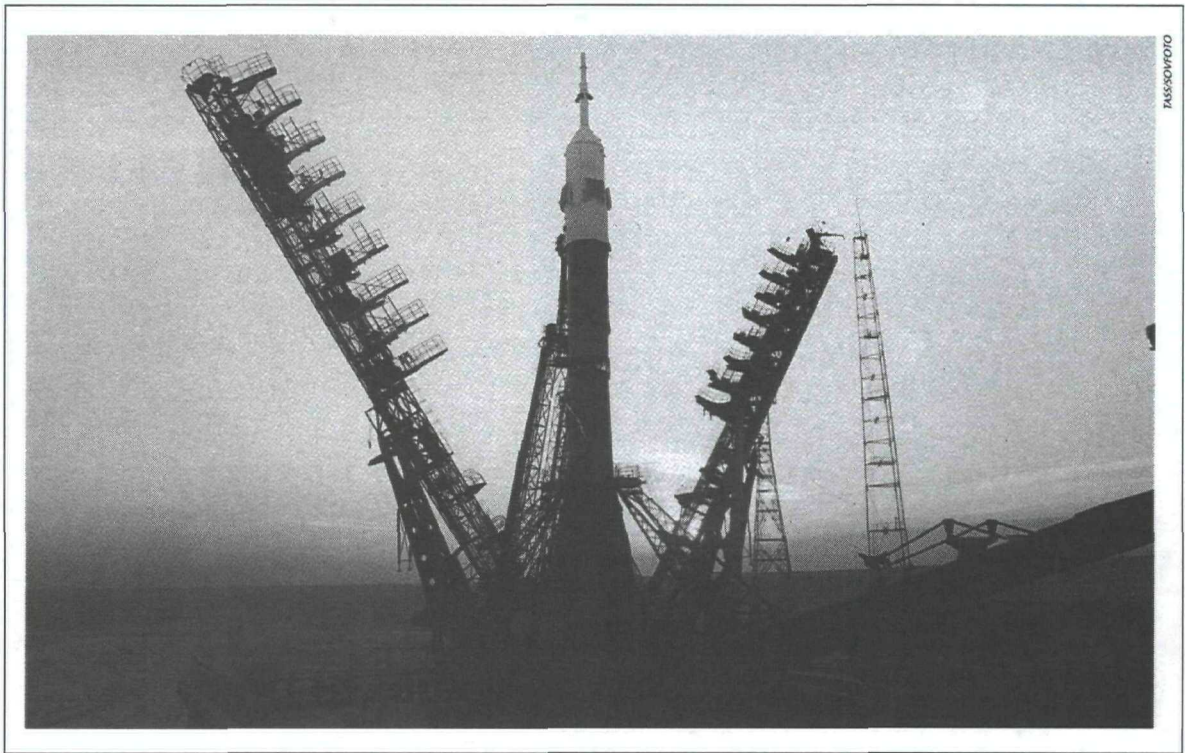


# Estimating Soviet Military Intentions and Capabilities





**Estimating Soviet Military Intentions and Capabilities**  
*Author's Comments: Raymond Garthoff*

The documents in this volume dealing with CIA's analysis of military affairs during the Cold War were selected with several considerations in mind. First, they provide illustrative examples of analyses of Soviet intentions and military doctrine, as well as of military forces and capabilities. Second, they include materials on strategic forces and theater or general purpose forces for nuclear and non-nuclear warfare. For reasons of space, however, some subjects regrettably are not covered, such as Soviet naval forces and civil defense. Third, they provide a balance, including CIA Directorate of Intelligence analyses on current Soviet military affairs (and "post-mortems" on past analyses and estimates), as well as CIA-drafted National Intelligence Estimates forecasting future developments.

Finally, the documents selected highlight new materials, omitting many relevant documents released earlier and published in previous collections. As a result, less attention is given to the 1960s and 1970s, and to the early period of concern over possible Soviet initiation of war in the late 1940s and early 1950s, the "missile gap" of the late 1950s, the Cuban missile crisis of 1962, the "Team B" competitive analysis on strategic estimates in the late 1970s, and the end game of the Cold War in the late 1980s.

~~TOP SECRET~~

## THE SOVIET STRATEGIC MILITARY POSTURE, 1961-1967

APPROVED FOR RELEASE  
CIA HISTORICAL-REVIEW PROGRAM

## THE PROBLEM

To reassess the broad outlines of the USSR's military doctrine and posture in the light of recent information on Soviet strategic thinking, present military capabilities, and R&D in major weapon systems, and to estimate future trends in Soviet military strategy and force structure.<sup>1</sup>

## THE ESTIMATE

## CURRENT TRENDS IN SOVIET MILITARY THOUGHT

## Basic Principles

1. Soviet thinking about military policy has proceeded from a general outlook which stresses that historical forces are moving inexorably in the direction of communism. This movement is carried forward by the struggle of "the masses," led by the Communist parties, to overthrow the existing social-economic order, rather than by the direct use of the military power of the Communist Bloc. These beliefs lead the Soviets to view their

armed forces as a means to deter Western military action against the Sino-Soviet Bloc, to inhibit the West from intervening militarily in other areas, to maintain security within the Bloc, to lend weight to their political demands and to demonstrate the success and growing power of their cause. At the same time, they wish to have the forces to fight a war effectively should one occur. However, their political outlook, their military programs of recent years, and intelligence on their current intentions, all suggest that the Soviet leaders do not regard general war as desirable or a Western attack on them as probable.

<sup>1</sup>Detailed estimates of the present and future strengths and capabilities of the Soviet and Bloc armed forces can be found in Annexes A and B of NIE 11-4-61, "Main Trends in Soviet Capabilities and Policies, 1961-1966," dated 24 August 1961, in NIE 11-8/1-61, "Strength and Deployment of Soviet Long Range Ballistic Missile Forces," dated 21 September 1961, and in NIE 11-2-61, "Soviet Atomic Energy Program," dated 5 October 1961.

It should be noted that the present estimate does not touch on Chinese Communist military developments or possible actions. These might come to affect Soviet military policies and programs during the period under consideration.

## Strategies and Forces

2. Within this general framework, the specific concepts which underlie Soviet decisions about force goals and strategic planning are difficult to discern. These principles can only be deduced, and incompletely at that, from overt Soviet statements, which are carefully framed with an eye to both security and propaganda; from such classified Soviet information as can be obtained; from the choices reflected in the actual military programs undertaken by the

~~TOP SECRET~~

1

~~TOP SECRET~~

2

USSR; and from the strategic situation which objectively confronts them.

3. It is worth noting that, while the Soviets have made impressive advances in modern weapon systems, a number of factors have hampered the process of integrating these advances into their strategic doctrine. One of these factors is the influence of a long military tradition, strongly reinforced by their experience in World War II, stressing massive movement, protracted campaigns, and the paramount significance of ground combat and the occupation of enemy territory. Another is security barriers within the military establishment, which appear to be far more stringent than in the US. Perhaps the most serious fetter, however, has been the rigid politico-military concepts which Stalin dogmatically imposed upon military thought. It was not until the mid-1950's, for example, that Soviet doctrine began to relax the principle that strategic surprise and the force of the initial blow are relatively unimportant to the outcome of a war between major powers, a position Stalin took in order to divert attention from the USSR's nearly catastrophic unpreparedness at the outset of World War II.

4. The pace of military thought, however, has quickened sharply in the last two or three years, primarily at the initiative of Khrushchev. At about the time when he set in motion a modernization of the Soviet force structure, including a substantial reduction in personnel, the regime began deliberately to encourage controversial discussion among senior officers in an effort to spark original and creative thought. As a result, strategic doctrine is a lively and argumentative field of professional study in the USSR today.

5. Such high-level discourse as we know about does not revolve around the questions of alternative attack strategies and target systems which are at the center of US military attention. Instead, the chief argument ranges "conservative" against "modern" views. Adherents to the first view assert that, despite the advent of new weapons, general war is likely to be protracted, ground combat on a mass scale will continue to be of major im-

portance, and victory will require the combined action of forces of all types, including a multimillion man army. Adherents to the second view charge that their opponents are making only minimal and inadequate adaptations of earlier doctrine to accommodate new weapons. This group argues that a general war is likely to be short, with victory decided primarily in the initial nuclear exchange. Current official doctrine, as it appears in statements by the Minister of Defense, appears to be an amalgam of both these views.

6. The high-level discussions of which we are aware are remarkably deficient in sophisticated analysis of such concepts as first and second strike capability or counterforce strategy. The problems of attacking hardened and mobile strategic forces go completely unmentioned in such information as we have on Soviet targeting for long range attack. While most recommended target lists include nuclear retaliatory forces and control centers, they generally give equal importance to strikes against urban centers and their enemy's broad warmaking potential.

7. We think it certain that the strategic thought which underlies operational planning in the long range striking forces themselves is more sophisticated than this. But we have not acquired detailed Soviet discussions of doctrine for the operations of long range missile and bomber forces. Planning in these forces has certainly been obliged to consider such factors as warning and reaction times and the specific characteristics of different weapon systems and enemy targets. [

] indicates that at least some of these factors have been taken into account, but not in ways that suggest very advanced concepts for dealing with the problems involved.

8. On the whole, the information we have suggests that Soviet military thought generally is still preoccupied with the problems of integrating nuclear and missile weapons into general doctrine and is only beginning to cope with the detailed comparative analysis of alternative strategies and force levels. Nor is this preoccupation completely surprising,

~~TOP SECRET~~

~~TOP SECRET~~

3

since the achievement of an ICBM capability, even in the early stages of its deployment, represents to the Soviets a profound change in their strategic situation. For over a decade, they confronted an opponent who possessed a formidable strategic capability but against whom their own long-range striking capabilities were relatively limited. Now, for the first time, they have a weapon system capable of delivering nuclear attacks against the US with little warning by a means against which there is no present defense.

9. The USSR probably has not elaborated any comprehensive doctrine covering the contingencies of limited and local war between Soviet and Western forces. Public Soviet statements regularly insist that such wars would quickly and inevitably expand into general nuclear war. These statements are clearly intended to deter the West from embarking upon conflict on the Bloc periphery or attempting penetrations of Bloc territory; they are not necessarily to be taken as expressions of Soviet military policy. Confidential sources do not reveal what detailed contingency plans the Soviets have for such a case. We believe, however, that the USSR would wish to avoid direct involvement in limited combat on the Bloc periphery and, if such conflict should occur, would wish to minimize the chances of escalation to general nuclear war. Consequently, it would not in most circumstances take the initiative to expand the scope of such a conflict. Although the degree of Soviet commitment and the actual circumstances of the conflict would determine their decision, we believe that in general the Soviet leaders would expand the scope of the conflict, even at greater risk of escalating to general war, only if a prospective defeat would, in their view, constitute a grave political reverse within the Bloc itself or a major setback to the Soviet world position.

10. Soviet doctrine apparently does not contemplate conflict with Western forces in areas of contention at a distance from Bloc territory. Conflicts involving local anti-Western or Communist forces are treated under the rubric of "national liberation wars." Such forces are

credited, on ideological grounds, with the inherent strength to overcome "imperialist" attempts at military intervention. The Soviet support rather vaguely proffered is intended to be of a general deterrent character, but does not envisage overt Soviet military involvement. Despite the Soviet tendency in recent years to adopt an aggressive political stance in conflicts all over the world, the Soviets have not developed the naval forces and other special components which would give them a capability for military operations at great distances from the Bloc.

#### CURRENT STRATEGIC POSTURE

11. The strategic nuclear force the USSR has developed in recent years could permit the launching of large-scale initial attacks on short notice against a large number of Eurasian targets and a more limited number of North American targets. However, the Soviet leaders cannot at present have any assurance that their own nation and system could escape destruction from retaliatory Western attacks even if the USSR struck first. The Soviet leaders evidently believe their current strategic forces provide a strong deterrent against Western initiation of general war and are sufficient to support a more assertive foreign policy, particularly by virtue of the threat they pose to allies of the US in Europe and Asia. But there is no implication in Soviet behavior that they consider themselves in a position deliberately to attack the West, or to undertake local moves which carried with them a serious risk of bringing on general war. These views do not exclude Soviet use of available strategic attack forces to launch a preemptive blow should they conclude that the West was irrevocably committed to an imminent attack.

12. There have been considerable improvements in the Soviet air defense establishment, primarily through the widespread deployment of surface-to-air missiles at major cities and other key installations. Soviet defenses are now reasonably adequate against medium and high-altitude attack by subsonic Western bombers. We believe that the system as a

~~TOP SECRET~~

~~TOP SECRET~~

4

whole, however, is far less adequate to cope with sophisticated penetration tactics, low altitude penetrations or supersonic cruise-type missiles. It has no present capability against ballistic missiles. Most important, because of the susceptibility of their defenses to saturation and degradation, the Soviet leaders almost certainly cannot be confident of the degree to which they could cope with the diverse types and scales of attack the West could direct against the Bloc.

13. In addition to forces designed for long-range attack and for defense against such attack, the USSR continues to maintain large theater field forces. The Soviets regard these forces as part of the deterrent to general war, and their military doctrine considers such forces as essential to the conduct of general war should it occur. The Soviet theater forces now in being could institute large-scale attacks in peripheral areas, but the success of such operations in a general war would depend heavily on the outcome of the initial nuclear exchange. The Soviet leaders also regard these forces as a deterrent to any limited action against Bloc territory or on its periphery, serving at the same time as an essential means of maintaining Communist regimes in the Satellites.

14. Based on the current Soviet naval posture and available writings on doctrine, we believe that the mission of the Soviet Navy is to carry out a variety of tasks in a protracted general war, including the support of theater forces in such a war. The USSR has developed some capability to deliver nuclear attacks against land targets, including some in the US, by means of short-range submarine-launched missiles. However, the bulk of the Soviet submarine forces, predominantly torpedo attack types, would engage in interdiction operations in a long war in which the US attempted to maintain extensive logistic support to overseas areas. The Soviet Navy would also conduct defense against hostile naval forces possessing long-range attack capabilities, which the Soviets evidently regard as a major strategic threat. Its capabilities against US missile

submarines in the open seas remain severely limited.

#### Military Research and Development

15. The Soviets are engaged in intensive efforts in weapons research and development to acquire new systems which, by their psychological, political, and military impact, would shift the world relation of forces to their advantage. In making their decisions, Soviet planners will have to consider such problems as rapid technological change, long lead times, developments in opposing forces, and increasing costs of weapon systems. Despite the rapid growth in Soviet economic resources, there will continue to be competition among military requirements as well as with the demands of important nonmilitary programs. Over the last two years, for example, Khrushchev has apparently linked his military arguments for reducing the size of Soviet forces with a further argument that additional funds could in this way be made available for raising living standards. Nevertheless, the USSR is allocating funds generously to military R&D, concentrating major efforts on improving the forces for long range attack and for defense against such attack by the West.

16. Much of the military R&D about which we have recent evidence is designed to fill obvious gaps in the Soviet strategic posture. In the field of long range delivery systems, an intensive program of test firing has been underway to develop second generation ICBM systems, which we believe include missiles of reduced dimensions and lighter weight, more easily deployed than the massive first generation Soviet ICBM. Some of the recent ICBM testing may represent development of systems for delivering warheads with yields on the order of 100 MT. Both a 2,000 n.m. ballistic missile and a supersonic "dash" medium bomber have been developed, and there is some evidence of R&D efforts in follow-on heavy bombers.

17. The principal current Soviet R&D program for strategic air defense, and perhaps the major Soviet military developmental program, is a large-scale effort to achieve defenses against

~~TOP SECRET~~

~~TOP SECRET~~

5

ballistic missiles. It has been clear to us for more than a year that the Soviets are assigning very substantial resources to this effort. In October 1961, Marshal Malinovsky stated that the USSR had "solved the problem" of intercepting a ballistic missile in flight. From intelligence sources, we believe that the Soviets are making good progress in development work for an antimissile system. This effort has resulted in the acquisition of important data, including data on high altitude nuclear effects, and has also involved the testing of at least some system components. Other known R&D in the air defense field over the recent past has included improved radars for early warning and fighter control, a surface-to-air missile system for use against low-altitude penetrators, and new fighter interceptor systems.

18. Soviet research and development activities also reflect efforts at qualitative improvement in the theater field forces and naval forces. The emphasis has been on mobility and firepower for theater forces, and short and medium-range missiles are now available for their support. Soviet field forces, at least in East Germany, have been allocated surface-to-air missiles for defense against medium and high altitude air attack. Within the next two or three years they will probably also have available missiles for defense against low flying aircraft as well as against ballistic missiles of short ranges. With the advent of US missile submarines, the Soviet Navy has recently placed increased emphasis on new weapons and techniques to extend ASW capabilities to the open seas. We believe, however, that over the next five years, the USSR will have only a limited capability to detect, identify, localize and maintain surveillance on submarines operating in the open seas.

#### Recent Nuclear Tests

19. The preliminary information now available indicates that the 1961 nuclear test series has given the Soviets increased confidence in current weapon systems, advanced their weapon design significantly, added greatly to

their understanding of thermonuclear weapon technology, and contributed vital weapon effects knowledge. Soviet thermonuclear weapon technology in particular appears to be sophisticated and advanced. The 1961 test series will permit the Soviets to fabricate and stockpile, during the next year or so, new weapons of higher yields in the weight classes presently available.

20. Of the 44 shots detected in the 1961 series, 5 to 10 appear to have been proof tests of complete weapon systems, many of them with yields in the megaton range. We believe the Soviets have proof-tested weapon systems of the following types: short or medium range ground-launched ballistic missiles with yields up to about 2 MT and short-range submarine-launched ballistic missiles with yields of about 3 MT. In addition, they have proof-tested bombs with yields up to about 6 MT and have probably delivered more than one such bomb on a single bomber mission. The warheads tested in these various weapon systems are believed to be in stockpile. Those few proof-tested warheads thus far analyzed appear to reflect 1958 technology.

21. Weapon effects tests were apparently conducted underground, underwater, near the surface of the water, and at various altitudes up to 100-200 n.m. Those at very high altitudes will contribute valuable effects information needed for Soviet development of anti-ballistic missile defenses, but were probably not complete systems tests.

22. The majority of the 1961 shots were developmental tests aimed at improving future Soviet nuclear weapons capabilities. Some of the fission weapons tested revealed extensive Soviet efforts to increase efficiency, and to reduce weapon size and weight. Two very large yield tests in this series are particularly significant in that they indicate a high degree of sophistication in weapon design.

a. [

] Preliminary estimates give

~~TOP SECRET~~



~~TOP SECRET~~

6

[ If the actual weight is 10,000 pounds, a 25 MT warhead could be delivered by the first generation Soviet ICBM to a range of about 5,500 n.m.

b. The 58 megaton device probably was actually a 100 MT weapon tested at reduced yield. Used as tested, the device could be of value to a Soviet strategy designed to minimize the fallout from very high-yield weapons. Weapons of this size and weight (probably 20,000-30,000 pounds) could be delivered by aircraft such as the BEAR, or could be emplaced offshore. If the actual weight is 20,000 pounds, such a warhead could be delivered by the first generation Soviet ICBM to a range of about 3,500 n.m. We believe that a more powerful vehicle than the first generation ICBM would probably be required to deliver such a warhead against most targets in the US.

c. A few handmade versions of these very high-yield weapons could be available now or in the near future, but series production would probably require a year or more. However, if they are to be employed as first generation ICBM warheads, we would expect tests of ICBMs with modified dummy nosecones prior to operational deployment.

23. Tests of other thermonuclear weapons, which apparently comprised the bulk of the shots in the recent series, indicate a continuing and highly successful Soviet effort to improve efficiencies, improve yield-to-weight ratios, and reduce fissionable material requirements. These tests show a concentration on weapons with yields between about 1.5 and 5 MT (corresponding to weights between about 1,000 and 3,500 pounds), which are suitable for delivery by all Soviet bombers and offensive missiles. The preliminary analysis indicates that [

] significant progress in thermonuclear weapons design has been achieved.

#### PROBABLE MAJOR DEVELOPMENTS IN SOVIET FORCES TO THE MID-1960's

24. Major Soviet concern will continue to focus on the strategic weapons balance. In this area, a critical question is whether or not the Soviet leaders will consider it feasible and desirable to: (a) seek a capability to destroy the US nuclear delivery forces prior to launching, by means of a first strike; (b) seek no more than a capability to deliver nuclear attacks on population and industrial centers; or (c) seek nuclear attack forces of a type and size which will be somewhere between these two concepts.

25. We believe the Soviets already view the first of these concepts as no longer practicable. This is partly because of the thousands of Soviet missiles and launchers that would be required to destroy all the fixed bases of the US nuclear force programed for 1963-1967, especially the hardened US ICBM sites. Equally important, US warning capabilities, fast reaction times, and mobile forces such as airborne bombers and missile submarines already tend to offset Soviet capabilities to attack fixed bases. These latter factors would compound the uncertainties inherent in any Soviet strategy for destroying US nuclear forces prior to launch, regardless of the size of Soviet long-range striking forces.

26. As to a capability to attack cities alone, there is evidence from recent statements and writings that some Soviet military men regard destruction of population and industry, not merely as something to be threatened for purposes of deterrance and intimidation, but also as a major determinant in the outcome of a general war. In view of the weight of nuclear attack the US can launch and the impossibility of achieving a fully effective defense, however, we believe that the Soviet leaders have decided that a capability to destroy only urban and industrial centers, while a powerful deterrent, would be inadequate should general war occur.

27. Consequently, we believe that the Soviets will seek a larger strike capability. This will

~~TOP SECRET~~

~~TOP SECRET~~

7

probably be one large enough to bring under attack the SAC bomber bases and other soft and semihardened US military installations against which their ICBMs are an efficient weapon system. Further, in determining force goals, they may also wish to provide themselves with an ICBM force large enough to permit them to attack some hardened US targets, and to have a more substantial residual striking capability after a US attack. Although the Soviets would probably not regard a capability on this order as adequate for deliberate initiation of general war, it would put them in a position to strike preemptively at an important segment of the US nuclear delivery forces should they reach a decision that such action was required.

28. Taking these considerations into account, we believe that the USSR will have an ICBM force of several hundred operational launchers in the period 1964-1967. The deployment complexes presently in operation and under construction, while protected by concealment from ground observation, some dispersal, and surface-to-air missiles, are unhardened and vulnerable to overhead observation. In view of Soviet concern for US reconnaissance and attack capabilities, we believe that the Soviets will move to increase the survivability of their ICBM force. In the mid-1960's, the bulk of the force will probably be protected by greater dispersal and possibly by semihardening, and some of the later launchers will probably be fully hardened. More than one missile will probably be available for most launchers.

29. In addition, through 1967, we forecast that the USSR will retain a mix of long range weapon systems. This will include a heavy bomber force which will probably remain relatively small but increase in quality, and an expanding force of missile submarines. Medium bomber strength will probably drop to a few hundred by the mid-1960's, but a considerable portion of these will be supersonic "dash" types, perhaps equipped for standoff missile delivery and for armed reconnaissance. After about the next year, ballistic missile

forces other than ICBMs will be characterized by shifts to improved, longer range systems rather than by sheer numerical expansion.

30. In addition to strengthening defenses against manned bombers and cruise-type missiles, we believe that a major Soviet objective of the mid-1960's will be to achieve defenses against long-range ballistic missiles before the US has acquired a comparable capability. In Soviet eyes, this would enable them to claim an important advantage over the US. For political as well as military reasons, the Soviets probably would wish to deploy antimissile defense in at least a few critical areas even if the available system provided only a limited, interim capability. Considering these factors and the present status of the Soviet research and development program, we estimate that in the period 1963-1966 the Soviets will begin at least limited deployment of an antimissile system. Soviet cities will probably have priority for deployment of any AICBM defenses available through 1967. We believe that throughout this period, the Soviets are likely to have only a marginal capability for interference with US satellites.

31. We believe that the Soviet leaders will continue to retain large theater and naval forces. The extent to which these forces are reduced in the next few years will depend in part on the prevailing international situation, but we now believe it may rest equally on the course of the internal Soviet discussion regarding the nature and duration of a large-scale war fought with nuclear weapons. In general, we believe that economic and political factors, together with the further growth of nuclear capabilities, will at some point persuade the Soviet leaders to revert to the military manpower reductions begun in 1960 but suspended in 1961. Ground divisions and tactical air forces will probably be reduced and older ships retired or mothballed, but the USSR will retain sizable forces calculated to be sufficient for all types of warfare, nuclear and conventional, limited and general. Moreover, the Soviets will not abandon the reservist and

~~TOP SECRET~~

~~TOP SECRET~~

8

mobilization system designed to augment their forces rapidly should the need arise.

32. The recent nuclear test series does not in itself provide clear guidelines as to possible changes in force structure or strategic concepts. We believe that long-range striking forces have been given priority in the allocation of available nuclear materials, and that limitations in the Soviet stockpile have consequently restricted the nuclear capabilities of other forces. The broad range of proof tests, weapon effects tests, and developmental tests in the 1961 series suggests an effort to improve the nuclear capabilities of all arms of the Soviet military establishment. We had anticipated that in any event the limitations on allocation of nuclear weapons to air defense, theater, and naval forces would have eased by the mid-1960's and this trend may be hastened by the recent tests. These forces will then have a greater variety of nuclear weapons at their disposal.

33. It now appears that the trend in nuclear weapon yields of long-range missile and bomber systems will be upwards. The use of higher yield weapons would tend to reduce Soviet numerical requirements for delivery vehicles to accomplish given objectives, although for attacking military targets the accuracy and reliability of the Soviet weapon systems are generally more critical than warhead yield. Warheads in the 25 MT class, which could probably be made available in quantity within a year or so, would enhance the capabilities of the first generation Soviet ICBM against hardened targets. It is reasonable to believe that some of the new ICBMs now under intensive testing are designed to carry warheads of very high yield. Nevertheless, we continue to believe it unlikely that the Soviets would try to acquire the very large number of ICBM launchers needed for effective attack on all the hardened ICBM sites planned by the US. For the present, the very high yield devices are probably intended to support deterrence and psychological warfare, although we have no doubt that military uses are also intended.

POLICY AND STRATEGIES TO THE MID-1960's

34. From the developments likely to occur in Soviet forces, and from implications found in current discussions of military doctrine, we conclude that, over the next five years or so, the Soviets are unlikely to develop a military strategy and posture aimed at the deliberate initiation of general war. They are likely to continue to believe that their policy goals cannot be achieved by this means. Therefore, their first priority, since they evidently do intend to pursue forward policies involving some level of risk, will be to have a credible deterrent against initiation of war by the West. They will recognize that deterrence may fail, and if completely convinced in some situation of high risk that the West was about to launch a general nuclear attack, would attempt to pre-empt. Their strategy for the conduct of general war will probably call for delivering large-scale nuclear blows against Western striking forces and national centers of power, protecting the Soviet homeland against nuclear attack to the extent feasible, and subsequently committing their remaining forces to extended campaigns probably aimed initially at the occupation of Western Europe.

35. The Soviets will want a formidable military posture primarily to prevent such a war, but they will also want it as a support to vigorous policy initiatives short of war. These latter will include in particular the sponsorship of revolutionary activity directed at advancing Communist or pro-Soviet groups to power in any part of the world where the opportunity exists or can be created. It is this sort of struggle below the level of direct military engagement with the major Western Powers which will almost certainly continue to be the Soviets' principal reliance in seeking the expansion of their power.

36. It is conceivable, however, that by the mid-1960's the Soviets will come to regard the deterrence which they can exert upon the West as strong enough to permit them, without excessive risk, to use their own forces in local military actions. They will certainly continue to have field forces on a scale to permit this in areas peripheral to Soviet Bloc

~~TOP SECRET~~

~~TOP SECRET~~

9

territory, and these will be forces of increased mobility and flexibility. They are also capable of acquiring the naval strength, air transport, and special forces to conduct local military action in more remote areas. On the whole, however, we believe that the Soviets are unlikely to adopt such a course as a matter of general policy, in part because of the risks involved but also because in their view there is likely to be increasing opportunity to advance their cause by nonmilitary means.

37. The use of Soviet forces in local military actions outside the Bloc, if attempted, would be unlikely to take the form of naked military aggression. Instead, any use of Soviet forces

outside the Bloc would take the form of support to revolutionary actions by local Communist or pro-Soviet forces, where a pretext could be made that Soviet intervention was intended to forestall intervention by the "imperialists." We believe there is some possibility that such a strategy will emerge by the mid-1960's and will be applied to vulnerable areas bordering on the Soviet Bloc. We think it more likely, however, that the Soviets will continue to rely on local political revolutionary forces, operating without overt Soviet military support but under the protection of an increasing deterrent power, to achieve a more gradual expansion of the area of Soviet control.

~~TOP SECRET~~

~~SECRET~~

## CAPABILITIES OF THE SOVIET THEATER FORCES

### THE PROBLEM

To estimate the role and capabilities of the Soviet theater forces, especially against the NATO area in Europe, at present and over the next two years or so.

### FOREWORD

1. As considered in this estimate, the components of the Soviet theater forces include: the ground forces and their weapons; tactical aircraft and missiles; supporting and logistical elements such as transport aircraft; and major portions of the surface naval and submarine fleets. The roles and capabilities of those Soviet forces which would perform other primary military missions, notably long-range striking forces and air and missile defense forces, are the subject of other National Intelligence Estimates.

2. In recent years, Soviets have debated at greater depth than in the past the probable nature of a general nuclear conflict between the Bloc and the West, and the information available to us reflects this increased attention. In this estimate, particularly in Chapters I and IV, we consider mainly the employment of Soviet theater forces in general nuclear war, taking some account of the way in which Soviet plans might be affected if operations were begun on short notice, or after a period of preparation. In Chapter V, we consider at much shorter length the possible employment of these forces in limited nuclear or conventional warfare under the threat of escalation.

3. It should be emphasized that, in discussing Soviet theater forces and their capabilities, we do not take account of the actions of opposing Western forces. In particular, we do not assess the

~~SECRET~~

-SECRET-

effect on Soviet theater forces of an initial, strategic nuclear exchange. We believe, however, that the effect of such an exchange could be a principal factor governing the ability of Soviet theater forces to carry out their assigned missions in a general war.

#### SUMMARY AND CONCLUSIONS<sup>1</sup>

A. Soviet military doctrine for general nuclear war stresses the use of all types of forces, and not strategic forces alone, from the outset of hostilities. The requirements for general nuclear war, as the Soviets see them, include forces prepared for action during a relatively brief strategic exchange, and forces suitable for protracted theater warfare involving extensive campaigns. Although this position imposes heavy demands on Soviet resources, it is still being sustained after extensive debate within the political and military leadership. We believe that for at least the next few years the Soviets will continue to regard large theater forces as essential. (*Paras. 1-5*)

B. Soviet doctrine continues to assume the full-scale employment of theater forces from the outset of a general war, with the ultimate objective of annihilating enemy military capabilities and occupying territory. The prospect of nuclear warfare has led to many modifications but no radical revisions in operational doctrine for theater forces. Efforts are being made to adjust organization and training to the requirements of rapid advance and flexible maneuver, to coordinate the employment of tactical nuclear support for Soviet forces, and to ensure destruction of the comparable nuclear means of the enemy. The traditional Soviet concept of combined arms operations has provided a basis for gearing modernized tactical air and missile support to the motorized and armored ground forces. (*Paras. 6-11*)

C. The ground elements of Soviet theater forces, containing nearly two million men and representing the largest part of the total military establishment, are well-trained and equipped with excellent materiel. Present trends point to a continuing emphasis on firepower and mobility. We estimate that there are

<sup>1</sup> The Assistant Chief of Staff, Intelligence, USAF, dissents from major aspects of this estimate. For his views, see pages 7-10, immediately following the SUMMARY AND CONCLUSIONS.

-SECRET-

—SECRET—

about 145 line divisions, approximately 80 of them considered to be combat ready and the remainder at low and cadre strength. The strongest concentrations are in East Germany and in the western and southern border regions of the USSR. If the Soviets were able to mobilize for 30 days before the initiation of hostilities, they could expand their total forces to about 100 combat ready and 125 nonready divisions, although there would be deficiencies in training, equipment, and supporting units. (*Paras. 13-16, 46-49*)

D. Short-range rockets and road mobile missiles with ranges up to 350 nautical miles are now in the artillery support structure of major Soviet theater commands. Tactical Aviation has been sharply reduced in quantity, and a prime current deficiency is the small number of modern aircraft, particularly fighter bombers. However, there have been qualitative improvements in aircraft and their armament, and this trend will continue. In addition, tactical ballistic and anti-aircraft missiles are now available, and theater support could also be afforded by MRBMs and IRBMs in western USSR. These developments provide a net increase in the firepower available to support theater forces in the event of general war, but at the expense of some flexibility. (*Paras. 17-21*)

E. Organic air transport is now sufficient to airlift simultaneously only one airborne division or the assault echelons of two such divisions; we believe that this capacity may be doubled in the next several years. Amphibious assault capabilities are extremely limited, and there are no indications of significant future improvements. (*Paras. 29-30, 33-34*)

F. Tactical nuclear support is still limited in quantity and quality, but it has improved markedly over the past few years. Soviet military planners are now in a position to think in terms of committing up to a few hundred nuclear weapons, virtually all with yields in the kiloton range, to a typical *front* operation.<sup>2</sup> Limitations on the quantity and variety of nuclear weapons available to theater forces will have eased by the mid-1960's. The Soviets are probably developing subkiloton weapons, but we have no present evidence of work on delivery systems designed spe-

<sup>2</sup> A *front* is roughly comparable to a Western army group.

—SECRET—

3

~~SECRET~~

cifically for such weapons. We believe that chemical warfare munitions are available in quantity and would be used extensively in conjunction with nuclear and conventional weapons in general war. (Paras. 25-27, 45)

G. Although tactical nuclear delivery systems are integral to Soviet theater forces, the nuclear weapons themselves do not appear to be in their custody. Such weapons are normally stored in depots operated by the Ministry of Defense and located within the USSR. Soviet procedures for controlling these weapons ensure the national leadership that they will not be used without authorization. Existing procedures, together with deficiencies in logistical support, appear to penalize the Soviets in terms of operational readiness and rapid response for tactical nuclear weapons employment. (Paras. 22-24)

H. The Soviets probably consider the East European Satellite forces to be a sizable but problematic asset, because of their varying levels of effectiveness and reliability. In the event of war, however, the USSR would probably employ some Satellite forces in combined combat operations, by integrating selected Satellite divisions, corps, or even field armies directly into major Soviet commands. Other Satellite units would be retained under national command for security, reserve, and other functions. (Paras. 36-37, 41-42)

I. The principal operations of Soviet theater forces in general war would be directed against NATO in Europe. The Soviets plan to move massive forces rapidly toward the Channel coast in the initial days of such a war. This campaign would probably be augmented by operations in Scandinavia, operations toward the Mediterranean, and operations toward the exits of the Baltic and Black Seas. The Soviet submarine fleet would contribute to the campaign against Western Europe by interdiction operations against the highly important Atlantic supply lines. Other peripheral areas, notably the Far East, apparently have lesser priority for theater force operations. Soviet capabilities to conduct theater force operations against North America are limited to minor airborne and amphibious attacks against Alaska and other Arctic bases. (Paras. 44, 59)

4

~~SECRET~~



~~SECRET~~

J. Although Soviet theater forces are formidable, especially in the area facing NATO in Europe, they continue to have certain limitations beyond those of tactical nuclear support. In the initial period of a general war, a significant portion of the tactical fighters would need to be assigned to interceptors as well as to ground attack missions. In offensive operations, the highly mechanized group forces are in constant danger of outrunning their logistic support. Finally, existing command and control systems do not permit the Soviets to exercise their traditional strict supervision over subordinates in the widely extended deployment required on the nuclear battlefield. (*Para. 45*)

K. The Soviets currently have 22 line divisions and 1,200 tactical aircraft stationed in East Germany and Poland. In a situation in which surprise or pre-emption were overriding considerations, they could launch an attack against Western Europe without prior buildup. If circumstances permitted, however, the USSR would seek to assemble a considerably larger striking force, primarily of Soviet but probably including some Satellite units. This force could comprise three fronts with a total of 50-60 divisions and 2,000 tactical aircraft. We estimate that under non-combat conditions, such a striking force could be built up in East Germany and western Czechoslovakia within 30 days, and a theater reserve could be provided for backup. The ability of these and other Soviet theater forces to carry out their assigned general war campaigns could be governed principally by the effects of the initial nuclear exchange. (*Paras. 53-58*)

L. The adjustments in Soviet theater forces in the past few years have not materially impaired their capabilities to conduct nonnuclear operations. The USSR's highly mechanized forces have favorable characteristics for the dispersed operations required because of the constant possibility of escalation to nuclear warfare. Over the past two years, the nonnuclear firepower of ground units has not been significantly altered, but the supporting nonnuclear firepower which can be delivered by tactical aircraft has decreased. There are indications that the Soviets have recently given recognition to the possibility of nonnuclear war with NATO forces in Europe. They probably intend to retain capabilities for conventional warfare against NATO, but they do not appear to have revised their expectation that any major

~~SECRET~~

5

~~SECRET~~

conflict with NATO would be nuclear from the start or would probably escalate. (*Paras. 63-66*)

M. The Soviets have evidently not elaborated any doctrine-- for limited nuclear warfare by theater forces, involving the use of tactical weapons only. We think they would be severely handicapped in any attempts to conduct such warfare at present. Moreover, thus far the Soviets appear to think that limited nuclear conflict in the NATO area would almost certainly escalate to general war. (*Para. 67*)

~~TOP SECRET~~

CENTRAL INTELLIGENCE AGENCY  
 Directorate of Intelligence  
 28 April 1972

## INTELLIGENCE MEMORANDUM

SOVIET DEFENSE POLICY  
 1962-72

## I. BASIC OBJECTIVES AND TRENDS

The objectives underlying Soviet military policies can be described today in much the same way as a decade ago: preserving the security of the homeland; maintaining hegemony over Eastern Europe; and fostering an image of strength in support of a strong foreign policy aimed at expanding Soviet influence.

The military policies that support these objectives, however, have shifted markedly. The impulsive policies of Khrushchev, who downgraded the importance of conventional forces and tried to buy a strategic nuclear deterrent cheaply, gave way in the mid-Sixties to more functional concepts of military power under Brezhnev and Kosygin. Soviet military policy was also influenced by fundamental changes in the way the USSR viewed its own power in relation to the other major countries of the world, by its estimate of the external threat, and by the impact of new technology on Soviet weaponry--and on the capabilities of potential enemies.

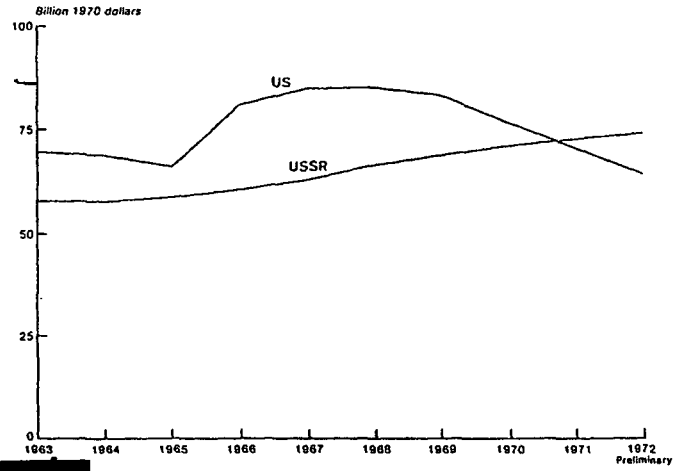
Trends in Military Policies

In broadest outline, the major trends in Soviet military policies over the past decade have been these:

*Note: This memorandum was prepared by the Office of Strategic Research and coordinated within CIA.*

~~TOP SECRET~~

Comparison of US Expenditures With Dollar Valuations of USSR Expenditures for Defense, 1963-1972



~~TOP SECRET~~ [REDACTED]

- Expansion and improvement of strategic offensive and defensive forces to the point that the Soviets now regard themselves as having achieved rough strategic parity with the US.
- Continued maintenance of strong ground, air, and missile forces opposite NATO, but with increasing confidence that NATO does not pose an imminent military threat.
- Growing concern over the possibility of armed conflict with China, and a consequent strengthening of military forces along the border since the mid-Sixties.
- Development of missile-equipped naval forces increasingly able to operate in distant areas, both to counter Western naval forces and to show the flag.

Trends in Military Spending

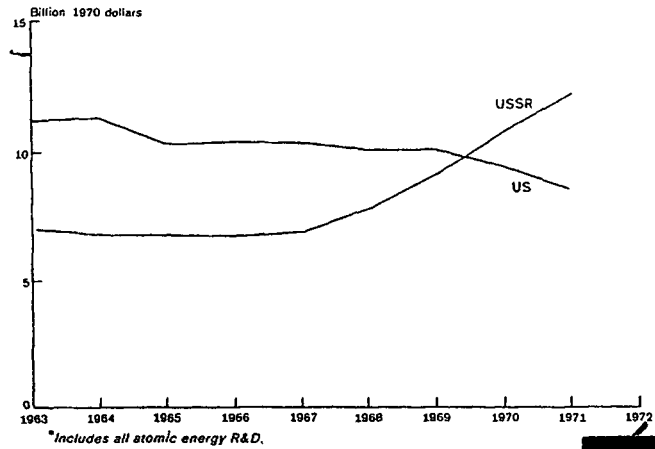
These policies led to a gradual increase in military spending. Total Soviet expenditures for military purposes grew from an estimated 18 billion rubles (58 billion dollars) in 1963 to about 22 billion rubles (72 billion dollars) in 1971, an increase of about 22 percent.\* The graph opposite shows the trend in Soviet military spending and compares it to US expenditures over the years.

The year-to-year changes in Soviet military expenditures have been shaped mainly by the Soviet drive to catch up with the US in strategic arms. Much of the rapid growth between 1966 and 1970 resulted from increases in outlays for strategic attack and defense programs, and particularly for military research and development. A decline in strategic attack expenditures--reflecting a leveling

\* The ruble figures are estimates of what the USSR pays for its military forces and programs. The dollar figures are estimates of what the Soviet forces and programs would cost if purchased and operated in the US.

~~TOP SECRET~~ [REDACTED]

Comparison of US Expenditures With Dollar Valuations of USSR Expenditures for Military RDT&E, 1963-1971



~~TOP SECRET~~

off in ICBM deployment--was primarily responsible for the low growth rate of about 1 percent in 1971. Soviet defense expenditures for 1972 are expected to reach about 22.5 billion rubles (74 billion dollars), about 2 1/2 percent more than in 1971.

Since 1967, the most dynamic element in Soviet defense spending has been military research and development. It has climbed sharply and in 1971 accounted for over 15 percent of the total dollar valuation of the Soviet defense effort. Historically the US has outspent the Soviets in this area, but since 1969 this relationship has been reversed as a result of continued growth of the Soviet effort while US spending on military R&D declined. (See Graph)

#### Trends in Military Manpower

Soviet military manpower has increased substantially over the past decade, moving from a total of about 3 million in 1962 to over 3.9 million this year. The increase resulted largely from the growth of ground forces to reinforce the border opposite China, and from the expansion of strategic forces.

US military manpower has shown a markedly different trend and is now about 1 1/2 million men below the Soviet total. Manpower for strategic forces has declined steadily, while general purpose forces peaked during the height of the Vietnam War and then declined. (Table 4 of the Annex compares US and Soviet military manpower trends.)

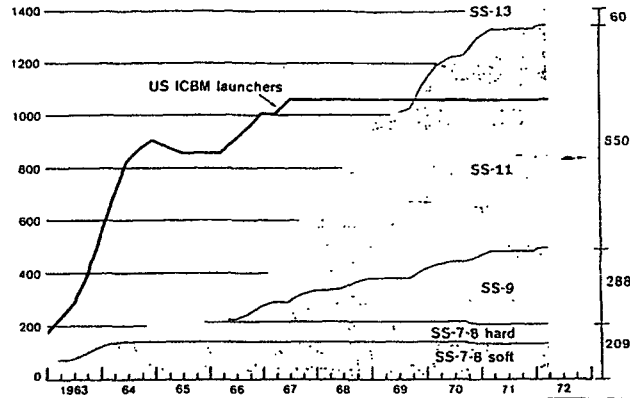
## II. STRATEGIC FORCES

In the aftermath of the Cuban missile crisis and the failure of Khrushchev's effort to improve the USSR's strategic position at one stroke, Soviet leaders saw the building of a significant deterrent force as their most pressing military requirement. It was evident to them that their small force of ICBMs, heavy bombers, and missile submarines was being grossly outnumbered by US missile and bomber deployment programs, and that their strategic defenses were becoming outmoded. Their response was

-3-

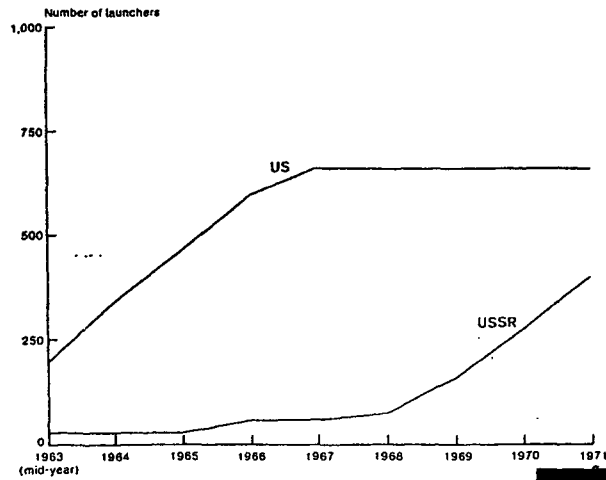
~~TOP SECRET~~

**Operational US and USSR ICBM Launchers**



The chart shows the estimated number of Soviet operational ICBM launchers as of early 1972. The completion of all known standard silos has provided the Soviets with a total of 1,407 operational launchers at their ICBM complexes. Because of the uncertainty surrounding the purpose and construction timing of the new silo program, it is not reflected in the chart. The chart also excludes the 120 ICBM launchers at Pervomaysk and Derazhnya, which are believed to be intended for use against targets in Western Europe.

**Operational US and USSR SLBM Launchers**





~~TOP SECRET~~ [REDACTED]

to undertake a massive effort to redress this growing imbalance by deploying large, survivable strategic attack forces and improving their strategic defenses.

#### Intercontinental Attack Forces

At the end of 1962, the Soviet intercontinental attack forces was composed of some 200 heavy bombers, 54 soft ICBM launchers, and less than a hundred short-range submarine-launched ballistic missiles. The only expansion under way was in the ICBM force, and that was moving slowly. The US, in contrast, had a bomber fleet of over 600 B-52s, 175 Atlas and Titan ICBMs, and 9 Polaris missile submarines carrying 16 missiles each. Moreover, the Minuteman ICBM was on the verge of large-scale deployment, and Polaris submarine production was continuing.

Several new Soviet weapons systems were already in research and development at that time, and the decision was made to embark on a sustained high-priority deployment effort centering on three of them: the large, high-yield SS-9 ICBM; the relatively small SS-11 ICBM; and the 16-tube Y class ballistic missile submarine. Bombers were retained as part of the force mix, but there was to be no effort to match the US bomber fleet numerically.

In the decade to follow, the Soviets worked a dramatic improvement in their strategic posture relative to the US. US deployment programs leveled off in the mid and late Sixties, and the Soviets began to catch up. The graphs opposite illustrate this trend for the ICBM and missile submarine forces.

ICBM Force Developments. By the end of 1968, the Soviets had reached virtual parity with the US in numbers of operational ICBMs, most of them now in hardened silos, and by the time SALT began in late 1969 they were moving well ahead. In the fall of 1970, there was a major switch in the ICBM deployment program. Construction of additional standard silos was abruptly halted, and a few groups of silos were even abandoned before they were finished. Instead, the Soviets introduced two new types of silos designed

-4-

~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~

for increased hardness, one probably intended for a large new missile and the other for a variant of the small SS-11. Over the next several months the Soviets began construction on 91 of the new-type silos, but in the summer of 1971 they stopped adding more and have not done so since.

Missile Submarines. The Y-class submarine construction program came later than the ICBM programs, but was well under way by 1968. Production reached a rate of 8 units a year in 1970. Since then, production has begun shifting from the standard Y class to a modified version which will carry a larger missile but will have 12 rather than 16 launch tubes. If production continues at current rates, the operational Y-class fleet would equal the US fleet of 41 modern ballistic missile submarines in 1974. Because of the reduced number of launch tubes in the new version, however, it would be another year before the Soviets caught up in total modern submarine missile launchers.

R&D Programs. While pursuing these deployment programs, the Soviets have continued to develop new offensive weaponry. There is evidence, for example, that preliminary tests of a new ICBM larger than the SS-9 began in late 1971, and other new missile projects appear to be in the offing. In addition, a 3,000-mile missile for the submarine force has been tested extensively, and it will soon be at sea on the new version of the Y-class submarine.

One significant feature of Soviet missile development so far has been the absence of any flight test programs for multiple independently targeted re-entry vehicles (MIRVs). The large new ICBM is a good candidate to be the first Soviet missile with MIRVs, but in this area the Soviets lag considerably behind the US, whose Minuteman III and Poseidon MIRV systems are already operational. Thus, while catching up with the US in total numbers of missile launchers, the Soviets have begun to fall behind again in another important measure of strategic attack capability--the number of separate targets that each side could attack. The US now has a commanding lead in this respect, and that lead is likely to grow at least through the mid-1970s.

-5-

~~TOP SECRET~~

~~TOP SECRET~~ [REDACTED]

Expenditures for Strategic Attack. In dollar terms, the Soviets have spent about the same amount on intercontinental attack forces in the 1963-71 period as the United States. The Soviets, however, have also maintained a substantial effort on peripheral attack forces which have no exact counterpart in the US, and when these expenditures are included overall Soviet expenditures on strategic attack for the 1963-71 period were about one-third more. Since US spending for intercontinental attack forces peaked before 1963, while Soviet spending did not reach its peak until 1969, these comparisons understate the long-term US effort to some extent. (The graphic opposite page 7 shows the trends in US and Soviet expenditures for strategic attack.)

#### Strategic Defense

Defense of the homeland from strategic attack has historically had a high priority in Soviet military planning, claiming a much higher share of resources than do strategic defenses in the US budget. In 1962, PVO Strany, the Soviet strategic defense organization, could already boast that it was numerically the largest air defense organization in the world, having some 7,500 SAM launchers and 4,500 interceptor aircraft. Moreover, construction had begun on ABM defenses around Moscow.

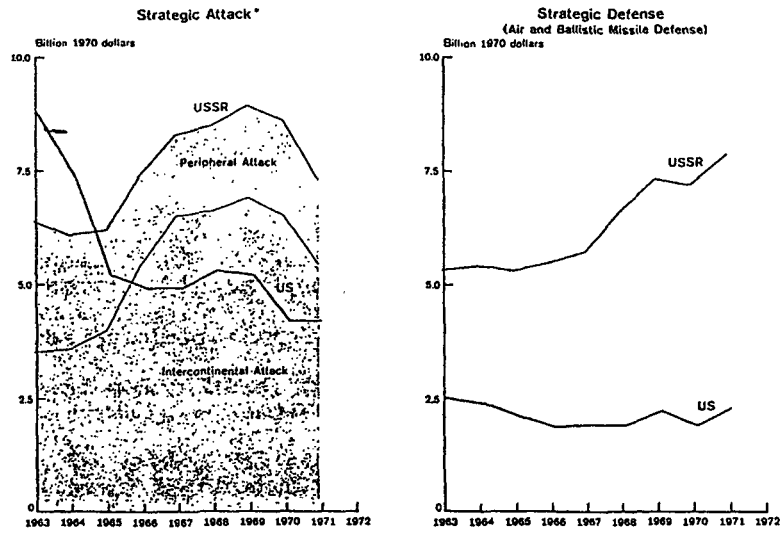
But the massive Soviet investments in missiles, aircraft, and radars were being undermined by changing US offensive capabilities. New US weapons and tactics--low-altitude penetration of bombers carrying long-range standoff weapons, and penetration aids and MIRVs on ballistic missiles--posed problems not satisfactorily solved to this day. The story of PVO Strany during the past decade is one of a vigorous but imperfect effort to upgrade its forces to counter the fast-paced changes in the US offense.

Air Defense Improvements. Unlike the US, the Soviets have added steadily to their air-defense weaponry in recent years. Since 1964 they have introduced five new types of fighter-interceptors, and production is continuing on two of them. The air-defense missile force has also continued to expand

-6-

~~TOP SECRET~~ [REDACTED]

**Comparison of US Expenditures With Dollar Valuations of USSR Expenditures for Strategic Attack and Strategic Defense, 1963-1971**



\*All US spending is for intercontinental systems.

Note: These comparisons exclude the cost of nuclear warheads and bombs.



~~TOP SECRET~~

and improve. Deployment programs are still in progress for the long-range SA-5 system and the SA-3 system designed for low-altitude defense. New radars, communications systems, and hardened control facilities have also been added. These improvements have plugged many gaps in Soviet air defenses, but they have not closed off the threat of low-altitude penetration by attacking bombers.

ABM Developments. The decision to begin deploying ABMs around Moscow in 1962 gave the Soviets an early start, but it saddled them with a system based on technology that was soon to be overtaken by offensive innovations. The dish-type radar used for target tracking, for example, is capable of engaging only a few targets at a time. The Soviets apparently soon recognized that the system could be overcome by multiple warheads and penetration aids, and between 1964 and 1967 they abandoned half of the ABM sites begun around Moscow.

In 1967, the Soviets began experimenting with new types of ABM radars capable of handling many targets simultaneously, and a year later, work started on a prototype for a completely new ABM system using this kind of radar. The new system is cheaper than the cumbersome Moscow system and could be deployed in much shorter time (construction of the sites at Moscow took about 7 years). The range of this system appears to be considerably less than that of the Moscow system, and it could be used for local defense of key target areas or possibly ICBM fields. Meanwhile, new ABM missiles have been undergoing tests since late 1970.

So far, none of the new ABM equipment has been put into operational use. Satellite photography has not revealed any evidence of operational ABM deployment in the Soviet Union beyond the Moscow area.

Expenditures for Strategic Defense. Soviet expenditures for deploying and operating their strategic defenses, as valued in dollars, have been nearly three times those of the US during the past decade. (The graph opposite shows the trends for both countries.) This difference is accounted for largely by the USSR's larger commitment to air defense--a reflection of the fact that the Soviets are confronted by a much

-7-

~~TOP SECRET~~

~~TOP SECRET~~ [REDACTED]

larger bomber threat than is the US. The total expenditures of the two countries on deployment of ABM systems have been about same. In the ABM field, of course, expenditures on R&D in both countries have greatly exceeded the deployment and operating expenses incurred so far, but it has not been possible to make meaningful comparisons of ABM R&D spending.

Soviet Strategic Concepts and Perceptions

The way the Soviets have developed, deployed, and operated their strategic forces says several things about how they view the utility of these forces:

- They consider these forces primarily as a deterrent. The major effort has been on programs which assure the ability of these forces to absorb a US strike and still be able to return a devastating blow.
- They nevertheless plan for the possibility that deterrence might fail. They give high priority to strategic defenses, and they apparently target their strategic attack forces primarily against military-related installations rather than population and industry per se. In their doctrine, the preferred use of strategic attack forces is to pre-empt--that is, to launch an all-out strike against the enemy's forces when the enemy clearly is about to launch his own nuclear attack. A "launch-on-warning" strategy has also been advocated by some Soviet military writers, but others have warned of the risks involved.
- They do not contemplate launching a sudden, bolt-from-the-blue, first strike on the US, nor do they expect one on themselves. They have not acquired forces with the necessary combination of accuracy, yield, and numbers to be effective in this role, and there is abundant evidence that they do not maintain their strategic forces in a state of constant alert. (One of the enduring tenets of their

-8-

~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~ [REDACTED]

doctrine is that any general war would be preceded by an extended buildup of tensions that would allow time for preparation.)

Soviet strategic doctrine also appears to reject the feasibility of graduated nuclear warfare. In their writings and statements on the subject, Soviet strategists are consistently skeptical that it is possible for two nuclear powers to exercise restraint once nuclear weapons have been employed.

The Soviet leadership has probably concluded that for the foreseeable future neither the US nor the USSR will be capable of acquiring a strategic superiority sufficient to ensure success in confrontation or a victory other than a Pyrrhic one in a nuclear war. Nevertheless, there are those in Moscow who believe that the US is striving to obtain some relative advantage in terms of political-military leverage and actual warfighting capabilities. The US doctrine of "strategic sufficiency" and emphasis on MIRV programs have been interpreted in some Soviet quarters as pointing in this direction. There are also voices calling for the USSR to strive for a measure of advantage.

There is probably no unanimous view in the Kremlin, however, as to how the strategic relationship should be measured. One senior member of the Soviet SALT delegation complained that some Soviet military men still tend to think as though they are counting "rifles and cannons" and pay too little attention to qualitative factors in looking at the strategic equation. At the same time, there is evidence that the Soviets perform sophisticated war-gaming analysis in much the same way as the US does. Whatever the measures, it is clear that the Soviets attach great importance to maintaining a position of "strategic equality" with the US and having it recognized by the US and other nations.

#### Soviet Motives at SALT

The Soviet decision to enter SALT in mid-1968 was induced not only by the evolution of a rough numerical parity between the two opposing strategic

-9-

~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~ [REDACTED]

arsenals, but also by a number of interrelated economic and political considerations. As SALT has progressed over the first seven rounds, Soviet interest in an arms limitation agreement has come into sharper focus.

One of Moscow's primary interests has been to stabilize the US-Soviet strategic relationship and to gain US recognition of the principle of "equal security with no military advantage for either side." Although the strategic forces of the two sides are asymmetrical, the Soviets apparently believe them to be comparable in terms of overall capabilities, and undoubtedly appreciate that this acknowledgement at SALT would buttress their claim for a role in world affairs equivalent to that of the United States.

Moscow's decision to enter SALT also reflected its desire to limit certain aspects of US-Soviet competition through negotiation. The negotiating record has indicated, however, that the Soviets did not enter SALT with the intent of ending strategic competition between the two countries. Rather, they have attempted to narrow the focus of this competition and limit it chiefly to the qualitative area of research and development. They have also insisted that force modernization be allowed to continue, at least under the terms of an interim agreement.

In spite of the Soviet buildup in strategic forces over the past decade the share of GNP allocated to defense fell to about 6 percent in 1971. This declining military burden indicates that purely economic considerations have not forced the Soviets to seek a SALT agreement. The Soviets may, nevertheless, hope to realize some savings in terms of high-quality physical and human resources--assets that are needed to modernize the civilian economy and boost productivity.

### III. GENERAL PURPOSE FORCES

#### Forces Opposite NATO

The structure and posture of Soviet and Warsaw Pact theater forces at the time of the 1962 Cuban

-10-

~~TOP SECRET~~ [REDACTED]



~~TOP SECRET~~ [REDACTED]

missile crisis reflected Soviet doctrine which had evolved in the late Fifties and early Sixties. This doctrine was based on the belief that any war between NATO and the Warsaw Pact would immediately escalate to nuclear war.

In the Pact strategy for nuclear war in Europe, the mission of the ground forces was to exploit massive nuclear strikes delivered throughout the depth of the theater by advancing rapidly across Western Europe. Ground and tactical air forces were equipped to provide greater mobility and concentrated, short term combat power. The ground forces were entirely mechanized and provided with massive numbers of tanks. The number of tactical aircraft was reduced, and equipment modernization programs emphasized air defense and tactical nuclear delivery capabilities. This focus on nuclear warfare resulted in a decline in conventional firepower.

By 1968, the Soviet view of war in Europe had undergone a significant change. In response to the NATO flexible response strategy, Pact planners have come to believe that the initial period of a war with NATO could be fought without the use of nuclear weapons. They still cling to the view that an unsuccessful NATO conventional offensive--or a breakthrough by a Warsaw Pact counteroffensive--would compel NATO to resort to tactical nuclear weapons. The Soviets see the conventional phase, therefore, as only a prelude to nuclear war. The Soviets believe moreover, that NATO does not intend to restrict a European conflict to the use of tactical nuclear weapons only and that a limited nuclear response on the part of the Pact would only offer the West the opportunity to deliver a massive and decisive strategic nuclear strike.

Soviet acceptance of a possible nonnuclear phase of hostilities has led to some changes in force structure. Division artillery, for example, has been increased by about 50 percent since 1967. Pact tactical aircraft, however, continue to be characterized by relatively small payloads, despite some improvements in current Soviet fighters.

-11-

~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~ [REDACTED]

For this reason the Soviets plan to use medium bombers for large-scale conventional bombing in the initial phase of a war with NATO. At the same time, the Soviets have continued to develop their tactical nuclear capabilities, increasing their tactical nuclear missile forces by about one-third.

Aside from these changes in combat support, Soviet theater force organization has not diverged significantly from the pattern established in the early Sixties. This organization emphasizes the shock power, mobility, and protection against nuclear effects of the tank, and is intended for a relatively short, fast moving offensive. The Soviets hope to conduct a conventional offensive using essentially the same tactics as for nuclear war.

#### Forces Opposite China

Deteriorating Soviet-Chinese relations have been responsible for significant changes in Soviet theater forces during the past decade. Since 1965 the Soviets have tripled their ground forces opposite China, and the buildup is continuing. There are now some 37 to 42 Soviet divisions and 370,000 men deployed in the border area. About 11 of these divisions are at or near combat strength.

The pattern of the ongoing buildup suggests that the Soviets intend eventually to have 42 to 48 divisions and close to 1,100 aircraft opposite China. At full strength, this force would have about 780,000 troops. Such a force probably would enable the Soviets to seize and hold indefinitely the most important peripheral regions of China such as Manchuria, Inner Mongolia, or large parts of Sinkiang.

It is clear that the Soviets are preparing for the possibility of tactical nuclear warfare against Chinese forces. Almost every division along the border has nuclear-capable tactical rockets, and there are four brigades equipped with 160-mile-range tactical ballistic missiles. In addition, the Soviets have deployed the 500-mile Scaleboard and

-12-

~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~ [REDACTED]

300-mile Shaddock mobile missile systems with ground forces in the area. Ultimately the Soviet forces along the border will probably have about the same proportion of tactical nuclear weapons as the forces opposite NATO.

Some Soviet strategic missiles and bombers are almost certainly targeted against China also.

#### Naval Forces

The requirement for anticarrier forces was the major influence on the development of the Soviet general purpose naval forces from the mid-Fifties through the mid-Sixties. Subsequently the emphasis broadened to include improvement of antisubmarine capabilities and expansion of out-of-area operations.

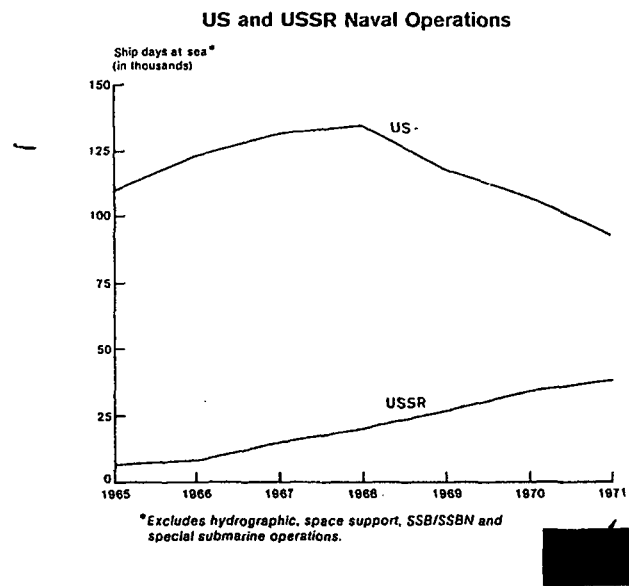
Anticarrier Forces. The Soviets decided to counter Western carrier forces primarily with anti-ship cruise missiles, rather than building their own carriers. By 1962 the Soviet Navy already had a large force of missile-armed medium bombers and had begun deploying cruise missile submarines. During the early and mid-Sixties the cruise missile submarine force was built up rapidly, and the naval air forces received new types of missiles and aircraft. Long-range cruise missiles also were fitted on a number of new major surface combatants.

Antisubmarine Warfare. During the last half of the Sixties the Soviets deployed a variety of new systems with improved ASW capabilities, while continuing to strengthen the anticarrier forces as well. The new weapons systems included helicopter carriers, long-range ASW aircraft, and two new classes of nuclear-powered submarines.

Despite these efforts, the Soviet Navy has made little progress in ASW. It has not solved the problem of initial detection of submarines, either through use of ASW forces or by an ocean surveillance system. As a result, current Soviet ASW forces do not pose a serious threat to the US ballistic missile submarine force. Furthermore, this same deficiency leaves Soviet naval surface forces vulnerable to Western attack submarines.

-13-

~~TOP SECRET~~ [REDACTED]



~~TOP SECRET~~ [REDACTED]

Out-of-Area Operations. Concurrently with the ASW programs, the Soviet Navy undertook a major effort to operate its forces in distant waters. In the early Sixties the Navy rarely ventured outside its coastal waters, even during major exercises. As late as 1965, Soviet surface combatants, attack submarines, and naval auxiliaries spent only about 6,000 ship-days on out-of-area operations. During the last half of the Sixties, however, Soviet naval operations expanded rapidly. The graph opposite shows this trend and compares it with US naval operations.

The 1962-71 period also saw an expansion of Soviet naval activity into new operating areas. The Soviet Mediterranean Squadron, for example, was first established in 1964 and grew into a major force in 1967. Soviet naval forces established a presence in the Indian Ocean in 1968, began a series of deployments to the Caribbean in 1969, and in 1970 began what has become a small continuous presence off of West Africa.

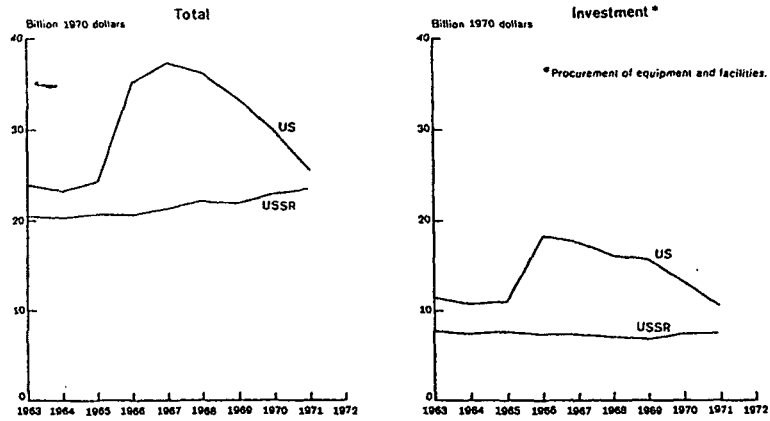
Naval air operations have expanded also. In 1965, the naval air forces received new reconnaissance aircraft and began to conduct long-range missions over the open ocean. In 1968, a Soviet naval air squadron was established in Egypt, and in 1970 naval reconnaissance aircraft began to make brief visits to Cuba.

Shipbuilding. During the 1962-1971 period, the Soviets built more major naval ships than the US, but their ships were generally smaller. In contrast to US practice, the Soviets have shown a preference for relatively small multi-purpose ships, with an emphasis on speed and firepower at the expense of range, endurance, and sustained combat capability. The only major area in which they have surpassed the US is in numbers of attack submarines, as shown in the following table:

-14-

~~TOP SECRET~~ [REDACTED]

Comparison of US Expenditures With Dollar Valuations  
of USSR Expenditures for General Purpose Forces, 1963-1971



Note: These comparisons exclude the cost of nuclear warheads and bombs.

~~TOP SECRET~~ [REDACTED]

Number and Tonnage of Major Naval Ships  
Commissioned, 1962-1971

|                          | Number    |           | Thousand Tons |           |
|--------------------------|-----------|-----------|---------------|-----------|
|                          | US        | USSR      | US            | USSR      |
| Major Surface Combatants | 83        | 92        | 564           | 291       |
| Attack Submarines        | 42        | 117       | 154           | 428       |
| Major Amphibious Ships   | <u>45</u> | <u>11</u> | <u>634</u>    | <u>38</u> |
| TOTAL                    | 170       | 220       | 1,352         | 757       |

The Soviet Navy does not have a major mission of projecting forces ashore, as does the US Navy, nor is it as concerned with protecting extended sea lines of communications. As a result, the Soviet Navy has been able to concentrate its main efforts on systems designed to attack and destroy other naval forces.

Expenditures for General Purpose Forces

Soviet spending on general purpose forces has grown slowly during the past decade but has remained well below US expenditures in this category. (The graphs opposite illustrate this trend.) Before the US made large-scale commitment in Vietnam, US expenditures for general purposes forces averaged about 15 percent above the dollar valuation of counterpart Soviet spending. During the height of the Vietnam conflict--1965-69--US spending was about 65 percent higher. Since then US expenditures in this category have dropped sharply, and in 1971 they were less than 10 percent above the Soviet total.

-15-

~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~

TABLE 1  
SOVIET INTERCONTINENTAL ATTACK FORCES

|  | End 1962 | End 1968  | 1 April 1972    |
|--|----------|-----------|-----------------|
| <u>ICBM Launchers</u>  |          |           |                 |
| SS-6   | 4        | --        | --              |
| SS-7   | 50       | 197       | 190             |
| SS-8   | --       | 23        | 19              |
| SS-9   | --       | 168       | 288             |
| SS-11  |          |           |                 |
| At ICBM Complexes  | --       | 580       | 850             |
| At MR/IRBM Complexes**   | --       | --        | 120             |
| SS-13  | --       | --        | 60              |
| Total  | 54*      | 968*      | 1,527*          |
| <u>Ballistic Missile Submarines</u><br>(Launch tubes in parenthesis) |          |           |                 |
| G class**  | 23 (69)  | 22 (66)   | 22 (70)         |
| H class  | 9 (27)   | 9 (27)    | 9 (30)          |
| Y class  | --       | 4 (64)    | 25-27 (400-432) |
| Total  | 32 (96)* | 35 (157)* | 56-58 (500-532) |
| <u>Heavy Bombers</u>   |          |           |                 |
| Bear   | 100      | 110       | 110             |
| Bison  | 100      | 90        | 85              |
| Total  | 200      | 200       | 195             |

\* These totals are for operational ICBMs and ballistic missile submarines, and they do not include others under construction at the times indicated. At the end of 1968, for example, some 330 additional ICBM silos (60 of them for the SS-9) were under construction and 13 additional 16-tube Y class submarines were under construction or fitting out. As of 1 April 1972, there were 91 new-type ICBM silos under construction and 15 Y class submarines under construction or fitting out.

\*\*These probably are intended primarily for attack against targets in Europe and Asia.

CURRENT US INTERCONTINENTAL ATTACK FORCES

|                                     |                       |
|-------------------------------------|-----------------------|
| <u>ICBM Launchers</u>               |                       |
| Minuteman                           | 1,000                 |
| Titan                               | 54                    |
|                                     | <u>1,054</u>          |
| <u>Ballistic Missile Submarines</u> |                       |
| Polaris/Poseidon                    | 41 (656 launch tubes) |
| <u>Strategic Bombers</u>            |                       |
| B-52                                | 450                   |
| FB-111                              | 74                    |
|                                     | <u>524</u>            |

~~TOP SECRET~~



~~TOP SECRET~~

TABLE 2  
SOVIET STRATEGIC DEFENSE FORCES

| <u>AIR DEFENSES</u>                     | <u>End</u><br><u>1962</u> | <u>End</u><br><u>1968</u> | <u>April</u><br><u>1972</u> |
|---|---------------------------|---------------------------|-----------------------------|
| <u>Interceptor Aircraft</u>             |                           |                           |                             |
| Subsonic                                | 3,325                     | 1,575                     | 885                         |
| Supersonic                              | 1,260                     | 1,775                     | 2,230                       |
|   | <u>4,585</u>              | <u>3,350</u>              | <u>3,115</u>                |
| <u>Surface-to-Air Missile Launchers</u> |                           |                           |                             |
| SA-1 (at Moscow only)                   | 3,276                     | 3,276                     | 3,276                       |
| SA-2                                    | 4,020                     | 4,500                     | 4,380                       |
| SA-3                                    | 220                       | 480                       | 988                         |
| SA-5                                    | --                        | 360                       | 1,332                       |
|   | <u>7,516</u>              | <u>8,616</u>              | <u>9,976</u>                |
| <u>ABM DEFENSES</u>                     |                           |                           |                             |
| Engagement Radars (Moscow)              | --                        | 3                         | 8                           |
| Launchers (Moscow)                      | --                        | 24                        | 64                          |
| Hen House Ballistic Missile             |                           |                           |                             |
| Early Warning Radars                    | --                        | 2                         | 6                           |
| Regional ABM Radars (Moscow)            | --                        | 1                         | 2                           |

CURRENT US STRATEGIC DEFENSE FORCESAIR DEFENSESInterceptor Aircraft

F-101, F-102, F-106 593  
(including Air National Guard)

Surface-to-Air Missile Launchers

BOMARC 84  
Nike Hercules (including Army  
National Guard) 755  
839

ABM DEFENSES

Ballistic Missile Early Warning Radars (BMEWS) 3  
Over-the-Horizon Radars 9  
SLBM Warning System Sites 8  
Satellite Early Warning Systems 2 satellites  
2 ground stations

~~TOP SECRET~~

~~TOP SECRET~~

TABLE 3  
SOVIET NAVAL GENERAL PURPOSE FORCES

|                             | End<br>1962 | End<br>1968 | April<br>1972-- | Current<br>US<br>Totals |
|-----------------------------|-------------|-------------|-----------------|-------------------------|
| <u>Major Surface Forces</u> |             |             |                 |                         |
| Aircraft carriers           | -           | -           | -               | 17                      |
| Helicopter carriers         | -           | 1           | 2               |                         |
| Cruisers - CL and CLG       | 14          | 12          | 15              | 9                       |
| Cruisers - CLGM (1)         | 1           | 8           | 11              | 28 frigates             |
| Destroyers                  | 107         | 81          | 82              | 122                     |
| Escorts                     | <u>79</u>   | <u>104</u>  | <u>112</u>      | <u>68</u>               |
|                             | 201         | 206         | 222             | 244                     |
| <u>Submarine Forces</u>     |             |             |                 |                         |
| Cruise Missile - nuclear    | 5           | 35          | 40              | -                       |
| - diesel                    | <u>11</u>   | <u>26</u>   | <u>28</u>       | -                       |
| Total Cruise Missile        | <u>16</u>   | <u>61</u>   | <u>68</u>       | -                       |
| Torpedo Attack - nuclear    | 8           | 18          | 28              | 56                      |
| - diesel                    | <u>253</u>  | <u>234</u>  | <u>182</u>      | <u>38</u>               |
| Total Torpedo Attack        | <u>261</u>  | <u>252</u>  | <u>210</u>      | <u>94</u>               |
|                             | 277         | 313         | 278             | 94                      |
| <u>Naval Air Forces</u>     |             |             |                 |                         |
| Missile carriers            | 265         | 270         | 275             | See                     |
| Reconnaissance/bomber       | 165         | 355         | 360             | footnote                |
| Patrol/ASW aircraft         | 80          | 85          | 135             | (2)                     |
| ASW helicopters             | <u>110</u>  | <u>175</u>  | <u>235</u>      |                         |
|                             | 620         | 885         | 1,005           | 2,500                   |

(1) *These ships--the Kynda and Kresta classes--are commonly identified as light cruisers because of their surface-to-surface missiles, but they are about the same size as a US guided missile frigate. They are less than half the size of a US light cruiser.*

(2) *The US Navy's air arm cannot be compared meaningfully to Soviet Naval Aviation because of the major differences in missions and equipment. The Soviets, for example, have no naval fighter aircraft, while the US has no long-range missile carriers comparable to the Soviet types.*

~~TOP SECRET~~

~~TOP SECRET~~

TABLE 4  
USSR AND US MILITARY MANPOWER

|                                | 1962      |           | 1968      |           | 1972      |           |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                                | USSR      | US        | USSR      | US        | USSR      | US        |
| Strategic Attack               | 174,000   | 263,000   | 325,000   | 169,000   | 363,000   | 150,000   |
| Strategic Defense              | 415,000   | 149,000   | 459,000   | 102,000   | 529,000   | 52,000    |
| Ground Forces*                 | 1,219,000 | 860,000   | 1,485,000 | 975,000   | 1,562,000 | 580,000   |
| Tactical Air Forces            | 223,000   | 155,000   | 240,000   | 345,000   | 259,000   | 215,000   |
| Navy                           | 340,000   | 405,000   | 369,000   | 460,000   | 385,000   | 340,000   |
| Command & Support              | 548,000   | 924,000   | 673,000   | 1,460,000 | 694,000   | 1,018,000 |
| Research & Development         | 45,000    | 54,000    | 53,000    | 42,000    | 53,000    | 35,000    |
| Military Security Forces       | 225,000   | -         | 225,000   | -         | 225,000   | -         |
| Total Active Military Manpower | 3,061,000 | 2,810,000 | 3,704,000 | 3,550,000 | 3,931,000 | 2,340,000 |

\*Includes Soviet Naval Infantry and US Marines.

~~TOP SECRET~~

~~TOP SECRET~~

TCS 1164/73

## Summary of Conclusions

Four principal questions relating to Soviet nuclear war doctrine are treated in this paper. The conclusions of the paper on these and a number of subordinate questions are summarized below.

1. *What purposes do the Soviets see their nuclear forces as serving?*

The main objectives underlying Soviet strategic policy may be described in broad terms as similar to those of a decade ago: to protect the security of the homeland, to deter nuclear war but to wage war successfully should deterrence fail, to project an image of military strength commensurate with the position of a great world power, and to support foreign policy aims if only by checking strategic forces of potential opponents.

-- *What is the relative weight of such factors as deterrence, considerations of prestige or influence, and use of nuclear weapons in war?*

It is difficult to separate these factors and assign each an exact ranking of significance. The pattern of development, deployment, and operation of the strategic forces, however, suggests how the Soviets view the utility of these forces. (1) Deterrence is a key objective. The major effort has been on programs which assure the ability of these forces to absorb a US strike and still return a devastating blow. (2) The Soviets nevertheless plan for the possibility that deterrence may fail, although they do not contemplate launching a sudden first strike on the US or expect one on themselves. (3) Their strategic buildup over the past decade shows that they are unwilling to remain in a position of marked strategic inferiority relative to the US. They apparently consider that their larger policy aims would be prejudiced by such a position.

-- *What is the implication of the Soviets' forgoing an ABM defense as a result of the ABM Treaty?*

- 3 -

~~TOP SECRET~~

~~TOP SECRET~~ [REDACTED]

TCS 1164/73

Soviet agreement to this treaty probably reflects a desire to limit competition in an area where the US had significant technical advantages and stood to lengthen its lead. In this regard, the Soviets would believe that they gave up little and gained substantial benefits.

The ABM Treaty, however, introduces a new consideration into Soviet planning for aerospace defense: the potential effectiveness of the extensive Soviet air defense network is undermined in the absence of a complementary ABM defense. If the treaty remains in effect over the long term, Soviet air defenses will be susceptible to disruption by a precursor missile attack. This consideration may affect future air defense system procurement. It may have already done so, in view of the absence of new strategic air defense weapons systems at test ranges for the past several years, although the evidence is inconclusive at this point.

A second implication of the treaty is that the USSR has limited the use of active defenses to deter or counter third-country missile attacks outside of Moscow and has chosen to rely primarily on the deterring influence of a superior offensive arsenal.

2. *How do the Soviets decide how much is enough?*

The ultimate objectives and intentions underlying Soviet strategic arms programs will continue to be a subject of uncertainty, given a dynamic strategic environment characterized by continuing competition on both sides, each attempting to prevent the other from achieving a measurable advantage, and in the absence of arms control agreements sufficiently comprehensive to restrain that competition.

Soviet spokesmen have often stated in recent years that the USSR's basic aim is to maintain a condition of "equal security" in relation to the US. This concept is not capable of precise definition. Possession by the Soviets of an assured deterrent

- 4 -

~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~

TCS 1164/73

capability, even though clearly recognized by the US, is evidently not "enough" if the deterrent forces stand in marked quantitative inferiority to those of the US. Similarly, the lag behind the US in significant qualitative aspects of strategic weaponry, such as MIRV technology, is probably also unacceptable.

Even if the intention is only to strive to maintain a relationship of rough strategic equality with the US, Soviet arms programs are bound to be vigorous and demanding. This is in part because of existing asymmetries, which may appear to the Soviets to justify certain quantitative advantages for the USSR, for example in land-based ICBMs, to maintain "equal security." Ongoing US development and deployment programs are probably also seen as requirements for offsetting action by the USSR. The Soviets would like to have a margin of strategic advantage over the US in some form, but we do not know what particular weapon programs the Soviets would consider most likely to afford them a useful advantage over the US or how they might assess the risks and costs of such programs in view of possible US reactions.

*-- Is there any doctrinal or conceptual limit on force size or composition? Or are the limitations the result of such practical considerations as cost, technology, and estimates of US reaction?*

There is a growing body of evidence that Soviet decisions on force goals involve a complex interplay of many factors beyond rational and objective considerations of strategic needs. The political leadership has the final say on those matters it considers, but it operates in the presence of other influences, including competing policy positions, special interest groups, Kremlin politics, bureaucratic pressures, and technological and economic constraints. Decisions are worked out on an incremental basis, and choices are susceptible to change from one year to the next. The decisionmaking process itself is veiled in secrecy, and evidence is often lacking on the substance and influence of positions taken by key institutions and individuals.

- 5 -

~~TOP SECRET~~

~~TOP SECRET~~

TCS 1164/73

Consequently we do not know precisely what conceptual criteria may govern Soviet force size and composition. It is possible, however, to circumscribe in a rough way the range of choices available in the light of major factors that the Soviets must take into account in planning for the future of their strategic forces. These factors include the provisions of strategic arms limitation agreements and the manner in which these agreements alter or appear to alter the strategic, political, and economic conditions confronting the USSR; the leadership's sense of stability or change in its strategic relationship with the US, including interaction in research and development; the pace and scope of technological change; economic capabilities; and the Chinese military threat.

-- *What is the impact of SALT on Soviet strategic doctrine?*

The ABM Treaty reflects a change from Soviet doctrine emphasizing active air and missile defenses against all threats. Otherwise, there is no evidence available at present to indicate whether or how the strategic arms limitation agreements have affected Soviet strategic doctrine.

3. *How would the Soviets envision using nuclear weapons?*

-- *Do they see using them at all? For initiation, retaliation, preemption?*

There is good evidence that the Soviets do not consider a sudden first strike to be a workable strategy. The Soviets have not deployed counterforce weapons in sufficient numbers to make a first-strike damage limiting strategy feasible. At the same time, the Soviets evidently do not anticipate a sudden first strike by the US. Their propaganda continues to cite the threat of a US surprise attack, but the observed day-to-day readiness posture of their strategic forces indicates that the Soviets do not, in fact, expect such an attack.

- 6 -

~~TOP SECRET~~

~~TOP SECRET~~

TCS 1164/73

Excluding a sudden first-strike strategy, the Soviet leadership has considered three strategic options: preemption, launch-on-warning, and retaliation.

Preemption is often presented in Soviet military writings as a desirable strategic option, but these discussions fail to address such factors as the US early warning systems and massive retaliatory capabilities. Given the immense risks involved, the Soviets probably would not attempt to translate this theoretical concept into a practical option.

Launch-on-warning evidently has been considered as a strategic option, but it is rarely mentioned by the Soviets. The concept may be seen as having a certain psychological value in reinforcing deterrence, but as a policy it would present command and control problems. The Soviet leadership is unlikely to delegate the authority to launch a nuclear attack or to accept the unpredictable risks of accidental or unauthorized launch inherent in such a policy.

Retaliation is the oldest declared Soviet strategy and the one most frequently advocated by the top party and government officials. None of the Soviet statements about preemption and launch-on-warning have come from the upper levels of the civilian leadership. The Soviet strategic buildup over the past decade has made retaliation a thoroughly credible doctrine. The assumptions underlying the leadership's view of retaliation, as reflected in the Soviet position at SALT, are that the US and USSR possess more than enough nuclear weapons to bring about a world-wide catastrophe, that the side attacked first would retain a retaliatory force capable of annihilating the attackers's homeland, and that a war between the US and USSR would be disastrous for both.

*-- Do the Soviets see using nuclear weapons for devastation in retaliation or for military effect? What military effects would be valued most?*

Both counterforce and countervalue targets are incorporated in Soviet planning. The basic targets

- 7 -

~~TOP SECRET~~



~~TOP SECRET~~ [REDACTED]

TCS 1164/73

are identified as missile launch sites, nuclear weapons production and storage facilities, other military installations, systems for controlling and supporting strategic forces, and military-industrial and administrative centers. Explicit references to the destruction of enemy population, as such, are notably omitted from available Soviet listings of strategic targets. The list obviously implies, however, the direct targeting of major American cities and therefore massive civilian fatalities.

*-- Do the Soviets envision use of nuclear weapons all at once or in some escalatory fashion? Is there any evidence of Soviet thinking about war bargaining, i.e. efforts to use nuclear weapons to create circumstances for bargaining, de-escalation?*

In the context of intercontinental warfare, there is no indication in available materials that the Soviets accept the feasibility of limited strategic nuclear warfare or war bargaining. At least in public they have consistently rejected the possibility that either the US or the USSR would be able to exercise restraint, once nuclear weapons had been employed against its homeland. Despite these disclaimers, the Soviet strategic arsenal could support a strategy of controlled strategic attack, raising the possibility that such a contingency may be included in Soviet targeting and attack planning.

In the context of warfare in Europe, Soviet doctrine on escalation has been modified since the mid-Sixties. An earlier position that any war involving NATO and the Warsaw Pact would automatically escalate to theater-wide nuclear war has been altered to allow for an initial conventional phase. Soviet writings and Warsaw Pact exercises have paid increasing attention to the importance of having armed forces equipped and trained for conventional as well as nuclear tactical warfare. Current Pact planning for a war in Europe recognizes the possibility of both a conventional or nonnuclear phase and a nuclear strike phase. Pact planners apparently believe that successful conventional operations by the Pact would force NATO to resort to nuclear weapons, and they emphasize the importance of the timing of their initial use.

- 8 -

~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~ [REDACTED]

TCS 1164/73

Soviet military writers have given little attention to the concept of controlled nuclear war in Europe. They emphasize the decisiveness of an initial nuclear attack and the need for effective coordination. The first salvo of intermediate- and medium-range ballistic missiles by the Strategic Rocket Forces evidently would be the signal for nuclear strikes by other Warsaw Pact forces.

For the Soviet political leadership, a broader range of options is likely to exist than is evident in Pact exercises and documents. Authorization for the scale of fighting to be pursued, the use of nuclear weapons, and the scope of permitted nuclear operations would rest with the political leaders. Under actual combat conditions they could decide to employ nuclear forces in a more carefully controlled manner than indicated in military writings and exercises.

4. *How do the Soviets see the relation between their intercontinental and theater forces?*

*-- Is there any way of judging which the Soviets might believe more likely to be used? Is there any evidence of Soviet views as to coupling or decoupling?*

We do not have good evidence on how the Soviets view the possibility of an intercontinental exchange between the US and the USSR if theater nuclear warfare erupts in Europe. The Soviets would presumably prefer to avoid a level of combat that would involve massive strikes on their own country. Their willingness to escalate to global nuclear warfare might depend largely on what they expected the US response would be to events in Europe.

Until the mid-Sixties Soviet declaratory doctrine held that a war between NATO and the Warsaw Pact would automatically escalate to theater-wide nuclear war in Europe and possibly to global nuclear war. Some Soviet military writers have continued to express skepticism that a European conflict could be kept limited. At the same time, other Soviet military writings have

- 9 -

~~TOP SECRET~~ [REDACTED]

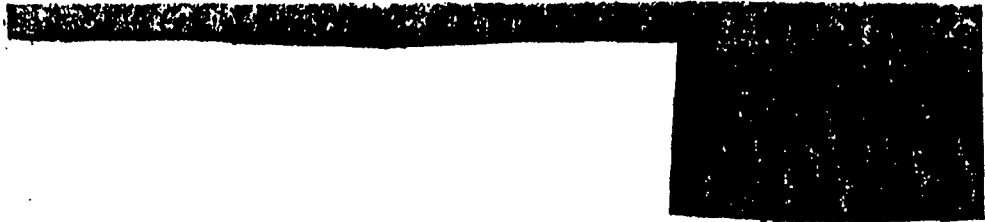
~~TOP SECRET~~ [REDACTED]

TCS 1164773

paid increased attention to the possibilities of limiting a war in Europe. In view of the modification of their doctrine on escalation, Soviet planners may have become more willing to consider decoupling a war in Europe from a direct US-USSR intercontinental confrontation.

- 10 -

~~TOP SECRET~~ [REDACTED]




THE TRACK RECORD  
IN STRATEGIC ESTIMATING

An Evaluation of the Strategic  
National Intelligence Estimates, 1966-1975

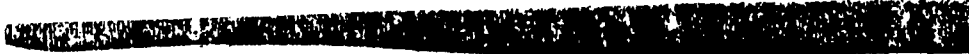
6 February 1976

Robert L. Hewitt  
Dr. John Ashton  
Dr. John H. Milligan

~~TOP SECRET~~ 

Approved for Release  
DATE 5-1-2001

74



CONCLUSIONS

1. The intelligence community, as judged by the findings in its national estimates, has a good record of detecting and determining major characteristics and missions of new weapons systems soon after testing begins and usually well before IOC.

?

a. This capability has improved since 1966 with the development of higher resolution photography and improved SIGINT capabilities.

?

b. However, the community was not always right from the outset:

*Mistake*  
↓

-- The SS-N-8 was considered to have a 3,100 nm range (3,500 nm maximum) until it demonstrated 4,200 nm in November and December 1972 (IOC was in April 1974). Lacking firm data, the analysts misjudged how close to 100 percent to propellant capacity was being used.

-- There was initial confusion about the size and functions of some of the new hardened missile silos introduced in the early 1970s.

-- Not until the early 1970s was it determined that some SS-11 silos which began deployment in 1967 were oriented to provide previously lacking coverage of China, and that others were oriented to cover Europe, the Mediterranean and South Asia. All, however, can be used against the US and are so counted.

*for what purpose*

- 1 -

~~TOP SECRET~~



*Silly section: "Good record" but...! Soften a bit excuse fundamental errors & omissions reflect them*

[REDACTED]

c. There were also persistent problems and disagreements over three weapon systems which appeared well suited for one sort of mission but at least marginally capable of performing another mission of more serious concern to the US. These were the SS-9 Mod 4, the SA-5, and the Backfire bomber.

-- In all three cases, the limitations of available evidence left uncertainties about detailed system performance, despite the sophisticated analytical techniques employed by the intelligence community. Thus there were questions, some of them still not resolved, about how much of a capability in the second category really existed, and hence about Soviet intentions in designing and building the systems.

2. The intelligence community has also been generally successful in monitoring the deployment of new weapon systems and the introduction of major modifications in existing ones, despite some initial difficulties in determining the scope and pace of deployment. There have been recurring minor uncertainties and disagreements about how many silos are under construction, how many submarines are in the building shed, and the like. These uncertainties have been reduced but not eliminated with the advent of better, more precise sensors.

a. The principal problems arose during the mid-1960s, before the full scope of the ICBM buildup and the pace of Y-class submarine production were clear.

*All points covered but*

[REDACTED]

1. The community's record in political operations likely  
Some orders go to the long term, on which direct evidence  
was initially lacking.

a. The most obvious shortcoming was the failure of the  
earlier estimates to foresee the degree to which Soviets would not  
only catch up to the US in number of ICBMs but keep right on going.  
There was a similar early failure to recognize that the Soviets  
would want -- and demand in negotiating the Intermediate Agreement in 1972 -- more than the 15-50 modern ballistic missile submarines,  
which the estimates took to represent rough parity with the US.

The estimates appear to have been overimpressed  
with the magnitude of the problem and uncertainty the Soviets  
facd in achieving and then retaining full equality with the US  
and to have overestimated Soviet concern about providing new US  
deployments or force improvements. At the same time, they evi-  
dently underestimated the strength and persistence of the politi-  
cal, institutional, and probably most of all, military pressures  
for continuation of the buildup -- probably in part because of  
doubt that a push much past equality would be of real military  
value.

*How  
imposed  
will  
was*

*How  
good  
in fact  
this*

b. On the other hand, the NIEs overestimated Soviet  
willingness to deploy ABMs in defense of key target areas beyond

~~TOP SECRET~~

[REDACTED]

Moscow, even though they identified the weaknesses and shortcomings of the Moscow system, and interpreted failure to complete it as evidence of Soviet discontent with the system, and recognized that there were probably divided counsels over the desirability of further deployment, even with an improved system. A key consideration appears to have been past evidence of Soviet willingness to deploy new and expensive strategic defense systems which had major weaknesses and shortcomings.

c. Deployment goals were more easy to gauge with defensive systems like the SA-5, where the coverage provided by existing air defense systems provided useful precedents, and with air defense interceptors, whose production runs normally fall within certain limits and which are usually deployed to known airfields. Even so, the NIEs for a time overestimated SA-5 force goals and misjudged actual force goals of two interceptors. *out of low many*

d. In the last few years, there have been no discernable problems about estimating force levels in the NIEs. The 1972 SALT accords removed many uncertainties by placing quantitative limits on certain categories, *which Soviet ignore regularly*, while in others, such as current SAM systems, the Soviets seem to be at or close to completion of deployment. The task was eased by the switch in 1970 from an attempt to define force goals by a single set of low-high numbers to the use of alternative projections illustrating what the Soviets might accomplish under various assumptions. ?

- iv -

~~TOP SECRET~~ [REDACTED]



[REDACTED]

7. The estimative record in foreseeing qualitative improvements in Soviet strategic systems is mixed. For the most part, they appear to have been successful in identifying major requirements the Soviets would probably seek to satisfy through new or improved weapon systems, though not exactly when or in what form the improvement would appear. In particular, they foresaw the development by the early or mid-1970s of MIRVed ICBMs with improved accuracy and hard target kill capability. They also foresaw the introduction of longer range SLBMs than those of the Y-class. In the various fields of strategic defense, they appear to have identified correctly the problems the Soviets faced and the most promising lines of development.

a. However, there have been some surprises. While anticipating greater Soviet emphasis on the survivability of their ICBMs, they did not foresee -- before construction actually began -- that the Soviets would undertake the very extensive remodeling of silos and construction of new launch control facilities now going on. More important, they failed to foresee that the Soviets would greatly increase the throwweight of their new missiles and introduce new launch techniques with some. Although the throwweight issue was examined in the context of possible SALT constraints, no one anticipated that the Soviets might greatly increase missile volume without increasing silo diameter.

*Yes otherwise  
we would think  
they would try  
to beat the  
system  
etc.*

- v -

~~TOP SECRET~~ [REDACTED]

b. In addition, the Soviets have thus far failed to make a number of advances which analysis in the estimates indicated would be necessary or desirable -- e.g., the development of quieter submarines with a capability for covert trail of US submarines. *Why not? Very significant*

8. In terms of the threat to the Triad, the record can be summarized as follows:

a. The threat to Minuteman from Soviet hard target MIRVs has been overestimated in terms of how soon high accuracy *Went* would be obtained, if the current estimates are correct, but was underestimated in terms of throw weight and number of RVs. Although the key consideration remains accuracy, the early availability of additional RVs will move up the date when there will be enough to threaten Minuteman survivability.

b. The threat to US bombers and ASMs penetrating Soviet territory has grown about as the estimates indicated, with the Soviets continuing to make incremental improvements in virtually all phases of air defense, but not the drastic improvements in low level intercept capabilities that were required. Although it is now judged that the Soviets may be able to overcome current deficiencies by the early 1980s, it remains uncertain whether this will provide an effective operational capability under actual combat conditions. There is no indication that the ?

- vi -

~~TOP SECRET~~ [REDACTED]

Soviets are developing a depressed trajectory mode of operation ?  
for submarine-launched ballistic missiles, so that they could be  
used against US bomber bases with reduced warning time.

c. Soviet ABM capabilities did not develop as expected;  
improved systems have been slower to develop, additional deploy-  
ment at Moscow or elsewhere failed to take place and deployment  
is now severely limited by treaty.

d. Soviet ASW capabilities against US SSBNs have ?  
remained very low as was estimated, despite vigorous Soviet  
ASW programs.

9. With respect to the effectiveness of the NIEs in depict-  
ing Soviet motivations, goals, and expectations over the past  
decade, it is probably impossible to provide an evaluation that  
will satisfy everyone. However, in terms of the intelligence  
community's present perceptions and judgments, the only particular  
shortcomings we would note are the following:

a. In retrospect, it is evident that the estimates  
of the mid and late 1960s failed to convey an adequate sense of  
the determination of the Soviets to build up sizable force and  
warfighting capabilities, however long it took. Perhaps there  
was temporary uncertainty in Moscow about what courses of action  
to follow and how the US might respond, as those estimates sug-  
gest. It now looks as though the Soviets adopted ambitious

- vii -

~~TOP SECRET~~ [REDACTED]

strategic force goals and moved steadily forward without much concern that the US might feel it necessary to step up its own programs in turn.

b. NIE 11-8-72 gives the impression that Soviet acceptance of the 1972 SALT accords involved greater Soviet interest in a stabilized strategic relationship with the US and a greater concern to avoid actions which might jeopardize detente than proved to be the case -- although it estimated that new weapon programs would be "vigorous and demanding," and presented force projections comparable to or in some cases more ambitious than the modernization programs now in progress.

*They must be kidding*

b. In fact the Soviets have taken a highly competitive view of the strategic relationship with the US; have evidently considered a high level of force development activity as quite consistent with "detente", and appear to have looked on arms control primarily as a means of constraining US force development rather than as a means of curtailing the overall competition and thus achieving greater stability.

*Good*

10. One final point is that, just as the strategic situation has changed greatly over the past decade, so have the scope and contents of the estimates. The estimates of the mid and late 1960s were relatively short and general in nature, with details about

how future Soviet forces might develop relegated to supplementing documents like the NIPP. More recently they have included greatly expanded and more explicit treatments of the evidence and analysis underlying key judgments and more on the organizational aspects and operational implications of the capabilities being built up. The content and focus of the estimates have since varied in some degree from year to year, depending on the observed progress of Soviet programs, on what topics were considered most pertinent and important, and on the availability of new analytical studies. Beginning in 1974 the NIE 11-3 and NIE 11-8 series have been combined in a single document, so that all aspects of Soviet strategic policy and activities are considered together.

11. How effective these changes have been in improving the usefulness of the estimates is for the customer to say. With respect to the estimative track record, however, it is pertinent to note that the analysts whose work is reflected in the estimates have had to address increasingly complex questions and in answering them have been under heavy pressure to be explicit about the nature and extent of their evidence, how their conclusions were arrived at, and how much confidence can be placed in them. Moreover, while there remain important limits on how much can be learned about Soviet strategic weapons and about Soviet strategic plans and policies, there have been important improvements in both the quality and quantity of information available to US intelligence.

- ix -

~~TOP SECRET~~ [REDACTED]

~~Top Secret RUFF~~

### KEY JUDGMENTS

The USSR's invasion of Afghanistan in December 1979 provided a rare opportunity to test the efficacy of the US warning system in situations involving substantial movements of the Soviets' armed forces outside their borders. Moreover, it afforded a chance to examine the behavior of the Soviet military in preparing for such an undertaking and to determine what implications this might have for the Intelligence Community's capacity to provide warning in other situations, especially one involving a Warsaw Pact move against NATO.

From the outset, it was recognized that the conclusions of this study could not be pressed too far. Both the performance of the Intelligence Community in providing warning of the invasion of Afghanistan and the applicability to other theaters of the lessons learned in that situation are very much affected by the particular circumstances involved. In contrast to a Soviet move against NATO, the situation for which the US warning system is largely designed, the invasion of Afghanistan required only a fraction of the USSR's military assets, was not opposed at the outset, did not involve a certainty of confrontation with US forces, and occurred in a region where US intelligence collection capabilities were limited.

These limitations notwithstanding, the examination of the Soviet approach to invading Afghanistan and the Intelligence Community's success in giving prior notice of this event have yielded some valuable lessons:

- Despite the unique circumstances surrounding this operation, the Soviets' behavior was essentially in keeping with US estimates of their doctrine for mobilization and the initiation of hostilities. This finding is important because the success of any warning system is dependent on the extent to which an adversary's behavior conforms to expectations.
- The system of warning indicators that is set up to detect potentially important changes in the Soviet/Warsaw Pact military posture provided a structured approach to and a sound evidentiary base for the Intelligence Community's conclusion that the USSR was preparing to introduce substantial forces into Afghanistan. The fact that the system worked in this unique

FGS-0219-80-

3  
~~Top Secret~~

~~Top Secret RUFF~~

situation provides increased assurance of its usefulness in other theaters, particularly in the NATO area.

- The US intelligence collection system proved equal to the task of providing analysts with sufficiently detailed, accurate, and timely data to allow them to reach essentially correct conclusions about the military activities in the Soviet Union with respect to Afghanistan. Of particular note was the synergy of signals and imagery intelligence in this collection effort and the quality of the data collected, despite limitations on the resources available.
- The Intelligence Community's analysts met their basic responsibility in a situation of this sort by providing sufficient prior reporting to assure that no key policymaker should have been surprised by the invasion. The analysts were unable to forecast precisely the timing or the size of the Soviets' move, but gave warning at least 10 days beforehand that the USSR was prepared to invade.

In conclusion, the examination of the early phases of the Soviet military intervention in Afghanistan provides a basis for greater confidence in US intelligence estimates of Soviet doctrine with respect to initiating hostilities and in the capacity of the US Intelligence Community to provide warning of such hostilities.

~~TCS-3219-00~~

4  
~~Top Secret~~

~~Secret~~

**Intelligence Forecasts of Soviet  
Intercontinental Attack Forces:  
An Evaluation of the Record** [REDACTED]

**Summary**

*Information available  
as of 1 March 1989  
was used in this report.*

The US Government's primary projections of Soviet intercontinental attack forces have been published annually in National Intelligence Estimates (NIEs). These projections have contained cases of both intelligence successes and failures. [REDACTED]

During the early 1960s, the Intelligence Community took seriously Khrushchev's boast that ICBMs would be "turned out like sausages" and, in the absence of confirmation from overhead photography, substantially overestimated the number of ballistic missiles that would be deployed. After the first overhead imagery became available, few ICBMs were found to be deployed and the Intelligence Community's projections were scaled back accordingly. By then the Soviets had largely completed deployment of medium-range ballistic missiles opposite Europe and had solved the technical problems they had encountered with their early ICBMs. The Soviets were thus ready to begin a massive buildup in their ICBM force, which the NIEs published during the mid-1960s did not anticipate. [REDACTED]

Once the magnitude of the Soviet buildup became clear, the NIEs depicted large uncertainties about the Soviet Union's ultimate strategic force levels. These uncertainties began to diminish after the Strategic Arms Limitation Talks (SALT) began. By 1971 the SALT ceiling on total numbers of strategic nuclear delivery vehicles (SNDVs), coupled with assumptions regarding Soviet willingness to remain within the agreed constraints, became the "governor" for SNDV force projections. Because SALT reduced uncertainty about the future, throughout the 1970s the Intelligence Community's projections of SALT-limited forces accurately reflected the number of SNDVs in the Soviet force. [REDACTED]

With the acquisition of MIRV technology in the early 1970s, Soviet strategic forces began to expand rapidly in terms of the number of deployed RVs. The Intelligence Community predicted well in advance when the Soviets would field MIRVed ICBMs and in 1970 began to include in its projections estimates of the total number of weapons deployed on delivery vehicles. The high and low projections made from 1970 to 1977 successfully bracketed the actual number of nuclear weapons in the Soviet force. The accuracy of the record in the early 1970s was due to a combination of correct estimates of the numbers of MIRVs on ICBMs and



~~Secret~~

of the rate at which these missiles would be deployed. In the mid-1970s, however, the accuracy of the overall record was fortuitous because it was the product of two offsetting errors:

- The projected number of RVs per missile deployed on submarine-launched ballistic missiles proved to be about half the number the Soviets deployed.
- The projected rate of modernization with new missiles carrying MIRVs was much greater than that which the Soviets actually achieved.

The rate of Soviet strategic force modernization has proved to be the most difficult aspect of Soviet strategic forces to project. For example, the figure shows the NIE projection made in 1975 for the year 1985. The Intelligence Community predicted that during this 10-year period over 90 percent of the delivery vehicles would be replaced. In reality, the Soviets replaced less than 60 percent of them. This tendency to substantially overestimate the rate of force modernization occurred in every NIE published from 1974 through 1986, and it was true for every projected force—whether it assumed high, moderate, or low levels of effort. The NIE published in 1985 projected that virtually the entire ICBM force would be replaced within 10 years. More than one-third of the projection period has passed, and so far only about 10 percent of the force is new.

The overestimates of force modernization have had two components. The date of initial operational capability (IOC) of a weapon system often was predicted to occur earlier than the actual date, and the rate of deployment was projected to be faster than it actually was. Of the 17 weapon systems that have been predicted to reach IOC since 1970, the Intelligence Community predicted that 10 would become operational earlier than they did, six were projected accurately, and one was projected to reach IOC later than it did. There are three reasons the projected IOC dates were often early:

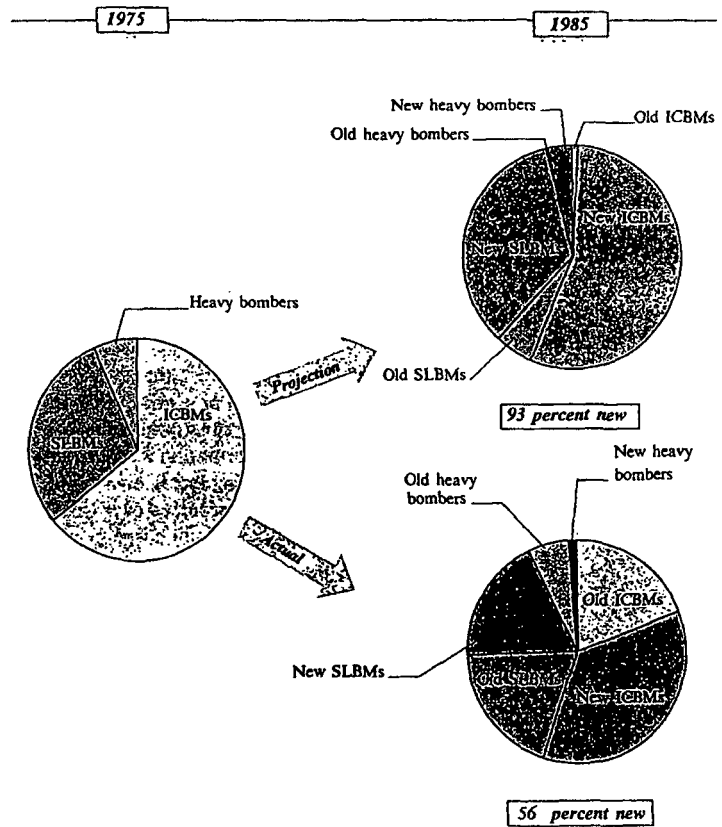
- The Intelligence Community did not correctly understand Soviet military requirements.
- The Soviets slowed some weapon programs to conform to arms control limits.
- Some programs had serious (and expensive) technical problems.

~~Secret~~

iv

~~Secret~~

Forecasting Soviet Force Modernization:  
An Example of the Record



v

~~Secret~~

~~Secret~~

Overestimates of deployment rates also contributed to the overall record on force modernization. Analysts used the rapid Soviet missile buildup in the late 1960s as a guide for future deployment rates, but that rate of deployment was never approached again. Examination of deployment rates also revealed that sometimes, when the follow-on to a weapon system was projected to arrive too soon after the original weapon system was fielded, the Intelligence Community anticipated the arrival of the follow-on by rapidly phasing in and phasing out the original weapon in the projections.

The lessons that emerge from this examination suggest several steps that could be adopted by the Intelligence Community to help improve the accuracy of projections in the future:

- *Institutionalize evaluations of the projections record by making them part of the annual Community product.* This is perhaps the simplest step to take, but, for it to succeed, the most recent projection must be evaluated in terms of all projections that were made over the last 10 years. Comparing last year's projection with this year's projection does not provide enough information to indicate trends in the forecasting record. Moreover, making incremental adjustments to a projection based upon changes that have occurred over the last year can mask fundamental trends and thereby prolong misperceptions.
- *Continue to develop measures for the projections to more sharply define the key changes that occur in the force.* The need to periodically evaluate and measure forces from a different perspective is a direct result of the changing technologies, functions, and capabilities embodied in military forces. Today the major Soviet weapon families—ICBMs and SLBMs—are reaching technological maturity. Although further improvements in accuracy and survivability are likely, if Soviet strategic delivery systems start to evolve in an entirely different direction—for example, by carrying advanced conventional munitions rather than nuclear payloads—the rate of modernization might no longer be a major focus of interest. Other measures of force capability would be needed to correctly depict force modernization.

~~Secret~~

~~Secret~~

- *Continue to examine the full range of factors bearing on force developments, the assumptions regarding the direction of force developments, and the magnitude of the effect of such factors.* Evaluating the many competing factors that the Soviets weigh in setting their procurement goals has been a perennial problem in making the force projections. Crediting one factor as having a central influence on force projections, especially for an extended period of time, obscures the roles that other factors play. Economic difficulty is one example of a factor that was given little weight in the past, but has now become important. In the current situation in the USSR, where traditional approaches are being swept aside and Gorbachev's national security policy is the subject of intense debate, the relative weights of the factors that influence future forces need to be carefully scrutinized each time a new projection is developed.
- *Continue to look at the potential for discontinuities in the future—not only highlighting which weapon systems might change more often or to a greater degree than others, but also examining the implications of major economic and political events.* Discontinuities are often the most imponderable of all analytical problems associated with developing projections. Defining "low" and "high" force projections in terms of a range of specific political, economic, or military developments—instead of as representations of different levels of effort—would help anticipate the consequences of these potential developments. [REDACTED]

Reverse Blank

vii

~~Secret~~

~~SECRET~~

**The Development of  
Soviet Military Power:  
Trends Since 1965 and  
Prospects for the 1980s**

**Summary: The Past,  
Present, and Future of  
Soviet Military Power**

*The Soviet Military Effort Under Brezhnev*

For more than two decades, the USSR has been engaged in a major buildup of its military forces. In the Khrushchev era the emphasis was on strategic nuclear programs, but since Brezhnev came to power in 1964 there has been an across-the-board expansion and modernization of all the Soviet forces. Among the many factors underlying this buildup, the most basic is the attitude of the Soviet leaders that military might is a necessary and effective instrument of policy in an inherently unstable world. This attitude has been embodied in and reinforced by an ambitious military doctrine that calls for forces structured to fight and win future conflicts and by a political and economic system that gives priority to military requirements

Taken together, these conditions have imparted a considerable momentum to the Soviet military effort. Thus, despite changes in the international environment, Brezhnev's detente policy, and Strategic Arms Limitation agreements, the overall pace of the Soviet military buildup has remained steady during the Brezhnev years. Annual Soviet military spending has nearly doubled in real terms and now consumes over one-eighth of GNP; military manpower has increased by one-third to more than 5 million;<sup>1</sup> defense research and development facilities have more than doubled in size; and weapon production facilities have expanded by nearly 60 percent

The number of Soviet strategic nuclear weapons delivery vehicles has increased from a few hundred in 1965 to about 2,500 today, overturning the previous US quantitative superiority. (The United States has just over 2,000 delivery vehicles.) The accuracy of the newest Soviet weapons now exceeds that of US systems, creating a major threat to US fixed, land-based missiles. These improvements have enhanced the capability of Soviet forces to fight a nuclear war. Moreover, by hardening their land-based missile launchers and putting a greater number of ballistic missiles on submarines, the Soviets have made their strategic forces so survivable that even after absorbing a US attack they could destroy most of the US population and most US military and economic targets in a retaliatory strike

<sup>1</sup> This figure includes about 1 million men who fulfill roles that the United States would not consider related to national security.

Soviet planners also emphasize defense against strategic weapons, but their defenses cannot prevent similar devastation from a US retaliatory strike:

- *The Soviets have introduced systems to detect and defend against ballistic missiles, but technical limitations and treaty constraints render them largely ineffective against a large-scale US missile attack.*
- *They have expanded and improved their air defense network (the world's largest), giving it a good capability against high-flying aircraft but only limited effectiveness against low-altitude penetration.*
- *Defense against missile-launching submarines is poor despite its high priority in naval planning, because the search and detection capabilities of Soviet forces are insufficient to locate submarines in the open ocean.*
- *Continuing attention to civil defense has provided protection for virtually all political leaders, most key workers, and about 10 percent of the urban residents; but the rest of the population would be dependent on evacuation, and economic and military facilities are still vulnerable*

The Soviets have eliminated the West's former edge in short- and medium-range nuclear delivery systems in Europe. The number of Soviet tactical surface-to-surface missiles there has increased by a third, and the number of aircraft capable of delivering nuclear weapons in Central Europe has more than tripled. The Soviets have broken the monopoly held by NATO since the 1960s in nuclear artillery and have introduced other new tactical delivery systems with improved ranges, accuracy, readiness, and destructive power. They may also have nuclear landmines. With these improvements, Soviet theater forces are now in a better position to match any NATO escalation of a European conflict from one level of nuclear war to another, without using long-range theater nuclear systems based in the USSR.<sup>3</sup> Those systems have also been improved by deployment of the SS-20 intermediate-range ballistic missile with three independently targetable warheads and of the Backfire bomber with improved payload and air defense penetration capabilities

To the extent that Soviet intercontinental nuclear forces now check those of the United States and Soviet gains in theater nuclear forces have offset those of NATO, the balance of conventional forces in Europe has become increasingly significant. In the conventional area, the Soviets expanded their

<sup>3</sup> The Soviets would hope to confine a NATO-Warsaw Pact war to European territory, avoiding the use of systems based in the Soviet Union so as not to invite retaliatory attacks. Nevertheless, they doubt that nuclear escalation in such a war could be held within bounds.

already large ground and theater air forces during the 1965-80 period and introduced modern systems, some of them equal or superior to those of NATO:

- Total ground forces manpower increased by nearly 50 percent, while the number of major weapons in a division increased by about a third and artillery firepower more than doubled.
- The number, variety, and capability of air defense systems available to tactical commanders increased rapidly, with deployment of all-weather missile-equipped interceptor aircraft and mobile air defense missiles and guns.
- The latest Soviet tanks (now common to most first-line Soviet units in Eastern Europe, but not yet widely deployed among units in the USSR) have armor that provides good protection against the most advanced antitank weapons.
- New tactical aircraft deployed in the 1970s have increased ninefold the weight of ordnance that Soviet theater air forces could deliver against targets in NATO's rear areas (the Benelux countries and parts of France, for example). More accurate bombing systems (radars, laser rangefinders, and computers) and precision munitions have improved Soviet capabilities against point targets and largely eliminated NATO's rear areas as sanctuaries in conventional war

On the other hand, the Warsaw Pact's military potential is affected by its political cohesion and its will to use force. Pact performance on the field of battle would be heavily influenced by the attitudes and effectiveness of the non-Soviet armies, which have been assigned major roles in both combat and support. These armies are less modern than that of the USSR. More important, the solidarity and enthusiasm that they would exhibit in combat against NATO are open to serious question

The Soviets also maintain large forces opposite China. Since the late 1960s, the number of Ground Forces divisions along the Sino-Soviet border has doubled and their total manpower has more than tripled. Expansion of Soviet tactical aviation forces since the late 1960s has also been directed primarily at China

~~Secret~~

In the early 1960s, the Soviet Navy was a coastal defense force with limited capabilities for operations in the open ocean, but it is being transformed into an outward-looking force deploying heavily armed surface ships, high-speed submarines, and advanced aircraft. The number of ships has changed little, but the proportion of large surface combatants and nuclear-powered submarines is growing. Qualitatively, Soviet naval forces remain vulnerable to air and submarine attack; nuclear-powered submarines are noisier (and thus easier to detect) than their Western counterparts; and capabilities for distant combat operations—such as the landing of troops and provision of carrier-based air support—are extremely limited. But their numerous missile-equipped surface ships, submarines, and aircraft enable the Soviets to control their own coastal waters and to contest the use of open-ocean areas by the West

To support the expanded combat capabilities of their forces, the Soviets have introduced space systems for communications, intelligence collection, navigation, and other military functions. They now have an average of about 90 satellites operational at any given time, of which about 70 percent are military and another 15 percent have both military and civilian uses. The Soviets have also introduced new procedures and systems for controlling military operations. These include an increase in the operational authority of the General Staff, creation of new intermediate levels of command, introduction of mobile and hardened command posts, and deployment of new communications systems. These measures have improved the flexibility, reliability, security, and survivability of command

As their military power has grown at the intercontinental, theater nuclear, and conventional levels, the Soviets have increasingly used military instruments to achieve political gains, especially in the Third World. Soviet exports of military equipment to the Third World have increased rapidly since their beginning in the mid-1950s. During 1980, some \$14 billion worth of hardware was sold to the Third World, and in 1979 nearly 15,000 Soviet advisers were in Third World countries—more than four times as many as in 1965. Operations of naval ships outside home waters increased sixfold between 1965 and 1970, fluctuated for several years, and increased sharply again during 1979 and 1980. Soviet naval ships now make several hundred visits to Third World ports each year

~~Secret~~

xvi



~~Secret~~

Military involvement in Third World conflicts has become more active and direct:

- In the late 1960s and early 1970s, Soviet air and air defense forces were used in defensive roles in the Middle East.
- In the mid-to-late 1970s, Soviet logistic support transported Cuban intervention forces to Angola and Ethiopia and sustained them there.
- In 1979, Soviet combat ground and air units invaded Afghanistan—the first direct involvement of Soviet ground forces outside the Soviet Bloc

To support their growing military involvement overseas, the Soviets have improved the ability of their forces to project power:

- The lift capability of primary Soviet amphibious ships has more than tripled since 1965. These ships can transport some 10,000 to 12,000 men (but they are spread out among four fleet areas). Merchant ships, some of which have been specifically designed to support naval operations, are also available.
- The firepower, mobility, and air defense capabilities of the six combat-strength airborne divisions have improved with the deployment of more modern weapons.
- By introducing heavy transport aircraft, the Soviets have doubled their airlift capacity (but their capabilities remain inferior to those of the United States)

The Soviets have not developed many forces specifically for overseas invasion. They rely instead on general-purpose forces designed principally for use in Europe but also suitable for operations in more distant areas to which they can deploy without opposition. Most areas of vital interest to them are close to the USSR, however, and thus Soviet requirements for long-distance intervention forces are less demanding than those of the United States

***Factors Affecting Future Military Programs***

As the Soviet leaders formulate their defense plans for the future, they face major external and domestic uncertainties:

- The fluid international situation dictates a prudent defense posture, and the Soviets' perceptions of emerging military threats argue especially for continued qualitative improvement in forces.

~~Secret~~

~~Secret~~

- On the other hand, to maintain even a modest rate of economic growth, those leaders must allocate more resources to capital investment and must improve labor productivity, in part by providing a rising standard of living.

This dilemma could cause political tension, particularly at a time of leadership transition.

These uncertainties make it particularly difficult to forecast Soviet policies. We have sufficient information on each of the factors involved, however, to make fairly informed judgments about their probable impact on the development of Soviet military power in the 1980s and to examine the possible effects of discontinuities in policy.

In the international arena, the Soviets are concerned by the prospect that the United States will augment its defense effort, by China's opening to the West, and by the possibility that US opposition to Soviet global aspirations will increase. They are troubled by instability on their borders—an insurgency in Afghanistan that they have been unable to suppress, an unpredictable regime in Iran whose fundamentalist Islamic ideology could spread to Muslim minorities in the USSR, and a major threat to Communist Party control in Poland. They probably view the 1980s as a decade of heightened competition, in which they will run a greater risk of military confrontation with the United States and of actual combat with major powers.

While they see increasing tension, the leaders and planners also see foreign nations making military efforts that threaten to undercut the strengths of Soviet forces and exacerbate their weaknesses. These threats, as well as deficiencies that the Soviets currently perceive in their own military capabilities, make continued pursuit of new weapon programs essential from the perspective of the Soviet planners. They see the possible US deployment of the M-X missile, for example, as a dual threat:

- Its survivability (from deployment on mobile launchers or in multiple shelters) could force the Soviets to expend all of their ICBM weapons against the M-X alone, were they to undertake a massive counterforce strike.
- Its accuracy increases the risk that the United States could neutralize the Soviets' land-based ICBMs, which provide nearly 75 percent of the weapons and warheads on their intercontinental nuclear delivery vehicles.

~~Secret~~

~~Secret~~

The Soviets also consider NATO's plan to deploy advanced ballistic and cruise missiles in Europe as part of a US strategy to threaten Soviet ICBMs and to reduce Soviet capabilities for theater war in Europe

Many other military developments are a cause of concern to Soviet planners:

- They foresee that new Western ballistic missile submarines, with their greatly enlarged patrol areas, will further tax their inadequate antisubmarine capabilities.
- They are watching China's lengthening nuclear reach and the upgrading of French and British strategic forces.
- They regard NATO's programs for armor and antiarmor systems, precision munitions, and nuclear weapons as substantial and technologically challenging.
- They believe they must accelerate their efforts to compete with NATO in tactical aircraft and air defenses.
- They are worried about the antisubmarine capabilities of the West and the vulnerability of their ships to air and submarine attack.
- They see the widespread deployment of cruise missiles on US ships as reducing their capabilities in ship-to-ship warfare and—if the long-range Tomahawk cruise missile is deployed—as introducing a new strategic threat to Soviet territory.
- Finally, instability on their borders and US plans to form a rapid deployment force have increased Soviet concern about military developments in areas near the USSR

As they attempt to react to the wide array of situations they perceive as either promising or threatening, Soviet policymakers will face a far more constrained resources picture than in the 1960s and 1970s:

- Soviet economic growth, which has been declining since the 1950s, has slowed to a crawl in the past several years. The real average annual growth in GNP in 1979 and 1980 was a little over 1 percent—the worst in any two-year period since World War II.
- In the 1980s, developing energy and demographic problems probably will hold GNP growth to an average of 2 percent or less—only half the rate at which defense expenditures have been growing.
- If military spending is allowed to follow its past trend, its share of economic output could increase from about one-eighth now to over one-sixth in 1990.

~~Secret~~

~~Secret~~

- More importantly, this increased military burden would reduce significantly the share of the annual increment to GNP that can be distributed among civilian claimants to ease the political tensions that arise from competition for resources. Military programs—especially those for nonstrategic forces—divert key resources from the production of critically needed equipment for agriculture, industry, and transportation

The problems of Soviet leaders in allocating resources could be further complicated by a political succession. Soviet President Brezhnev is 74 and in poor health, and most of his colleagues are also in their seventies, many of them also ailing. The departure of these men could affect military policy, but probably not immediately. The process of Soviet national security planning and decisionmaking is highly centralized, secretive, and resistant to fundamental change. It is strongly influenced by military and defense-industrial organizations, represented by men who have held their positions for many years, providing a continuity of plans and programs. Because of this momentum, and the political clout of the men and institutions that support defense programs, we doubt that Soviet emphasis on military power would decrease in the early stages of a leadership succession

The attitudes of the senior leaders are another buffer against any quick change of direction. If Brezhnev leaves the scene soon, the chances are that he would be replaced by one of the current group, most of whom share his general policy views. The two most likely candidates are party secretaries Kirilenko (who has expressed views somewhat more conservative than Brezhnev's on national security policy) and Chernenko (who has always been very close to Brezhnev). Eventually, of course, the interim leader will be replaced by a younger man; but among the younger Politburo members who appear to be candidates, most also seem to favor a continued high priority on defense. The effect of a political transition is inherently unpredictable, however, and we cannot exclude the possibility that major policy changes could result

In contrast to the imponderables of the economic and political environments, we have a good capability to identify most future Soviet weapon systems. The forces of the 1980s will be equipped primarily with systems already in the field and secondarily with those now entering production or in late stages of development. (Because it takes a decade or more to develop and test modern weapon systems, few of those now in early stages of development could be introduced in significant numbers in the 1980s.) We believe that we have identified about 85 percent of the new systems likely to be introduced

~~Secret~~

xx

~~SECRET~~

in this decade. Knowing Soviet military requirements and the amount of available development and production resources, we can postulate others. These identified and postulated systems, plus existing systems, will make up well over 90 percent of the weapons in the field in 1990

*Soviet Military Power in the 1980s*

Taking these factors into account, we can project in broad outline the prospects for further development of Soviet military power in the 1980s. We have made several projections. The most detailed (our baseline projection) is the one most consistent with currently available evidence. It assumes that pressures in favor of continuing the current policies—pressures from external challenges, from the Soviets' ambitious military doctrine, and from the powerful institutions that support defense programs—will offset to a large extent any inclination toward change that might arise from the leaders' growing economic concerns. The baseline projection allows for adjustments to defense expenditures—provided they do not significantly affect military capabilities

Because changes in political and economic conditions could lead to discontinuities in policy, we present three alternative projections: two that require an acceleration in the growth of military spending and one that requires an absolute reduction. We consider all of these to be less likely than the baseline projection but present a discussion of them intended to suggest reasonable limits to the options open to Soviet policymakers

*Baseline Projection.* For our baseline projection we estimate—on the basis of the weapon production and development programs we have identified—that the Soviets will continue their policy of balanced force development. Within the outlines of this continuity, however, we expect them to increase their emphasis on strategic forces that can survive a US attack, on strategic defense, and (to a lesser extent) on forces for the projection of Soviet power to distant areas. Manpower constraints will limit increases in the size of forces, but improvements will continue rapidly as new weapons become available. Improvements in Soviet military forces will lead to growing capabilities in many areas—including some areas of traditional Western strength

We expect the Soviets to carry out programs aimed at maintaining or increasing their lead over the United States in most measures of intercontinental nuclear attack capability and at upgrading their nuclear war-fighting capabilities. They will continue to improve the accuracy of their ICBMs and

~~SECRET~~

~~Secret~~

will develop a variety of payload options for responding to US deployment of new ICBMs. As a result, the Soviet ICBM force—with or without the SALT II Treaty—will have the theoretical potential to destroy most of the warheads on US land-based missiles throughout the decade. This potential will be greatest in the early 1980s, before the United States can deploy a new ICBM. But even in that early period, US forces could conduct a massive retaliatory strike

To maintain survivable strategic forces in the face of a potential threat to their own fixed, land-based missiles, we expect the Soviets to increase the capability of their submarine-launched ballistic missiles and possibly (especially in the absence of SALT constraints) to deploy land-mobile ICBMs. They may introduce a new strategic bomber or an aircraft to carry long-range cruise missiles, and they may already be testing a sea-launched strategic cruise missile

Should strategic arms control negotiations be resumed, these weapon developments could complicate monitoring—an already difficult US intelligence task. Land-mobile strategic weapons and cruise missiles cannot be counted with high confidence. As a result, monitoring strategic arms control agreements will be much more difficult in the 1980s than it was in the 1970s

Air defense improvements have been identified at Soviet test ranges, and some are now entering deployment. These include new surface-to-air missiles and interceptor aircraft with radars that enable them to detect and engage low-flying targets. These defenses could make penetration of Soviet airspace much more difficult for large manned bombers of current types. The small size and low flight altitudes of modern cruise missiles present a more complicated problem, however, and we project that Soviet defenses will be less effective against these new systems during the 1980s

The Soviets continue their antiballistic missile (ABM) programs, but the technical difficulties of detecting, identifying, and intercepting ballistic missiles have kept progress slow. Moreover, the deployment constraints of the 1972 ABM Treaty severely limit the effectiveness of defenses against missiles. (Should the Soviets abrogate the treaty, they could deploy ABM defenses widely in the latter half of the decade.) We expect continuing Soviet interest in antisatellite defenses and in high-technology systems for strategic defense. Possible developments in the late 1980s could include a space-based antisatellite laser system and a few laser air defense weapons. Continuing

~~Secret~~

ERRATUM page

~~Secret~~

civil defense efforts will improve protection for the leaders and essential work force, but not for the general population or for military or economic facilities. Soviet capabilities against ballistic missile-launching submarines will remain poor

We project that, despite the widespread Western deployment of counterforce weapons in the 1980s, the Soviets will maintain the capability to destroy most of the US population and industry in a retaliatory strike. Conversely, despite their own growing counterforce and defensive capabilities, they will not in the 1980s be able to prevent a devastating retaliatory strike by remaining Western ICBMs and air- and submarine-launched weapons

Programs for theater nuclear weaponry will further erode NATO's nuclear advantage in Europe unless NATO takes action to offset them. The Soviets have programs under way to improve the accuracy and flexibility of nuclear delivery systems at all ranges. These include the introduction of new tactical aircraft and short-range ballistic missiles, the continuing deployment of nuclear-capable artillery, and further improvements in the number and quality of weapons on long-range theater nuclear delivery vehicles (missile launchers and aircraft) based in the USSR

Our baseline projection includes improvements in Soviet Ground Forces. They will continue to emphasize the central role of armor; by the end of the decade most major Soviet units (and some units of their allies) will have tanks with advanced armor that provides good protection against current NATO weapons. The introduction of new artillery and air defense systems, as well as organizational changes that involve the addition of combat units and weapons, will increase the capabilities of Soviet divisions to respond to rapidly changing battlefield conditions. New fixed-wing ground attack aircraft and helicopters, with increased ranges and payloads and improved munitions, will increase the vulnerability of NATO's installations and forces and improve Soviet capabilities for close support of ground operations

With these new systems, we expect Soviet theater forces to keep pace with NATO's modernization programs. The East European forces of the Warsaw Pact will improve less rapidly, however, because economic constraints will limit the amount of modern Soviet equipment they can afford to acquire and maintain

This should be page 305





~~Secret~~

will develop a variety of payload options for responding to US deployment of new ICBMs. As a result, the Soviet ICBM force—with or without the *SALT II Treaty*—will have the theoretical potential to destroy most of the warheads on US land-based missiles throughout the decade. This potential will be greatest in the early 1980s, before the United States can deploy a new ICBM. But even in that early period, US forces could conduct a massive retaliatory strike

To maintain survivable strategic forces in the face of a potential threat to their own fixed, land-based missiles, we expect the Soviets to increase the capability of their submarine-launched ballistic missiles and possibly (especially in the absence of SALT constraints) to deploy land-mobile ICBMs. They may introduce a new strategic bomber or an aircraft to carry long-range cruise missiles, and they may already be testing a sea-launched strategic cruise missile

Should strategic arms control negotiations be resumed, these weapon developments could complicate monitoring—an already difficult US intelligence task. Land-mobile strategic weapons and cruise missiles cannot be counted with high confidence. As a result, monitoring strategic arms control agreements will be much more difficult in the 1980s than it was in the 1970s

Air defense improvements have been identified at Soviet test ranges, and some are now entering deployment. These include new surface-to-air missiles and interceptor aircraft with radars that enable them to detect and engage low-flying targets. These defenses could make penetration of Soviet airspace much more difficult for large manned bombers of current types. The small size and low flight altitudes of modern cruise missiles present a more complicated problem, however, and we project that Soviet defenses will be less effective against these new systems during the 1980s

The Soviets continue their antiballistic missile (ABM) programs, but the technical difficulties of detecting, identifying, and intercepting ballistic missiles have kept progress slow. Moreover, the deployment constraints of the 1972 ABM Treaty severely limit the effectiveness of defenses against missiles. (Should the Soviets abrogate the treaty, they could deploy ABM defenses widely in the latter half of the decade.) We expect continuing Soviet interest in antisatellite defenses and in high-technology systems for strategic defense. Possible developments in the late 1980s could include a space-based antisatellite laser system and a few laser air defense weapons. Continuing

~~Secret~~

~~Secret~~

Soviet naval programs will continue to emphasize open-ocean forces and the deployment of air power to sea. These programs will improve the Navy's capabilities to contest areas of the open ocean with the West. Ships and submarines with a new, long-range cruise missile are being introduced to offset Western gains in shipborne defenses. The Soviets are producing nuclear-powered attack submarines at an increasing rate, and the submarines introduced in this decade probably will be quieter (and harder to detect and track) than current models.

Another naval development has important implications for Soviet military power—we have evidence of activities that probably are related to a program for a new aircraft carrier. It could be introduced in the late 1980s and probably would carry standard fighter or attack aircraft and be nuclear-powered. (The Soviets have helicopter carriers and ships that carry short-range, vertical and short takeoff and landing aircraft, but this could be their first attack aircraft carrier.) It would improve the Navy's air defenses and—more importantly—it could inaugurate a capability for projection of air power in distant areas. The USSR could not achieve a large-scale capability in the 1980s—only one or two carriers could be available—but this could emerge as a major theme in the 1990s and later.

We expect other improvements in Soviet forces for power projection, besides the aircraft carrier. Introduction of a new class of landing ships—if it occurs in the 1980s—would increase the troop-lift capability of the Navy. The Soviets are reportedly working on a large transport aircraft, similar in size to the US C5A. If they produce such an aircraft, their airlift capabilities by 1990 could be substantially improved.

In the 1980s, the Soviets will continue to improve their military space and command and control systems. We expect them to place in orbit new military space stations, to be used for intelligence purposes, and new unmanned satellites for real-time photographic reconnaissance and the detection of missile launches. We also expect further improvements in command and control, with emphasis on mobile systems and on the use of computers.

With these new forces and capabilities, we expect the Soviets to maintain a high level of activity in the Third World to achieve both military and political goals. They may be willing to use their own forces more actively in the Third World, even if the activity brings a greater risk of confrontation with Western powers.

~~Secret~~

xxiv

If the Soviets carry out the programs that we have identified, their defense expenditures will continue to increase in real terms throughout the 1980s. The precise rate of increase is difficult to predict. It could be as high as 4 percent a year, if no constraints are imposed by arms control agreements and if the Soviets do not alter the support structure of their armed forces. A rate of 4 percent would increase the military drain on the economy and the potential for internal political problems

In an attempt to address these problems, the Soviets might try to reduce the growth of their defense spending to, say, 2 percent or less. To accomplish this they could:

- Cut back the current production of some systems while continuing development of follow-ons.
- Stretch out new production programs and postpone the target dates for force modernization.
- Attempt to improve efficiency in the military and the defense industries.

They could even take advantage of the limited financial savings that arms control agreements would permit by deploying fewer weapons—but their past actions suggest that they would procure forces to the limits of any such agreements.<sup>3</sup>

If the Soviets chose to make adjustments, they could spread them out among all of the military services, minimizing the impact on the rate of modernization of the forces as a whole. These changes could be risky from the point of view of the military, but might be attractive to political leaders with a broader perspective. We believe adjustments sufficient to hold the growth in spending down to 2 percent would not significantly alter the major judgments of our baseline projection

*Alternative Projections.* More radical changes in Soviet military policy are possible. Currently available evidence provides no clear indications that they are in the offing, but the interaction of political, economic, and technological forces in the 1980s could conceivably lead to major discontinuities:

<sup>3</sup> Arms control agreements could also reduce uncertainty about Western military programs and thus enable the Soviets to avoid some of the costs of hedging against uncertainty

~~Secret~~

One possibility is that the Soviets will reduce the level of military expenditures absolutely (rather than merely reducing the rate of increase). We believe this to be unlikely in the near term. Their dim view of the international environment would argue against such cuts, and the guidelines they have published for their next Five-Year Plan imply continued growth in defense spending. We have not detected any evidence that the Soviets are considering reductions

Nevertheless, reductions cannot be excluded as a long-run possibility; and, as one alternative projection, we have examined the consequences of a cut in defense expenditures. We believe that to reduce expenditure levels in real terms the Soviets would have to alter the roles and missions of some of their armed forces. They probably would spread the cuts among all the military services—making them somewhat deeper in general purpose forces, especially ground forces. General purpose forces are larger than strategic forces and they take up more of the defense budget and use more of the energy, manpower, and key material resources needed by the civilian economy. Production of general purpose weapon systems competes directly with production of equipment for transportation, agriculture, and manufacturing. (The resources devoted to production of strategic weapons, on the other hand, are more specialized and less readily transferable to important civilian uses.

Another alternative projection considers the possibility that the Soviets will increase defense spending more rapidly than in the past, to support a stepped-up military competition. This effort (focused on either strategic or conventional forces) could expand the forces and improve capabilities more rapidly than is forecast in our baseline projection. The range of program options is broad enough to permit a major increase in defense spending, and Soviet military-industrial capacity is large enough to sustain it. Such an increase would affect the distribution of economic resources significantly, however (especially if it were in conventional forces), and its political consequences could be extremely serious:

- The Soviets' ability to increase investment resources critical to long-term economic growth would be reduced substantially.
- Per capita consumption might decline in real terms late in the decade.
- Key sectors of the economy would be disrupted.

We do not know at what point the Soviets would find an increased defense burden to be unacceptable. This would depend on the international environment and the outlook of the leaders in power. Judging by their past behavior,

~~Secret~~

xxvi

~~Secret~~

we believe that they would prefer, if possible, to keep defense expenditures within their current growth rate, while still pursuing their military goals.

- The Soviets probably will seek to constrain US programs and to reduce their uncertainty about future US capabilities by urging further arms control negotiations.
- They will also attempt, through propaganda and diplomacy, to undermine Western cohesiveness on security issues and to slow the pace of West European defense programs.

The Soviets' incentives for such actions will increase as their economic growth slows in the 1980s. But Soviet leaders place a high premium on military power and will not, for economic reasons alone, accept constraints on defense programs that they consider vital to their interest

*Background and Structure of This Report*

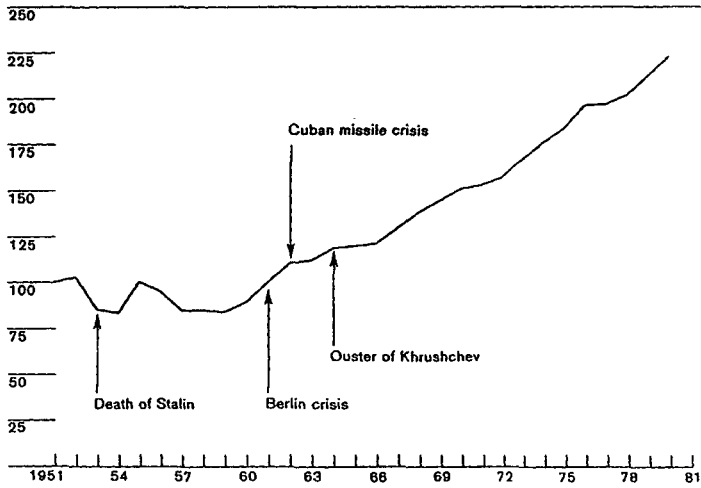
This report is based on a major interdisciplinary research effort carried out by the National Foreign Assessment Center during the 1979-80 period. It surveys the development of Soviet military power in the Brezhnev era—a period of relative economic prosperity and political stability—and outlines its probable evolution in the 1980s, when declining economic growth, a leadership succession, and a complex international environment will pose difficult choices for Soviet political and military leaders. To improve our understanding of these choices, more than 40 individual research projects were undertaken by the Offices of Central Reference, Economic Research, Political Analysis, Scientific and Weapons Research, and Strategic Research.

Beginning with a discussion of the Soviet military buildup under Brezhnev and of the factors underlying it, the paper then discusses the forces that will affect Soviet power and policies in the 1980s. These ideas underlie our baseline projection for the period through 1990 (page 73). Finally, several alternative courses of action that the Soviets could follow are outlined, as well as the conditions and constraints that bear on Soviet behavior and the clues that could alert us to changes in Soviet military policy

~~Secret~~

**Trends in Soviet Defense Expenditures**  
(based on estimates in constant 1970 rubles)

Index: 1951=100



~~Secret~~

**Center for the Study of Intelligence  
Central Intelligence Agency**