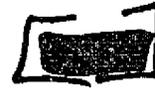




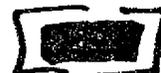
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Soviet Spending for Defense: Trends Since 1965 and the Outlook for the 1980s

An Intelligence Assessment

Approved For Release
Date: 10 SEP 1984

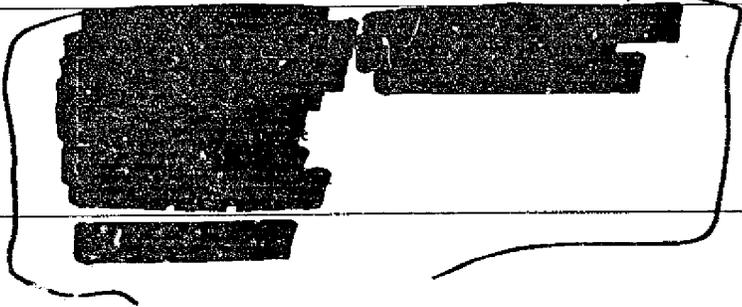


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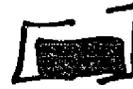
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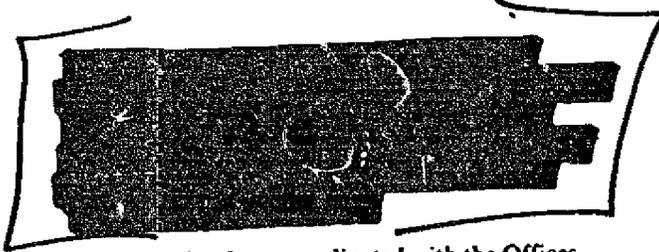
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Soviet Spending for Defense: Trends Since 1965 and the Outlook for the 1980s (U)

An Intelligence Assessment

*Information available as of 10 October 1979
was used in the preparation of this report.*



This report has been coordinated with the Offices of Economic Research, Imagery Analysis, Political Analysis, Scientific Intelligence, and Weapons Intelligence. It has also been reviewed by the National Intelligence Officers for General Purpose Forces, Political Economy, Special Studies, Strategic Programs, and the USSR and Eastern Europe. (U)



SR 79-10147
October 1979



Soviet Spending for Defense: Trends Since 1965 and the Outlook for the 1980s (U)

Key Judgments

Trends in Defense Spending and Programs

When the current Soviet regime took power in the mid-1960s it continued a policy, which probably had begun in the late 1950s or early 1960s, of increasing the commitment of resources to the military forces. Since 1965, Soviet defense expenditures in constant 1970 rubles have increased at a real average annual rate of 4 to 5 percent. Because defense spending grew at about the same rate as the economy as a whole, these expenditures absorbed a relatively constant 11 to 12 percent of the Soviet GNP. This figure reflects defense as it is defined in the United States; under a broader definition, which the Soviets may use, the defense share of GNP was about 1 percent higher.¹ (U)

The increase in Soviet expenditures on defense between 1965 and 1979 resulted from both a substantial expansion of Soviet military forces and an across-the-board improvement in the quality of weapons and equipment. Total Soviet military manpower increased by 30 percent during those years. The most significant increases in force size took place in Frontal (tactical) Aviation and Ground Forces—especially those along the Sino-Soviet border—and in strategic missile forces. All of the Soviet military services benefited from the introduction of successive generations of major weapons and support systems. (U)

Outlook for Future Defense Spending

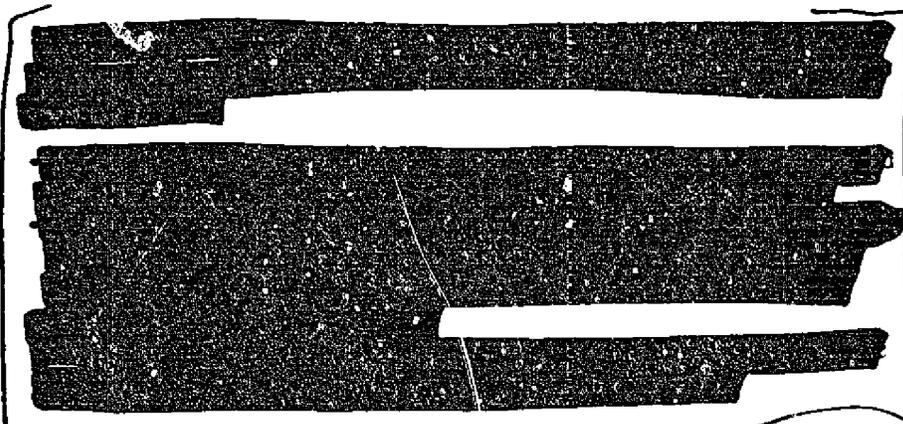
Changing economic and political factors make it difficult to forecast Soviet defense programs and expenditures in the 1980s:

- The rate of Soviet economic growth has been slowing and has recently fallen below the rate of growth that we estimate for defense expenditures.
- Energy problems and demographic problems are likely to lead to a further economic slowdown in the 1980s, so that defense activities could begin to consume an increasing share of Soviet resources.

¹ This estimate is presented in ruble terms to reflect the cost of military programs and activities in the USSR. For an alternative measure that reflects the cost of reproducing Soviet military activities in the United States, see *A Dollar Cost Comparison of Soviet and US Defense Activities, 1968-78*, SR 79-10130, October 1979, Secret. (U)

- 
- A political succession is imminent, and the potential candidates for the top positions appear to hold differing views on resource allocation issues.
 - Arms control negotiations now under way could affect the future composition of Soviet military forces and expenditures.

These factors take on particular importance in the light of decisions that the Soviet leaders are making now on economic plans for 1981-85. (U)



On the basis of this information, we believe that Soviet defense spending will continue to increase in real terms at least through 1985. The available evidence indicates that, if the Soviets do not alter their current plans, defense spending probably will continue to grow over the next five years at or near the rate of the past 15 years. If economic pressures became particularly severe, however, the Soviets could moderate the rate of increase in defense spending by economizing in ways that would have only modest impact on the modernization of their forces—by stretching out selected weapon programs, for example, or by taking advantage of the limited direct savings made possible by arms control agreements. (U)

In the longer term, growing economic difficulties may push the Soviet leaders to reexamine their plans with a view to reducing the growth of defense spending. But they will have to weigh their economic concern against their perception of future military requirements and their strong sense of the utility of military power in advancing Soviet policy objectives. Whatever choices they make with regard to defense spending, we think it highly unlikely that, even in the longer term, economic difficulties will force a reversal of the Soviet leaders' longstanding policy of continuing to improve their military capabilities. (U)

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Soviet Spending for Defense: Trends Since 1965 and the Outlook for the 1980s (U)

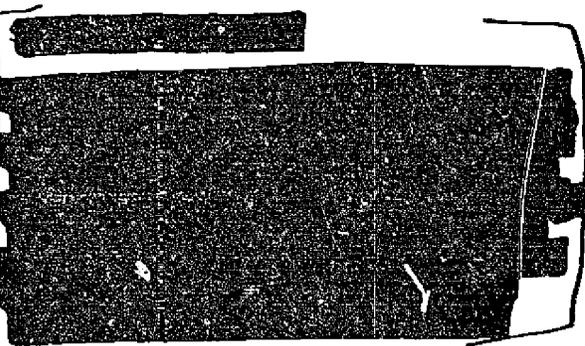
Introduction

Since the accession to power of the current Soviet regime in the mid-1960s, the USSR has carried out a major expansion and modernization of its military establishment. This effort—which began before the present leaders assumed office—has paid substantial dividends in military capability and political prestige. But the cost has been high: the effort has directed toward the Soviet military a growing infusion of scarce human and technical resources and raw materials. (U)

One way in which the US Intelligence Community measures the Soviet commitment of resources to its military forces is to estimate the annual ruble expenditures for defense. This report analyzes the level and trend of these expenditures over the last 15 years, their distribution among resource categories and military services, and the major weapon procurement programs that have provided the principal impetus for their growth. It then evaluates those defense spending trends in the light of a projected transition from the generally steady economic growth and political stability of the past 15 years to a decline in that growth and the instability of a political succession. Finally, on the basis of that evaluation, we attempt an assessment of future Soviet defense programs. (U)

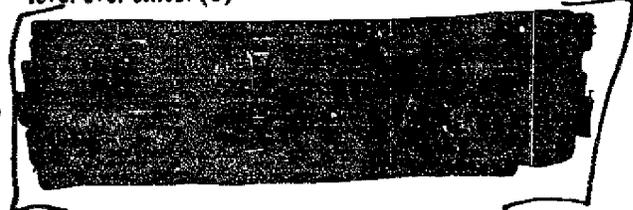
The estimates presented in this report are expressed in rubles to reflect our understanding of the costs of military equipment and activities in the USSR. Such estimates help us assess the resource considerations confronting Soviet defense planners, the relative priorities assigned to the forces and activities that make up the defense effort, and the impact of defense on the Soviet economy. We use constant prices so that the estimates reflect real changes in defense activities rather than the effects of inflation. The use of 1970 prices permits the comparison of estimated defense expenditures with other Central Intelligence Agency estimates of Soviet economic performance, which also use that price base. (U)

The estimates are based for the most part on a detailed identification and direct costing of the activities and components that make up the Soviet defense program for each year. We have greater confidence in the estimates of total expenditures than in those for lower levels of aggregation. We also have greater confidence in our estimates for past years than in our projections of future spending. A more detailed description of our methodology, our concepts, and our confidence in the estimates can be found in the appendix. (U)

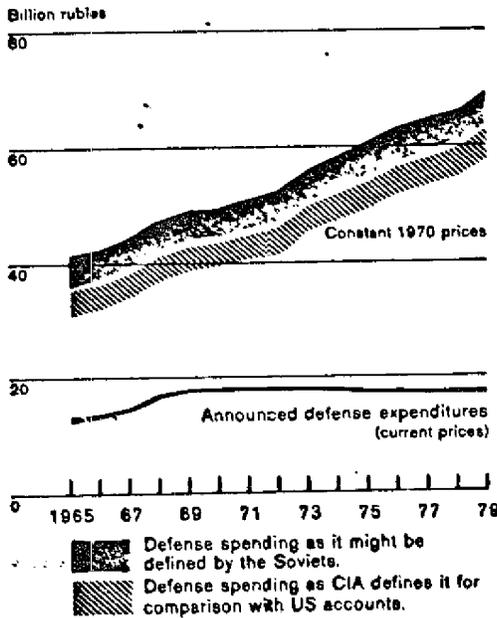


The Announced "Defense" Budget

In the published state budget, the Soviet Union annually includes a single-line figure for "defense," which is expressed in current prices. The definition of defense—what activities are included in this figure—has not been publicly released. Announced Soviet defense spending was 12.8 billion rubles in 1965. It increased in the late 1960s and remained stable at about 17.9 billion rubles in the early 1970s. It fell to 17.2 billion rubles in 1977 and has remained at that level ever since. (U)



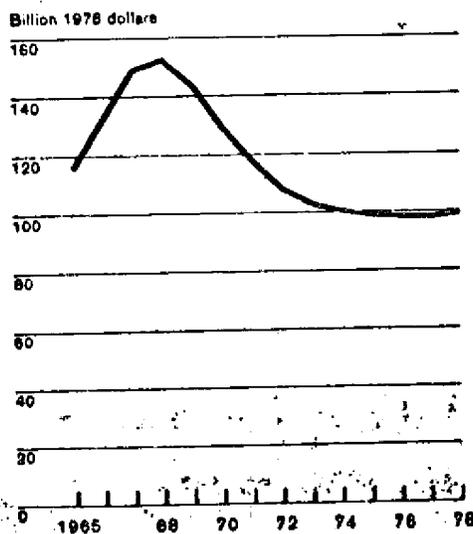
Estimated Soviet Defense Expenditures, 1965-79



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US Defense Expenditures, 1965-78



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The relatively low level of the announced "defense" figure, coupled with its remarkable stability in recent years, suggests that if it reflects any set of actual expenditures at all, the set must be only a portion of the total. If the Soviets base their figure on an actual inventory of defense activities, then over time they have apparently changed its scope; this would enable them to manipulate the announced figure for political purposes while at the same time enlarging their military effort. (U)

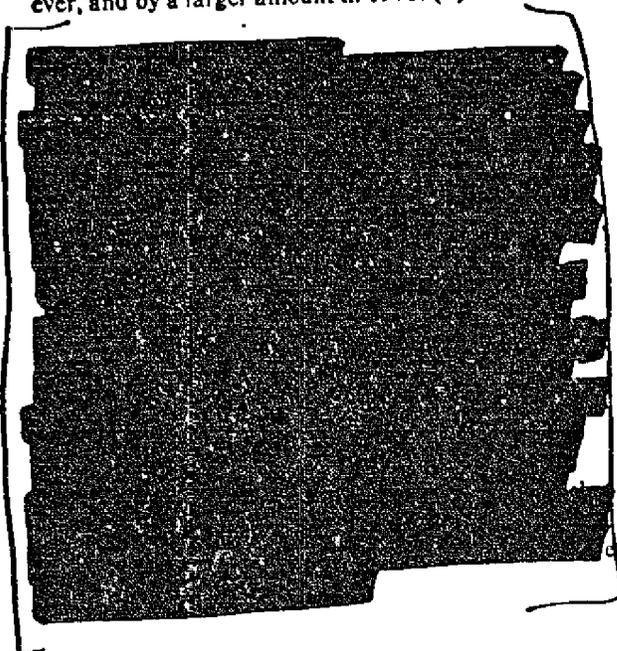
Defense Spending as Defined in the United States

Several definitions or ways of measuring defense expenditures are used in the United States. Probably the most common is the one used in the annual budget of the Department of Defense (DoD). This measure, however, includes funds for some nondefense activities that the Department administers and excludes various defense-related expenditures administered by other government organizations. In the US gross national product (GNP) accounts, the Department of Commerce uses a broader definition, intended to cover all government purchases of defense-related goods and services. The CIA, in its comparisons of the dollar cost of US and Soviet defense activities, uses yet another definition.³ This is similar to the definition used in GNP accounts, but it excludes some activities—such as net expenditures on foreign military assistance—whose costs for the USSR cannot be estimated with confidence. It includes—for the United States—national security programs carried out by the Department of Defense and the defense-related programs of the Department of Energy, the Coast Guard, and the Selective Service Commission and—for the USSR—equivalent Soviet activities. (U)

According to this CIA definition, estimated Soviet defense expenditures in 1965 were about 31-36 billion rubles (measured in constant 1970 prices). They have increased since then at a real average annual rate of growth of 4 to 5 percent, and we estimate that in 1979 they will reach 58-63 billion rubles. Growth rates varied from year to year, primarily in response to fluctuations in the procurement of strategic missiles and aircraft. The continuing increase in estimated Soviet defense expenditures is in keeping with observed trends in Soviet military activities. The trend in US

³ See *A Dollar Cost Comparison of Soviet and US Defense Activities, 1968-78*, SR 79-10130, October 1979, Secret. (U)

defense expenditures is in marked contrast. From the Vietnam peak of 1968, US defense outlays declined through 1976. They increased slightly in 1977, however, and by a larger amount in 1978. (U)



Patterns and Priorities Revealed by Analysis of Expenditures

The "direct-costing" methodology for estimating Soviet defense spending makes it possible to analyze expenditure patterns in a number of ways.* Analysis by resource category provides a measure of Soviet force expansion and modernization; analysis of major procurement programs reveals the principal determinants of defense spending; and analysis of expenditures by the individual services provides an insight into changing Soviet military priorities. (U)

The analyses of expenditures in the sections that follow are based on narrow definition of defense, corresponding to that used in the CIA comparisons of US and Soviet defense activities. (U)

* See appendix for a discussion of direct costing.

Analysis of Expenditures by Resource Category: Measures of Force Expansion and Modernization

One breakdown is in terms of three principal resource categories—operating, RDT&E (research, development, testing, and evaluation), and investment. The operating category includes expenditures for personnel and for operating and maintaining current forces. RDT&E expenditures are used for exploring new technologies, developing new weapons and improving existing weapons. Investment expenditures are those associated with the acquisition and capital repair of weapons, equipment, and facilities. (U)

A breakdown into these categories reveals that Soviet military planners devoted about 30 percent of total defense expenditures over the 1965-79 period to operating expenses and about one-half to investment. The remaining one-fifth appears to have been allocated to RDT&E. Expenditures for all three resource categories increased between 1965 and 1979. We estimate that spending for RDT&E grew more rapidly than operating or investment expenditures. While this estimate is subject to particular uncertainty, its rapid growth suggests that qualitative improvement is becoming increasingly important in shaping Soviet defense spending. (U)

Operating Expenditures

The operating category includes expenditures for personnel—pay and allowances, food, personal equipment, medical care, and travel—and for the operation and maintenance (O&M) of active forces. Between 1965 and 1979, personnel expenditures (except pensions, which are excluded from this analysis) accounted for about 15 percent of total Soviet military expenditures and for over 50 percent of operating expenses. There was an increase of over 35 percent in personnel costs over the period, resulting mainly from an increase of 1 million men in Soviet active military manpower. Most of the growth in manpower took place before 1972, reflecting primarily the growth and modernization of the Soviet Ground Forces. (U)

In the O&M part of the operating category we include our data on Soviet expenditures for the maintenance of equipment and facilities, for petroleum products, utilities, and civilian personnel, and for the leasing of communications. Between 1965 and 1979 these costs accounted for about 15 percent of total defense expenditures and for almost one-half of the expenditures in the operating category. O&M expenditures almost doubled during this period, largely because more (and more sophisticated) weapons require more (and more costly) maintenance. (U)

RDT&E

We consider the estimate of Soviet RDT&E outlays to be less reliable than the estimates of operating and investment expenditures. Nevertheless, information is available on some particular RDT&E projects, and we have access to published Soviet statistics on science and to statements by Soviet authorities on the financing of research. These sources indicate that military RDT&E expenditures are large and growing. This indication is reinforced by evidence that the Soviets have increased the manpower and facilities devoted to military RDT&E programs. (U)

Our estimate suggests that outlays for RDT&E accounted for about 20 percent of total Soviet military expenditures during the 1965-79 period. The estimated share has increased over time and this year probably will reach almost 25 percent of the total. We believe that the growth in Soviet spending for the RDT&E category (as for the investment category) varied from year to year with the initiation and completion of individual development programs. (U)

Because our calculations are based on highly aggregated and uncertain data, we cannot speak with confidence, nor in detail, about the allocation of RDT&E spending among the services or among military missions. (U)

Investment

The investment category is divided into two components: the procurement of weapons and equipment and the construction of facilities.³ During 1965-79, procurement accounted for over 90 percent of the

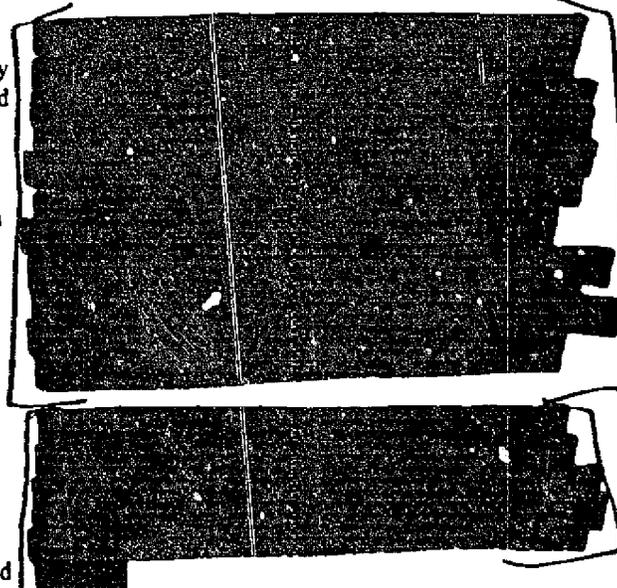
³ For the purpose of this study we have defined both procurement and construction to include a portion of the spending for capital repair and for the recurring purchase of spare parts. This is consistent with our understanding of Soviet accounting practice. (U)

expenditures in the investment category and over 45 percent of total expenditures. Construction received a far smaller share than procurement. (U)

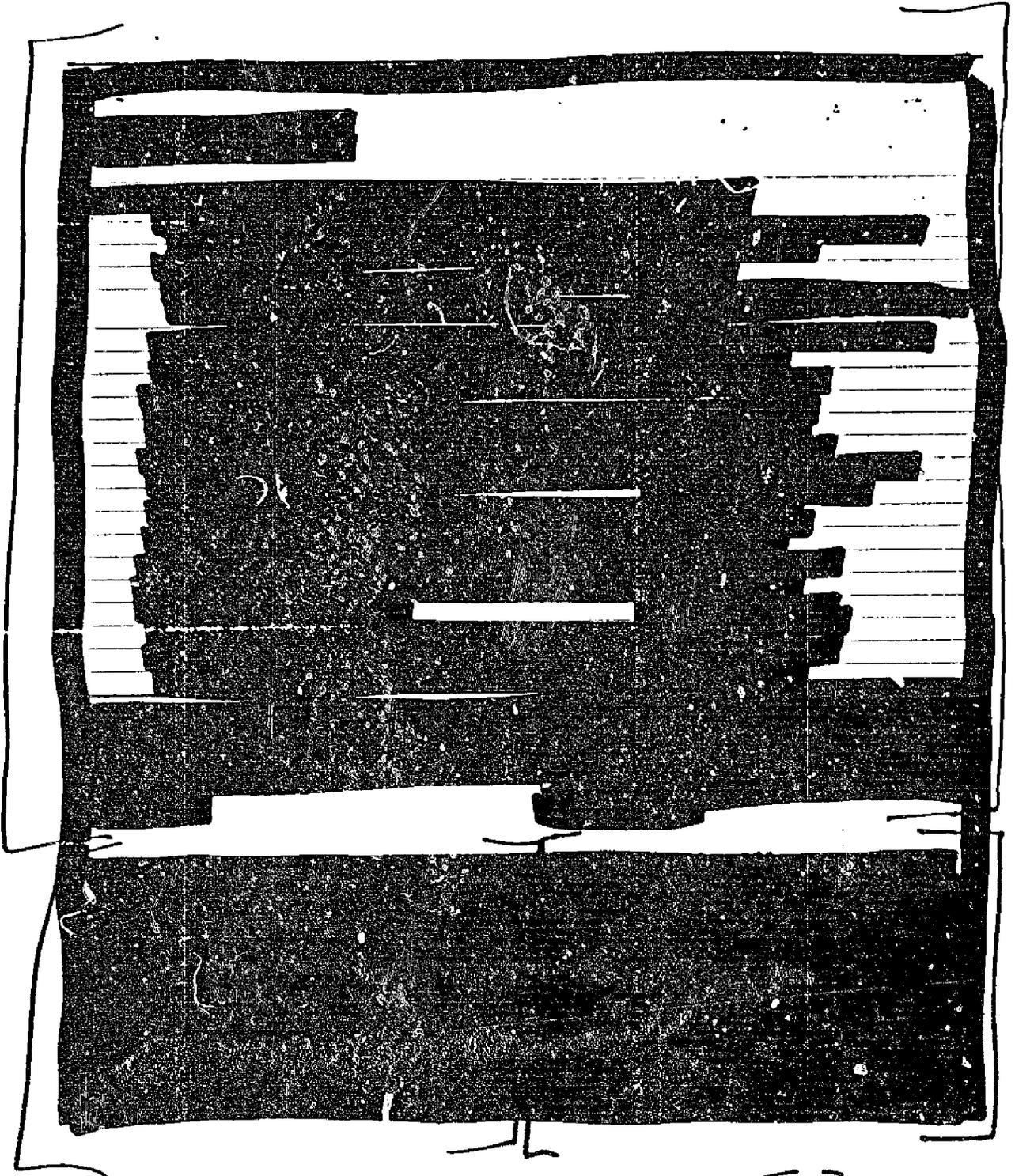
Spending for the investment category as a whole grew at nearly the same rate as total defense spending during the period, although its growth rate varied from year to year. The growth pattern for investment was determined, for the most part, by procurement cycles for aircraft and missiles. (U)

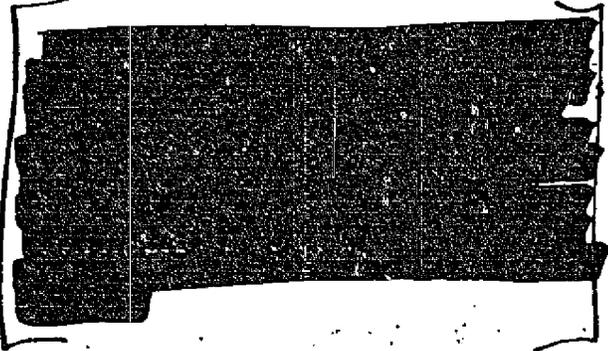
Major Procurement Programs: the Drivers of Defense Spending

When we analyze Soviet defense spending between 1965 and 1979, it becomes apparent that the procurement of new weapons and equipment was the major factor driving it upward. Procurement accounted for a large part of the increase (more than either RDT&E or operating costs) and also accounted for its variations: the initiation and completion of major procurement programs was primarily responsible for the cyclical fluctuations in the rate of growth of the total. (U)



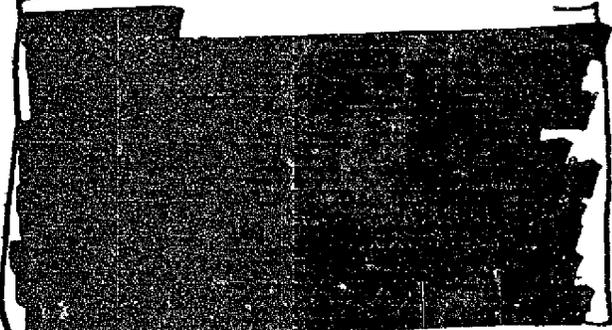
⁴ When we discuss procurement expenditures at this level, we include only the purchase of the weapon itself and the initial spare parts. We are less confident in our estimates of defense expenditures at the individual program level than in those at higher levels of aggregation. (U)





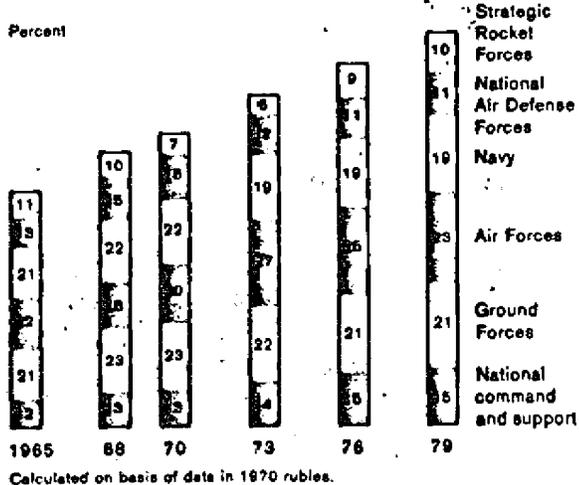
Expenditures by the Military Services: Insights into Changing Institutional Priorities

The Soviet armed forces are organized into five major service groups—Air Forces, Ground Forces, Navy, National Air Defense Forces, and Strategic Rocket Forces (SRF). Using the direct-costing approach, we can form a reasonable picture of the allocation of most defense spending among these services and gain insights into trends in Soviet priorities for allocating defense resources among competing claimants. The spending that we cannot confidently allocate in this way includes the costs of RDT&E and of certain national command functions and rear service and other support functions. Therefore the analysis that follows will examine the investment and operating expenditures of the services but exclude their expenditures on RDT&E, and it will treat the national command and support¹ functions as a category separate from the various services. (U)

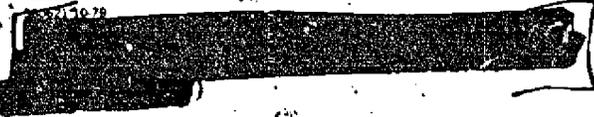


¹ The command and support category should not be confused with command, control, and communications, the costs of which we have allocated among the categories analyzed in this section. (U)

Shares of Estimated Soviet Investment and Operating Expenditures for Military Services



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The Air Forces and Ground Forces each claimed over one-fifth of investment and operating expenditures during 1965-79. The Ground Forces share remained relatively constant throughout but increased slightly from 1965 through 1972 as a result of the Soviet buildup along the Sino-Soviet border. The Air Forces, on the other hand, experienced significant fluctuations in its share. (U)

The Navy share, which declined slightly, accounted for about one-fifth of total investment and operating spending for the period as a whole. After peaking in 1969, the National Air Defense Force share declined in the early 1970s and has fluctuated in recent years. It accounted for less than 15 percent of investment and operating expenditures during the entire period. The SRF share, which rose and fell depending on the deployment cycles of new missile systems, accounted for less than 10 percent of total investment and operating expenditures during the 1965-79 period. The national command and support share averaged less than 15 percent of investment and operating expenditures during the period and increased slightly. (U)



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Air Forces

The Soviet Air Forces includes three components: Frontal (tactical) Aviation, Long Range Aviation (LRA), and Military Transport Aviation. Frontal Aviation missions include counterair, ground attack, reconnaissance, electronic warfare, and helicopter ground attack and troop lift. The primary missions of LRA are intercontinental nuclear strikes and conventional or nuclear strikes in support of theater forces. Military Transport Aviation is responsible for the transport of airborne assault forces. (U)

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Frontal Aviation. Within the Air Forces, Frontal Aviation has consistently absorbed the largest share of spending, and during 1965-79 it was responsible for a major shift in defense resource allocation. Its expenditures more than doubled during the period and accounted for over 70 percent of the investment and operating resources going to Soviet Air Forces. (U)

Ground Forces military manpower increased from 1.3 million men in 1965 to almost 1.8 million men in 1979. More than half of this increase resulted from the buildup of Ground Forces along the Sino-Soviet border, where the number of divisions more than doubled and manpower more than tripled between the mid-1960s and mid-1979. (U)

The remaining 5 percent of Air Forces investment and operating expenditures were for command and general support of aviation forces and cannot be allocated among the three force components. (U)

Ground Forces



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Navy

Over the last 15 years, the Soviets have undertaken programs aimed at acquiring naval forces with improved capabilities for both conventional and nuclear war. They have invested most heavily in strategic and general purpose submarines but have also increased expenditures for surface ships and naval aircraft. They have also increased the peacetime operations of their ships away from home waters. As a result, annual expenditures by the Soviet Navy have grown substantially and probably will be about 50 percent greater in 1979 than they were in 1965. (U)

During 1965-79 the Navy consumed approximately 20 percent of Soviet military investment and operating expenditures. Investment programs made up over three-quarters of the total naval expenditures, and procurement of ships, aircraft, weapons, and equipment accounted for nearly all of this share. Total Navy expenditures fluctuated in a pattern corresponding to the fluctuation of expenditures for the major ship procurement programs. Ship procurement* accounted for about 60 percent of overall naval procurement, and ballistic missile and attack submarines accounted for over 70 percent of total ship procurement. (Most of these submarines were nuclear powered.) Missiles and aircraft each accounted for about 15 percent of overall naval procurement expenditures. (U)

The Soviet Navy's operating expenditures increased by almost 40 percent between 1965 and 1979, primarily as a result of the increasing costs of maintaining complex ships and aircraft. (U)

National Air Defense Forces

The Soviets have traditionally placed great emphasis on strategic defensive forces. These are under the jurisdiction of the National Air Defense Forces. During 1965-79, expenditures for this service reflected continuing concern about the threat from manned aircraft and about the deployment of antiballistic-missile (ABM) systems—until the costly ABM competition with the United States was constrained by treaty in 1972. Recent Soviet procurement programs show a continuing emphasis on countering manned bombers, especially those capable of penetrating at low altitude, and a new emphasis on meeting a new Western strategic threat, the cruise missile. (U)

Soviet expenditures for the National Air Defense Forces rose in the late 1960s, peaking in 1969 at a level 50 percent higher than that of 1965. This reflected primarily the rapid and costly deployment of the Moscow ABM system and the procurement of the SA-5 SAM. Expenditures fell until 1974 and have fluctuated—but generally increased—ever since. Procurement of new third-generation fighter aircraft has been an important influence on spending in the 1970s. (U)

* Ship procurement, as defined here, includes the ship and its initial outfittings but excludes missiles, torpedoes, and other ammunition. (U)

* Major surface combatants are defined as those with displacements of 3,000 tons or more. (U)

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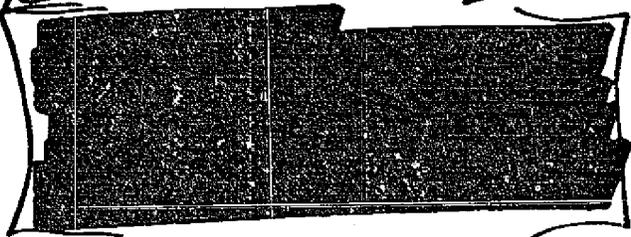
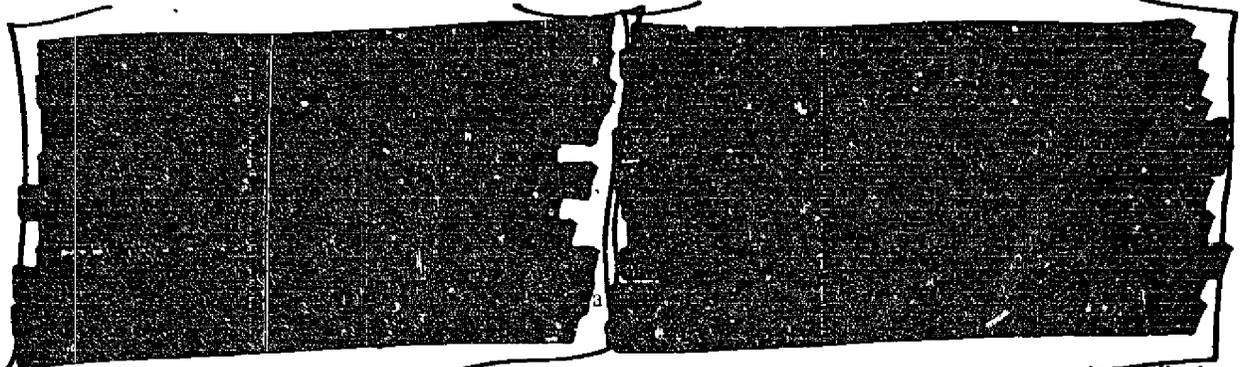
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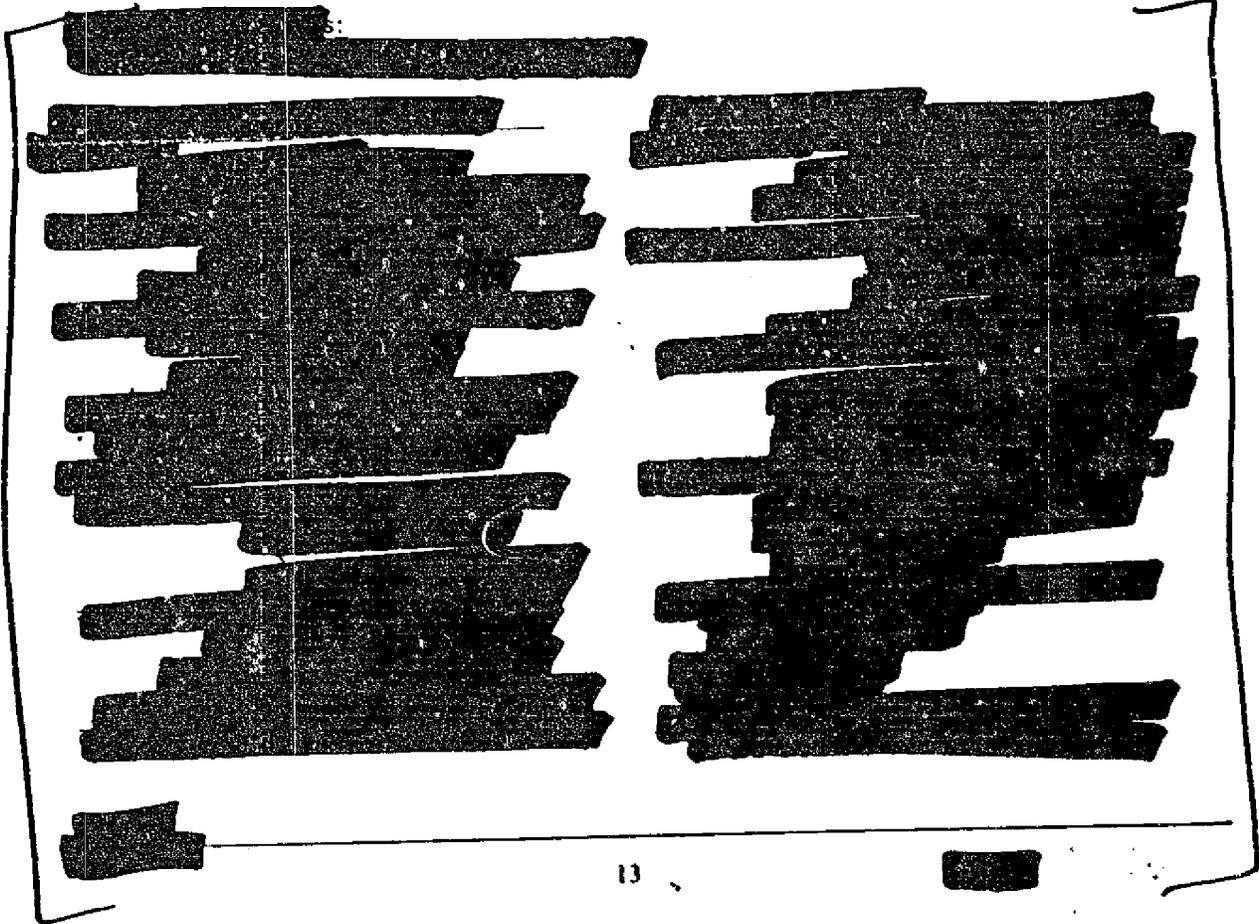
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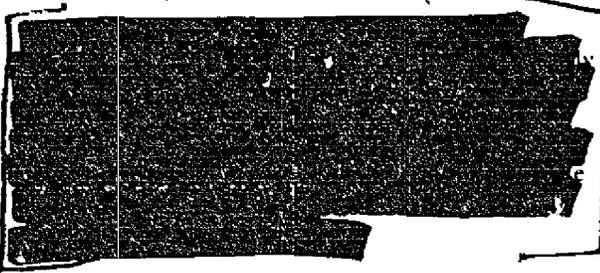


The deployment of new-generation strategic missiles is clearly reflected in the trend of total SRF expenditures. They peaked in 1967 with the deployment of third-generation SS-11 and SS-9 ICBMs and fell through 1972 as that deployment was completed. Expenditures then increased throughout the remainder of the period, reflecting the addition of fourth-



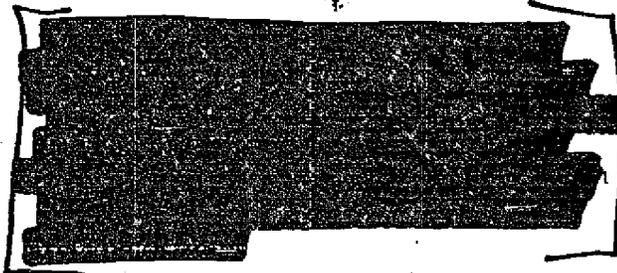
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generation SS-17, SS-18, and SS-19 ICBMs and the SS-20 IRBM to the force. The SRF was the only service to experience a decline in operating expenditures. This resulted from the deactivation—influenced in part by strategic arms limitation (SAL) constraints—of older missile systems with high personnel and O&M costs. (U)



National Command and Support Activities

Expenditures for national command and support climbed during this period and are expected to be over twice as much in 1979 as they were in 1965. The increase in support costs reflects an increase in the size of the Soviet armed forces and of the central Ministry of Defense apparatus, as well as the increased complexity of the task of controlling and supporting the more advanced weapon systems. (U)



Factors Affecting Future Defense Expenditures

We have less confidence in our projections of future Soviet defense expenditures than in our estimates of past spending. This is chiefly because of uncertainties about how the Soviet leaders will weigh military, political, and economic factors in making their decisions on future military forces. The economic and political environments, in particular, are becoming increasingly complex. Although Soviet economic growth has been slowing since the 1950s, its rate has only recently fallen below that of defense spending.

Similarly, the advancing age of the top political leaders and the poor health of many of them make the coming political succession increasingly relevant to the question of future defense activities. We review below some of the major forces that are likely to affect Soviet decisions on military programs and expenditures during the period between 1980 and 1985. (U)

Economic Considerations

Past Trends. Before we can consider the future relationship between the general Soviet economy and the defense effort, we must examine the past relationships. The defense effort of the past 15 years has had a substantial impact on the economy, but there is no single measure that adequately describes this impact or how the Soviet leaders and planners might perceive it. The discussion that follows presents several alternative measures of the relationship between Soviet defense expenditures and economic growth during 1965-78. (U)

Soviet defense spending (as defense is defined in the United States) consumed about 11 to 12 percent of the Soviet GNP at factor cost between 1965 and 1978.¹⁰ Because defense spending grew at about the same rate as the GNP, there was little change in its share between 1965 and 1978. (There were minor shifts in the share from year to year because of fluctuations in GNP growth and the cyclical behavior of defense spending.) (U)

If we consider only the nonagricultural sectors of the Soviet economy, we see that they generally have grown more rapidly than GNP as a whole and more rapidly than defense spending. The defense share of the nonagricultural GNP averaged some 14 to 15 percent during the period but was slightly lower in 1978 than in 1965. The growth of the final output of Soviet industry—and of the final output of the machine building and metalworking sector (which produces civilian investment and consumer durable goods as well as military hardware)—were also higher for the period than the growth of defense purchases from these sectors. Defense programs consumed on the average nearly 15 percent of the final output of industry in general and over one-third of the final output of

¹⁰ Under the broader definition that the Soviets may use, the share was about 12 to 13 percent. See the appendix for a discussion of the factor cost adjustment. (U)



machine building in particular. In each category, the defense share was lower at the end of the period than at the beginning. (U)

The above discussion of alternative measures of the defense "burden" understates its impact on the Soviet economy to the extent that it fails to take into account qualitative considerations and the effect of defense programs on key sectors of the economy. Defense takes a large share of the nation's best scientific, technical, and management talent and draws heavily on the output of science and of high-quality components and equipment. In addition, defense programs take substantial portions of the output of important industries such as steel and electronics. (U)

Moreover, these four quantitative measures of the economic impact of defense are based on Western estimates of Soviet economic performance. It is difficult to determine how the Soviets perceive this defense impact.¹¹ Our information on their view of their own economy is indirect—it consists mainly of general statements by Soviet leaders and our analysis of their actions. (U)

Economic factors do not appear to have limited Soviet military programs by much, over the past 15 years. In the USSR the military sector has a priority claim on scarce resources, and this claim is institutionalized in the Soviet administrative systems for economic management, material supply, and the supervision of production. Soviet leaders have funded the defense programs well, even during periods of lower than average economic growth, and the follow-through on key programs has been strong. (U)

Recent Developments. In recent years the rate of growth in all four of these measures of economic performance has declined. The primary cause of this slowdown has been declining growth in factor productivity—inefficient use of labor, capital, and natural resources. But Soviet leaders also have to cope with a tightening labor supply and with natural resources that are less accessible and more expensive than in the past. In 1978, Soviet industrial employment grew by only 1 percent, the lowest rate in over 29 years, and the increase in Soviet oil production in that year was the smallest in the postwar period. Statistics for

¹¹ See the appendix for a further discussion of this point. (U)

the first 6 months of 1979 indicate that the Soviet economy is headed for one of the worst years in almost three decades. (U)

Defense spending has grown at a slightly lower than average rate for the past several years. This appears to reflect cycles in procurement (as several major weapons programs reached a low point) rather than signaling a new trend. In fact, our observations of Soviet military programs in 1978 and the first half of 1979 suggest that in defense spending the rate of growth is beginning to turn up again. The defense share in three of our four measures—GNP, non-agricultural GNP, and the final output of industry—has been fairly stable since the mid-1970s. Defense purchases of machinery, however, have continued in this period to grow more slowly than the final output of machinery. (U)

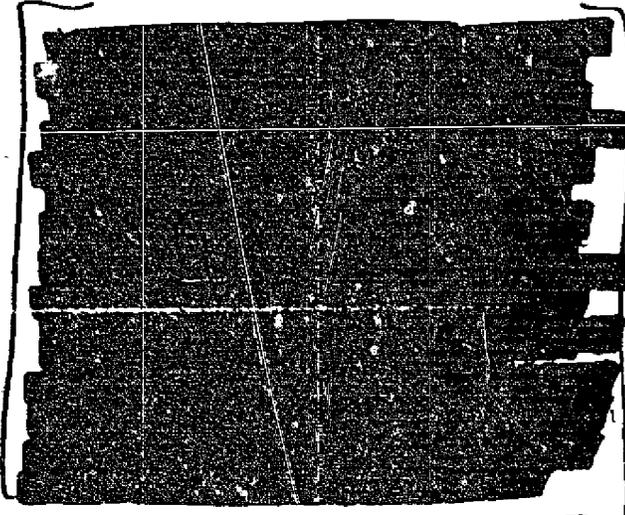
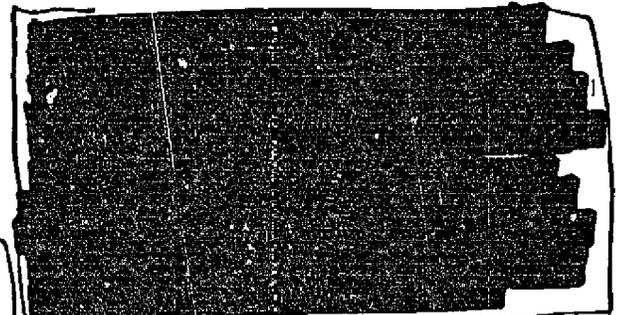
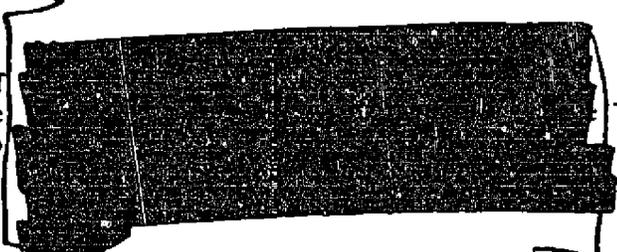
Prospects. Over the next several years, developing demographic and energy problems will combine with the difficulties of longer standing to cause an even sharper decrease in economic growth. Recent information on Soviet economic performance in 1978 and the first half of 1979 suggests that our 1978 forecast of Soviet economic growth during 1981-85 (3 to 3.5 percent a year) may have been overoptimistic. It now appears that during the early 1980s the average annual rate of growth may not be more than 2 percent. If defense spending returns to its long-term trend—growing at 4 to 5 percent a year—it will consume an increasing share of Soviet resources. In 1985 the defense share of GNP (as defense is defined in the United States) could be as much as 13 to 15 percent, rather than the current 11 to 12 percent. (U)

Recent Soviet statements indicate increasing concern over declining economic growth. Some Soviet officials have linked economic problems directly to the costly defense effort, and recent speeches by the top leaders suggest differences over the relative priority to be given to future defense programs. As the economy slows, the level of defense spending is likely to become more of an issue for the leadership. (U)



Political Considerations

Over the past year there has been increased evidence of political maneuvering in Moscow in preparation for the departure of Brezhnev from the scene, but we have too little information to predict the makeup of the post-Brezhnev leadership or its likely policy preferences. The dissatisfaction of the political leaders with the performance of their economy has increased, and differences on questions of resource allocation and economic management are becoming more clear. We cannot determine how they will be resolved, but we anticipate that they will become increasingly politicized—providing the potential for an adjustment (perhaps even a reduction) in planned defense spending. (U)



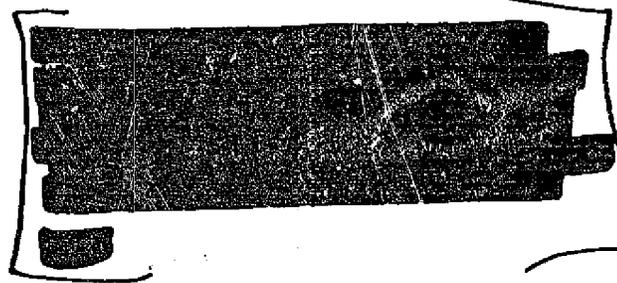
Almost all of these problems require costly high-technology solutions. They demand the continual upgrading of current weapons and the development of new systems and thus directly affect future investment and RDT&E expenditures. (U)

Arms Control Agreements

The USSR is currently engaged in a number of arms control negotiations that could provide opportunities to moderate the growth of defense spending. Although past agreements have not apparently caused a reduction in defense spending, current economic developments could encourage the Soviets to pursue the potential economic benefits of arms control. We have therefore analyzed in detail the potential impact of SALT and MBFR on Soviet defense spending and studied briefly the possible economic benefits of other negotiations. (U)

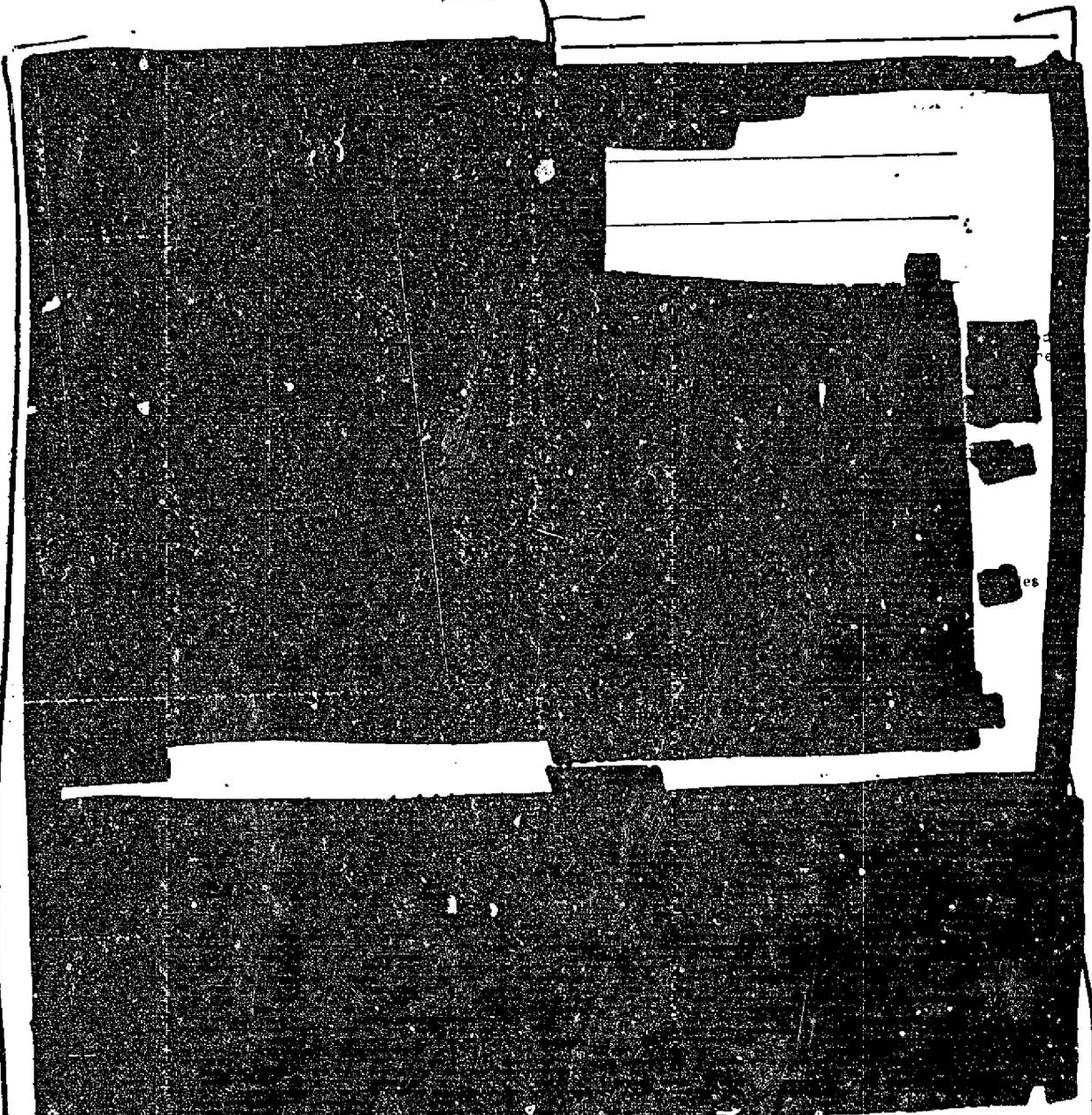
Requirements for Future Military Forces

Although the Soviets have made substantial improvements in their military capabilities in recent years, they continue to perceive important deficiencies in their forces. These take on increased importance in the context of the improvements in Western and Chinese military forces that Soviet planners undoubtedly project. (U)



The Planning Process

Soviet economic plans provide the fundamental directions for industrial activity in both the civilian and the defense sectors. During plan preparation periods, the Soviet leaders project the future environment and arrive at a consensus on national objectives. Plan targets can be modified after they have been established—adjustments are constantly needed—but each change creates complications, and their reverberating impact creates a strong aversion to plan modification. (U)



Trends in Costs of Weapons

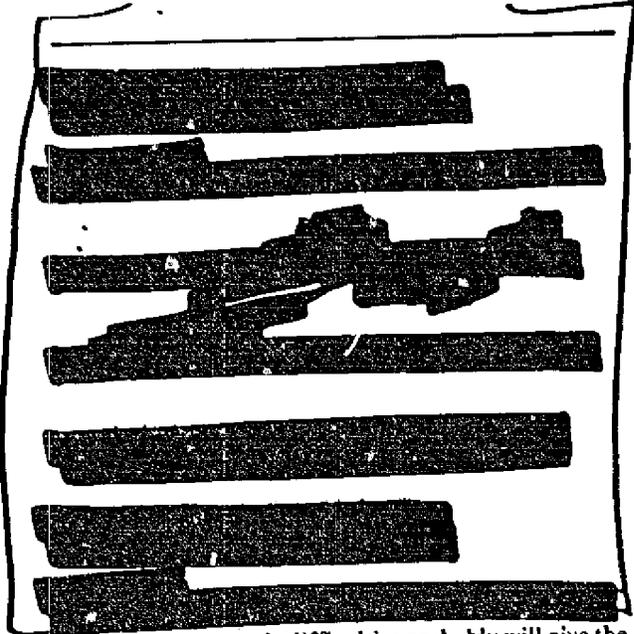
The consistently high levels of weapon production and development—coupled with rising weapon costs—portend a further increase in Soviet expenditures for weapons procurement. The production of advanced

weapons is relatively expensive in the Soviet Union. As Soviet military programs have shifted more and more toward advanced technology, the costs of new generations of weapons have increased steadily. Our projections of the cost of future weapon systems indicate that this upward trend in unit procurement costs will continue. The increasing complexity of the systems will also require an increase in maintenance and support costs, which further adds to the total cost of military programs. (U)

Outlook for Defense Spending

Through 1985

On balance, we believe that Soviet defense spending will continue to increase in real terms at least through 1985. Evidence on specific defense activities now under way indicates that the Soviets have not yet altered their defense programs in response to economic difficulties. If they do not alter them, defense spending probably will continue to grow over the next five years or so at or near the historic long-term rate of 4 to 5 percent a year. (U)



Continuing economic difficulties probably will give the Soviet leaders an increasingly strong incentive to reexamine these plans with a view to reducing the growth of military spending in the long run. They might well be undertaking such a reexamination in conjunction with the major choices to be made on the allocation of economic resources in the 11th Five-Year Plan, and it is possible that the coming political succession will affect these choices significantly. (U)

However, Soviet military expenditures over the next five years—and even beyond—are already determined to a large extent by programs now in production or in late stages of development. The decisions that set these programs in motion were made some time ago. They reflect agreements already reached between Soviet political and military leaders on defense requirements for the 1980s, and sizable resource commitments, including expansion of defense industrial capacity, have already been made. It is possible that the leaders could reverse a number of these decisions and thereby slow the growth of defense spending significantly. But we think they would be more likely to limit their alterations of ongoing programs to reducing production targets, stretching out some weapon programs, and possibly taking greater advantage than in the past of the limited direct savings permitted by arms control agreements. The Soviets might also intensify their efforts to improve efficiency and lower production

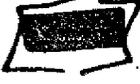


costs in the defense industries and to improve their analysis of military force requirements. These measures could moderate the rate of growth in defense spending through 1985 and would be of some benefit to the economy. Moreover, they would not in themselves slow the modernization of the Soviet armed forces significantly. (U)

Longer Term Considerations

The Soviets themselves probably do not know what additional steps they might take over the longer term. However, from now on their decisions regarding new military programs and future investment in the defense industries may reflect a greater concern for the impact of military programs on the economy and for the implications that the declining rate of economic growth will have for the capability of the economy to support the defense establishment. Because military programs have long lead times, most current decisions would not begin to affect defense expenditures until the late 1980s. It is possible that the Soviets will soon make decisions that attempt to reduce the growth of military spending in the late 1980s. Such decisions will depend on how the leaders weigh the potential economic savings against their forecast of the strategic environment of that period and its military requirements, as well as on their perception of how their military effort enhances their security and advances their foreign policy goals. The decision will also depend on the defense and foreign policy actions of their potential adversaries, and perhaps on progress in arms control negotiations. (U)

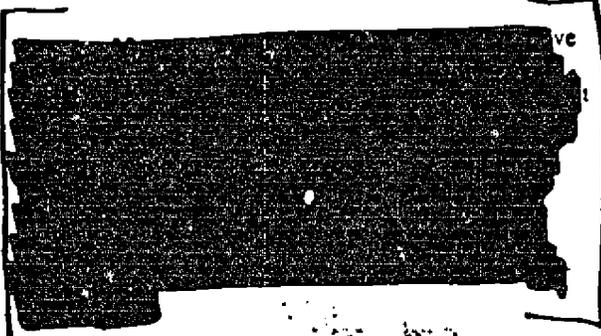
Whatever decisions the Soviet leaders make for the longer term, it is highly unlikely that economic difficulties will force a reversal of their longstanding policy of continuing to improve their military capabilities. A reduction in the rate of growth of defense spending in the late 1980s could delay force improvements in some areas and could pose difficult choices for Soviet defense planners. However, the present level of Soviet military investment is so high that even with a reduction in the rate of growth—or indeed with no growth at all—substantial modernization of the Soviet armed forces as a whole would continue. (U)



Defense Spending Priorities in the 1980s

Within the context of the projected continuation in the growth of Soviet defense spending, we have examined the major military programs and activities that the Soviets are likely to undertake through the mid-1980s. If the SALT II Treaty enters into force they would probably give slightly less emphasis in expenditures to intercontinental attack forces and slightly more to conventional, theater nuclear, and (especially) strategic defense forces. (U)

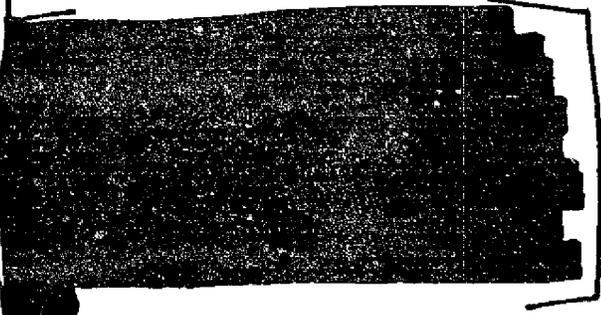
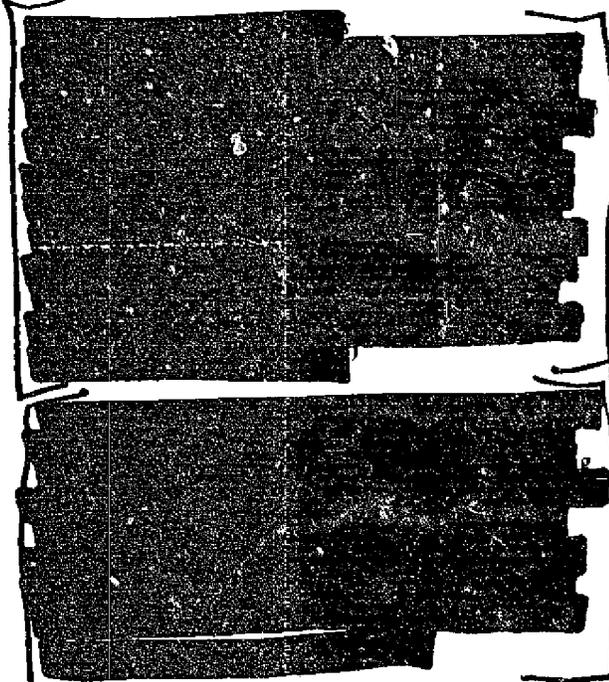
Qualitative factors are likely to become much more important in shaping Soviet defense spending in the 1980s than they are now. The Soviets will face demographic problems that probably will limit increases in force size, and the rate of growth of operating costs during 1980-85 probably will be lower than it was in the past. The requirement for high-technology remedies for current deficiencies, however, indicates that force modernization will continue to be rapid. The decreasing availability of manpower could also spur the Soviets to seek more capable, less manpower-intensive weapon systems. Military investment and RDT&E expenditures, therefore, probably will show increased growth. (U)



Impact on the Military Services

Changing Soviet priorities and the constraints of SALT will alter the distribution of investment and operating expenditures among the services in the 1980s. The average shares of these expenditures devoted to the Navy, Ground Forces, and Air Forces during 1980-85 probably will be about the same as their current shares. Under a SALT II agreement, the share allocated to the SRF probably will fall slightly from its current level, along with the share allocated to national command and support. The National Air Defense Forces, however, are likely to take an increasing share of investment and operating expenditures in the early 1980s. (U)

Air Forces. Expenditures for the Air Forces are projected to increase at about the same rate as total defense investment and operating spending. Only minor shifts are likely in the allocation of resources among the three components of the Air Forces. (U)



¹⁴ The listing of programs given here is based on the assumption that a SALT II agreement will be in effect in the 1980s. Without such an agreement, most of the intercontinental attack programs would have a higher rank. (U)

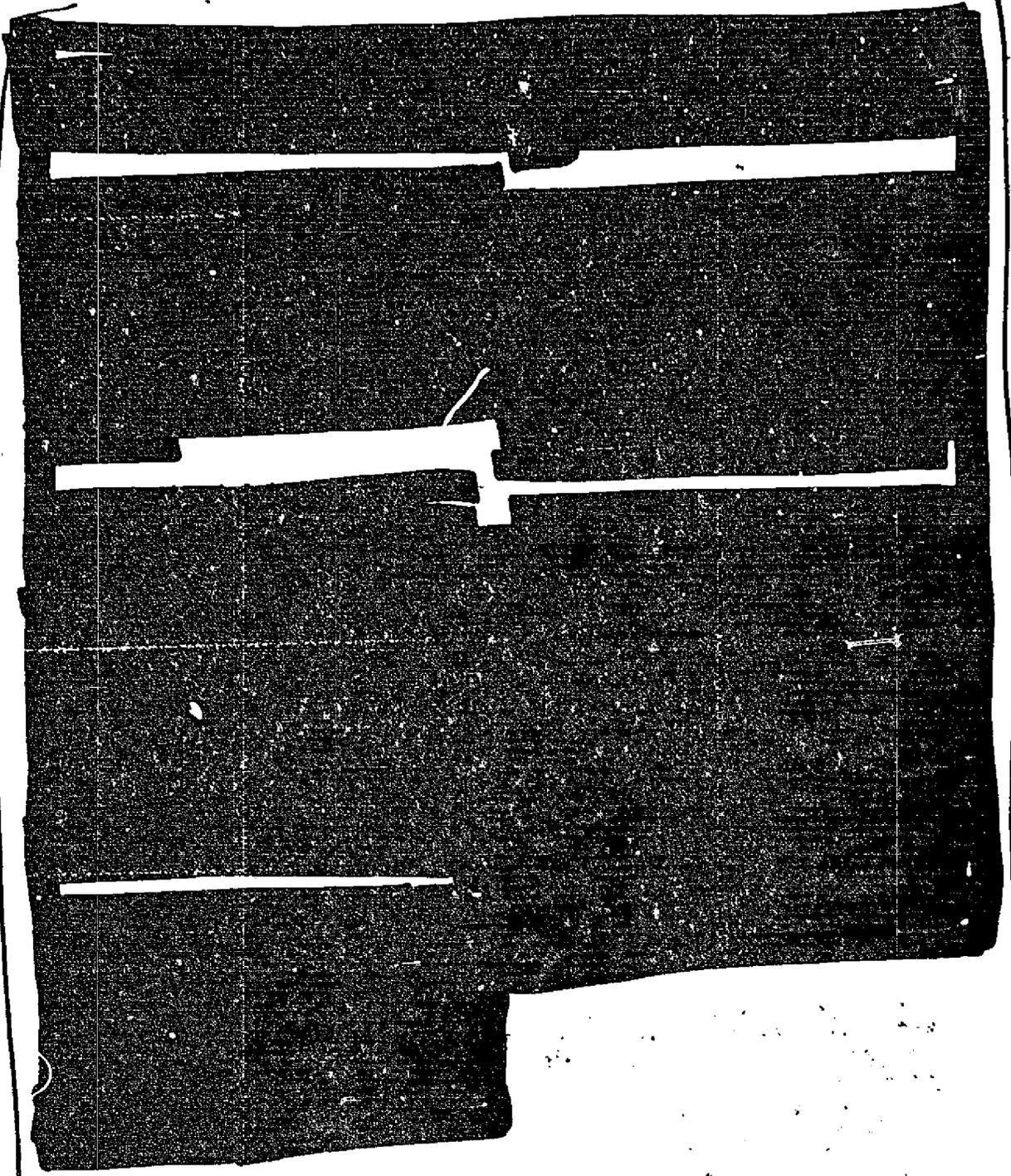
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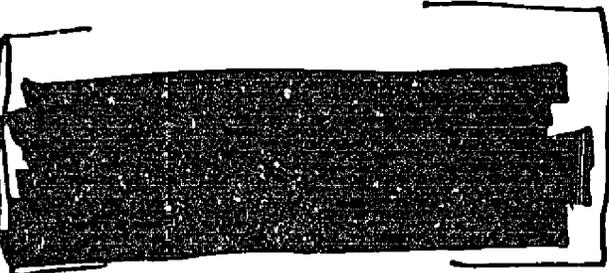
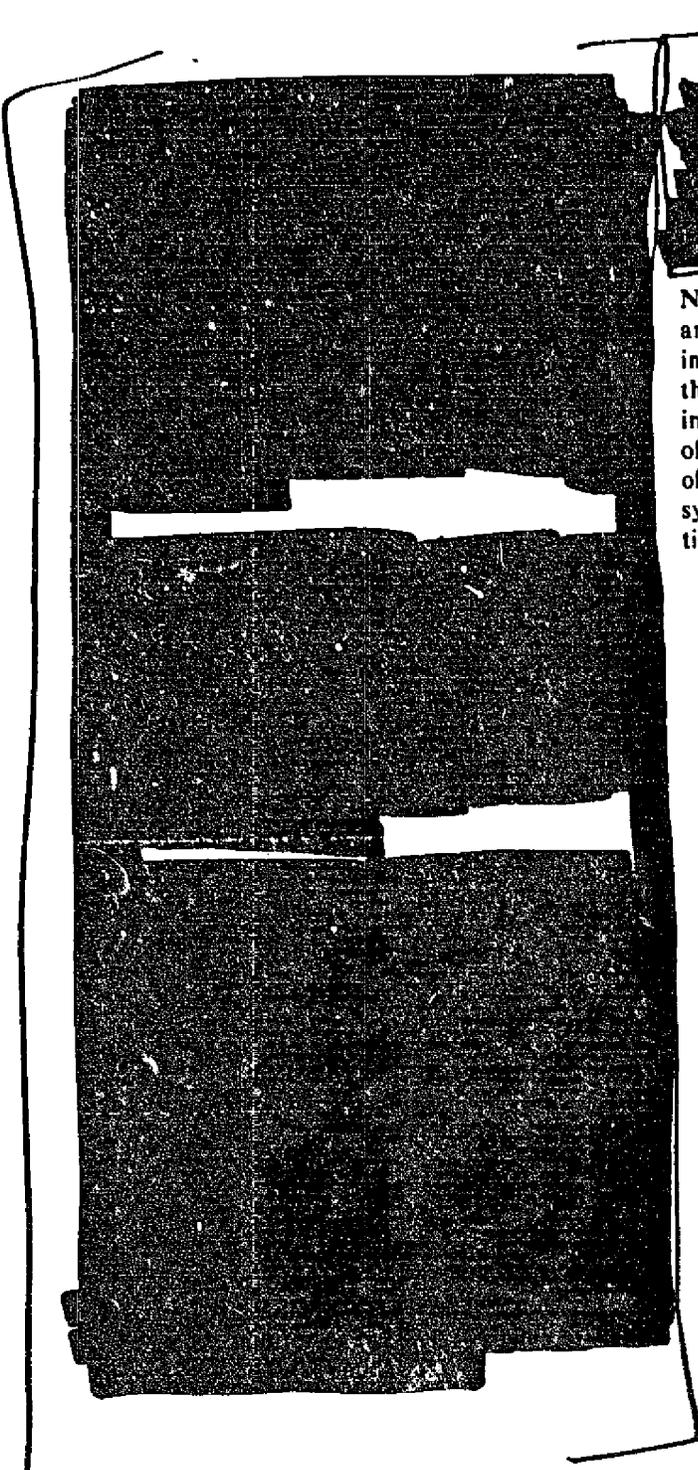
[REDACTED]

[REDACTED]

Expenditures for Military Transport Aviation probably will increase as the force is modernized with newer aircraft—especially the IL-76 Candid. The size of the force probably will not change significantly, but its lift capacity will increase. (U)

[REDACTED]





National Command and Support. National command and support expenditures probably will continue to increase through 1985, as the increasing complexity of the Soviet forces requires a larger and more costly infrastructure. Major command and support programs of the early 1980s will include the continued upgrading of national-level command and control facilities and systems and the introduction of new space communications and reconnaissance and support systems. (U)

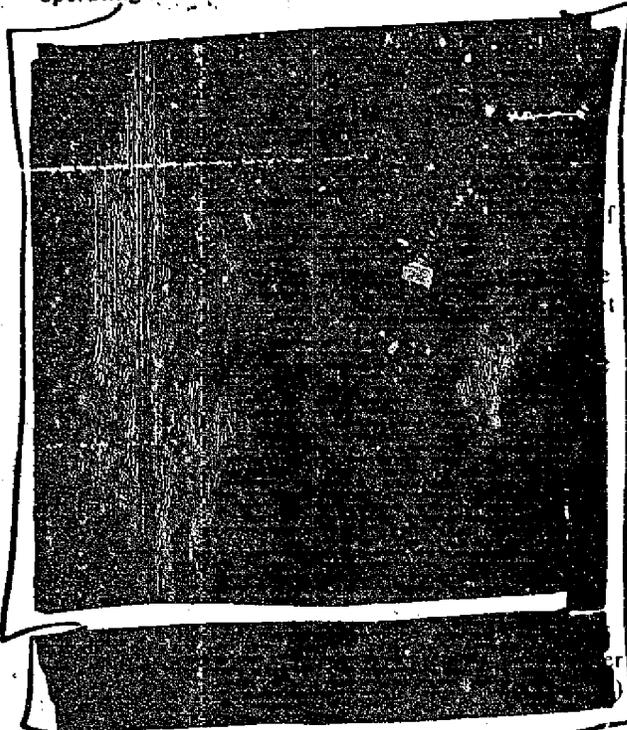


Appendix

Methodology, Concepts and Confidence in the Estimates

Methodology

CIA's estimates of Soviet defense spending are based primarily on direct costing—that is, first identifying individual components of the Soviet defense effort and then calculating the costs of each. From all-source intelligence and from US Intelligence Community judgments (presented in National Intelligence Estimates and other publications) we compile a detailed list of the activities and physical components which make up the Soviet defense program for a given year. This list includes data on order of battle, manpower, production of equipment, construction of facilities, and operating rates for the Soviet military forces. (U)



For two of the main categories of defense spending—investment and operating expenditures—prices and quantities are estimated separately for each major activity and component. We cannot, at present, apply

this approach to the third category—RDT&E. The cost of military RDT&E, which is the weakest part of our estimate, is derived by another method—analysis of Soviet information on expenditures for science. (U)

Concepts

Our methodology is intended to provide an estimate of the level of, and an indication of the real trend in, the annual Soviet resource commitment to military forces. We use ruble prices to reflect as accurately as possible the relative prices of military programs and activities within the Soviet economic system. The estimates can be used to assess the resource constraints confronting Soviet military planners, the priorities they assign to the components of the defense effort, and the impact of defense programs on the Soviet economy. (U)

For assessing the trends of the Soviet defense effort and the priorities of the various components within that effort, we use estimates of “established prices”—the actual prices paid by the Soviet Ministry of Defense for goods and services. For example, our estimates of total defense spending and of spending by the individual military services are based on established prices. In the Soviet economy, however, prices are established administratively, not by market forces. Consequently, they are less accurate in reflecting relative scarcity and value than prices in a market economy would be. As a result, these established prices give a misleading picture of the real economic impact of Soviet defense activities. (U)

In order to improve the validity of ruble prices for economic analyses—for example, in calculating the defense share of GNP—we adjust our established-price ruble valuations so that they more nearly reflect the real allocation of resources in the Soviet economy.

This procedure is called a factor cost adjustment.¹³ When the direct-costing estimate of defense expenditures has been adjusted to factor cost, it can then be compared with other estimates of Soviet economic performance made in factor cost terms. (U)

[REDACTED]

Second, and more important, Soviet planners would use a different price base. The Soviets present their economic data either in the prices prevailing in each year (current prices) or in what they call comparable prices for a given year. The Soviets' comparable prices are intended to show trends in real terms, but they are constructed differently from Western-style constant

¹³ For a detailed discussion of the procedure, see *USSR: Gross National Product Accounts, 1970, A* (ER) 75-76, November 1975. (U)

prices and often display quite different growth trends.¹⁴ (U)

Thus, the perceptions the Soviets draw from their own data may differ from the analysis in this paper in ways that are hard for us to determine. We do know, however, that although their measures of overall economic performance differ from ours in concept and price base, they too perceive a slowdown in their economy (see table 3). Similarly, Soviet perceptions of the economic impact and priorities of their defense programs probably differ from ours in detail. But the planners clearly are aware that the defense effort has had a substantial effect on their economy and that this effect is likely to increase. (U)

[REDACTED]

¹⁴ For a discussion of Soviet pricing concepts and changes in prices over time see *Inflation In Soviet Industry and Machine-Building and Metalworking (MBMW) 1960-1975*, SR M 78-10142, July 1978. (U)



Table 3

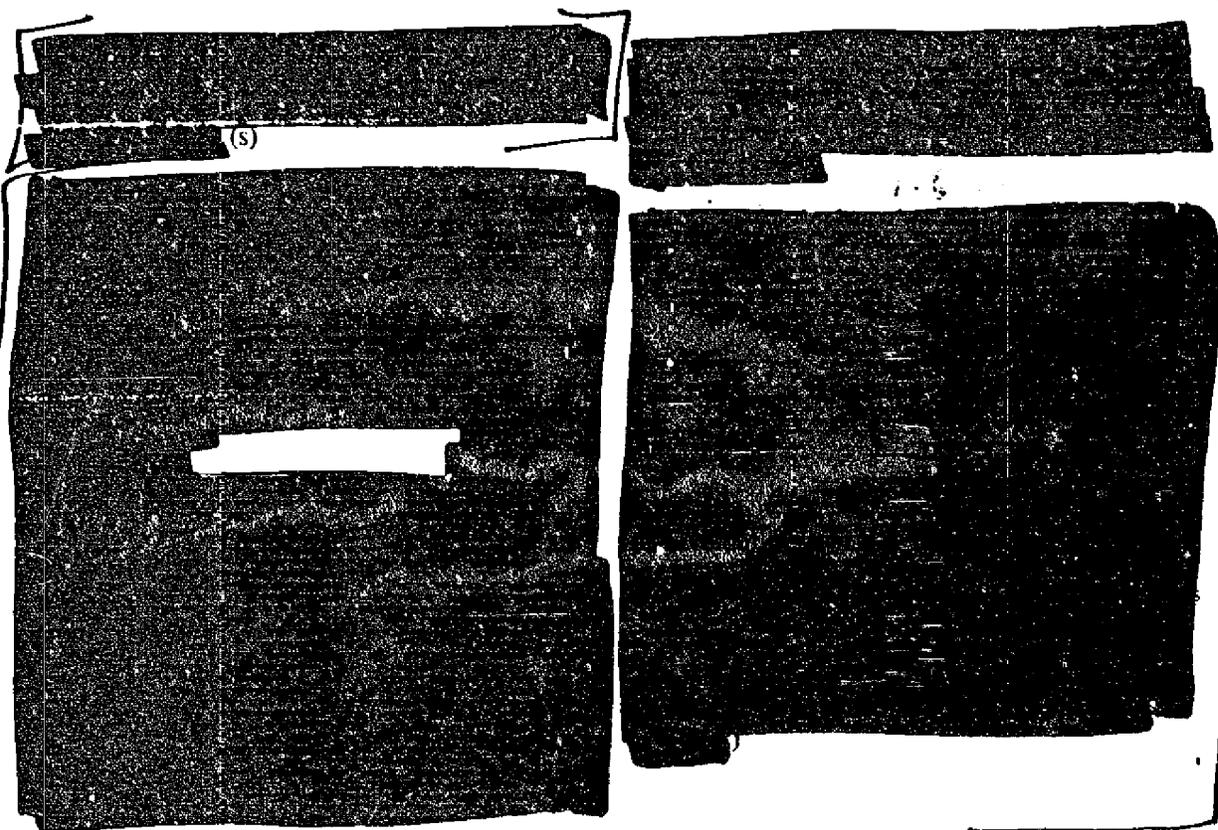
Comparison of Western and Soviet Measures of Soviet Economic Growth

Western Measures (based on CIA estimates in constant 1970 prices)	Average Annual Rate of Growth (percent)		Soviet Measures (based on Soviet data in "comparable" prices)	Average Annual Rate of Growth (percent)	
	1965-75	1975-78		1965-75	1975-78
Gross national product (factor cost) ¹	4.6	3.6	National income produced ¹	6.7	5.1
Final output of industry ²	6.1	3.8	Gross value of output of industry ²	8.0	5.1
Final output of machine building and metalworking ²	7.6	5.9	Gross value of output of machine building and metalworking ²	11.7	9.1

¹ On the difference between GNP and national income, see *USSR: Toward a Reconciliation of Marxist and Western Measures of National Income*, ER 78-10505, October 1978.

² The Soviet gross value of output for any given sector differs from the Western final output by including the sector's sales to itself.

This table is Unclassified.



(S)



