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# ALLOCATION OF RESOURCES IN THE SOVIET UNION AND CHINA—1977

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HEARINGS  
BEFORE THE  
SUBCOMMITTEE ON  
PRIORITIES AND ECONOMY IN GOVERNMENT  
OF THE  
JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES  
NINETY-FIFTH CONGRESS  
FIRST SESSION

PART 2  
EXECUTIVE SESSION—JUNE 30, 1977  
SUMMARY OF STATEMENTS AND EXCERPTS FROM  
ORAL TESTIMONY

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## FOREWORD

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On June 30, 1977, Lt. Gen. Samuel V. Wilson, U.S. Army, Director, Defense Intelligence Agency, et al., appeared before the Subcommittee on Priorities and Economy in Government of the Joint Economic Committee in executive session (closed hearing). The following is a summary of statements and excerpts from oral testimony given that day. The full hearing will be published at a later date.

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## SUMMARY OF STATEMENTS—U.S.S.R.

During the past year, improvements in Soviet forces have continued across the board. The improvements cover the entire spectrum of weapon systems—from nuclear strategic forces to conventional general purpose forces.

First, in the area of intercontinental ballistic missiles, dismantling of the older SS-7 and SS-8 launch sites has continued. While the total number of ICBM's continues to decline, the deployment of the newer SS-17, 18, and 19 missiles with heavier payloads and more accurate MIRV systems has increased the total force capability. During the past year, we estimate that the total number of reentry vehicles has increased significantly. The SS-X-16 ICBM completed its development in 1975. The missile has probably been tested in both a silo-based mode and in a mobile mode. There is, as yet, no firm evidence of the deployment of the system in either mode.

The medium and intermediate range ballistic missile force targeted against Eurasia is ready for a major modernization program. The mobile SS-X-20 IRBM has completed its R. & D. cycle.

The total number of submarine-launched ballistic missiles is rapidly approaching the SALT I limit of 950. The Soviet ballistic missile submarine force continues to grow in size, complexity, and capability, and flight testing has continued on two new SLBM's, the SS-NX-17 and the SS-NX-18.

It is expected that the SS-NX-17 will be installed in a Yankee conversion. The SS-NX-18 is believed to have a MIRV capability and a more sophisticated guidance system than current SLBM's.

The major development in the strategic bomber force continues to be the deployment of the Backfire bomber in long range aviation units and in naval units.

In strategic defense, the Soviets have continued to place major emphasis on qualitative upgrading of individual systems and integrating command and control systems, and a new SAM, is being developed. In addition, the Soviets have continued to improve their ballistic missile early warning systems. The Soviets are also continuing R. & D. efforts on components for a new ABM system.

At the present time, the strategic fighter-interceptor force includes about 2,600 aircraft. The trend toward a reduction in the total number of interceptors is reversing: the total number is now expected to increase as the older aircraft, replaced by new Flogger and Foxbat, are reassigned to other air defense units rather than being retired. As for the newer aircraft, the Flogger, which first entered the force in late 1975, continues to be operationally deployed.

In addition to their strategic offensive and defensive capabilities, the Soviets have also continued to improve their general purpose forces.

For example, the Soviet navy is continuing to place heavy emphasis on production of missile-equipped ships and aircraft, and on development of an initial fleet carrier capability. The Kiev class guided missile ASW aircraft carrier will add a new dimension to Soviet naval operations, providing a capability for sea-based tactical air support of their surface forces. The first Kiev class carrier departed the Black Sea in July and is currently continuing its workup in the Northern Fleet. A second carrier is expected to become operational in 1978 and the third in 1980-81. The Kiev has an extensive weapons fit, including surface-to-air and surface-to-surface missiles, antisubmarine rockets and torpedoes, and various gun systems. It is expected to have a complement of 32-36 V/STOL fighters and helicopters.

While the Soviet general purpose submarine force has continued to decline in terms of total numbers, the overall force is steadily improving as a result of the introduction of modern nuclear attack submarines to replace older units being placed in reserve.

During the past year, the Tactical Air Forces further improved their capabilities for carrying out the missions of counterair, ground attack, and reconnaissance. Total numerical strength has remained stable, but modernization of equipment and support facilities has continued. Most importantly, new aircraft now comprise a significant portion of the force. The ground attack force appears to have received the most attention during the year, with the continued deployment of the more modern aircraft. The number of Fencer, for example, has continued to increase. This aircraft is assessed as a sophisticated deep penetration system most likely intended for the attack of key point targets. It is similar to our F-111. The number of Floggers also increased dramatically. This aircraft carries an increased payload and has greater range than the ground attack aircraft it is replacing. The Flogger is roughly equivalent to our F-4.

The size of Soviet ground forces has remained essentially constant, and we anticipate no major changes. However, qualitative improvements providing greater mobility and firepower have continued, with the ongoing deployment of new tanks, self-propelled artillery, and armored personnel carriers. The total number of tanks and artillery has continued to increase. Most important, however, is the introduction of newer systems.

The Soviets have continued to introduce new T-72 tanks into their ground forces, especially in the Group of Soviet Forces Germany. The T-72 is estimated to be the culmination of a series of prototypes. It probably has a 115-millimeter smoothbore gun and we believe it incorporates several new features which make it a faster and more agile tank than earlier Soviet versions. Additionally, the development of self-propelled versions of the 152-millimeter gun and the 122-millimeter gun, which began in 1973, is continuing. These weapons provide increased mobility, reduced crew vulnerability, and the ability to keep up with tanks and armored personnel carriers on cross-country moves. The BMP amphibious armored infantry combat vehicle has impressive capabilities and has continued to be widely deployed by the Soviets. To protect the ground forces from air attack, the Soviets have a family of air defense systems, including both guns and missiles, which incorporate mobility and sophisticated electronics. The newest system is the

SA-8. This system provides excellent low to medium altitude protection against high performance aircraft.

As you have seen, the Soviets have been improving their military forces both quantitatively and qualitatively.

Now I would like to discuss the cost of these Soviet defense programs. We have developed jointly with CIA cost estimates of Soviet weapon systems and used this intelligence to revise many of our estimates of equivalent dollar costs. When constant 1975 dollar costs are applied to observed Soviet defense programs, the total costs for 1976 are equivalent to \$118 billion compared to \$84 billion for U.S. defense expenditures.

The dollar trends over a period of time are helpful as an indication of what is occurring in specific areas. The Soviet procurement of weapons has grown annually and in 1976 reached 141 percent of the 1966 level. The impetus for this growth in total procurement comes from the procurement of intercontinental attack systems, having grown to a 1976 level equal to 157 percent of the 1966 level. While some of this annual procurement represents replacement, much of the new equipment are additions to stockpiles and to capabilities. As a result of the increasing Soviet trend and decline on the U.S. side, the Soviets now exceed us in the procurement of systems by 114 percent. Meanwhile in R. & D. the Soviets clearly exceed the U.S. effort evidenced by the development of new systems.

A separate estimate costed in rubles is developed in an attempt to gain an appreciation for defense outlays as seen by Soviet leaders. While we do not have and may never have definitive answers as to all the ramifications of Soviet defense outlays we can say that Soviet defense is more of an economic burden, given higher priority, and a greater commitment than previously believed. Soviet defense spending in constant prices is now estimated by the intelligence community to be 40-50 billion rubles in 1970, and to rise at 4-5 percent per year between 1970 and 1976, reaching 52-62 billion rubles in 1976. These levels of spending represent a burden rate during the 1970-76 period of some 11-13 percent of GNP.

While we agree with the community estimate for 1970-76 when valued in constant 1970 ruble prices, we believe, on the basis of communist statements, that Soviet defense spending expressed in current rubles exceeded 70 billion rubles in 1975. This represents 14 to 15 percent of the Soviet gross national product. Using current ruble values and Soviet economic plans for 1976-80, we are able to project that Soviet defense outlays will continue to rise at about the same rate as the previous five years. Although the plan figures are not well defined and may well include inflated prices, we believe that these figures approximate the values as seen by the Soviet policy makers and may realistically reflect the growing costs of new technologies.

Soviet production technology has become increasingly sophisticated and the Soviet Union is steadily gaining the ability to produce complex systems. With this ability comes the inevitable cost increases associated with modern technology. The opportunity of the intelligence community to examine Soviet equipment has given us a chance to evaluate cost trends. Clearly, their newer systems are much higher in costs than older systems.

We still do not have a full appreciation of the extent that the Soviet economy defers to the military. For instance, we know that military industries receive preferential treatment in materials, services, and in the recruitment of skilled labor. We also know that the Soviets are interested in economizing, in getting more military capability for the ruble. So the task still before us is to ascertain the full burden of defense, as well as take full measure of the Soviet dedication—present and future—toward military superiority.



## SUMMARY OF STATEMENTS—PEOPLE'S REPUBLIC OF CHINA (PRC)

### EFFECTS OF CHAIRMAN MAO'S DEMISE

The effects of Mao's death on defense spending and the defense industry, in general, have been almost imperceptible. Post-Mao policy continues to emphasize the long-term, systematic upgrading of the PLA's capability, and a continuation of the evolutionary trend for improvement of the total armed forces. No dramatic changes have been noted in the development and procurement of military equipment, nor are any anticipated in the near term.

There is little doubt that Huo Kuo-feng owes much of his authority and influence to the military establishment; as a result the military can be expected to play a significant role in planning and policy-making. However, emphasis on domestic programs such as agriculture, and acceptance of the idea that military modernization is dependent on overall economic modernization will likely result in a relatively long term and consistent approach to military matters.

### PRC MILITARY CAPABILITIES

The PRC continues to stress a gradual program of force modernization, with growing emphasis on qualitative vice quantitative improvements. Several results of this long term program have been apparent during the past year.

With respect to strategic forces, China's nuclear delivery capability remains with a small force of bombers and missiles. Although this force is, for the most part, oriented to the periphery of China, the addition of a limited range ICBM to the operational inventory permits China to cover targets at greater distances including parts of European U.S.S.R., the Marianas, Australia, but not the United States. The PRC is progressing with development programs for a full-range ICBM and an SLBM but these systems will not be operational before the next decade. China still must rely on the TU-16 bomber as its primary air nuclear delivery system. No replacement for the TU-16 has been evidenced. China's general purpose forces are also characterized by long term modernization efforts. The ground force continues to emphasize qualitative improvements with only slight increases in the number of combat divisions by 1980. With the existing ground force, the PRC can successfully defend against any conventional attack except those initiated by the superpowers, and even they would be unable to totally overwhelm the PRC Army on Chinese soil.

China is still not expected to become a naval power capable of successfully opposing the United States and Soviet Navies in open ocean combat within the next decade. However, the navy has been progressing with existing modernization programs. It is expected that

surface combatant strength will increase over the next 5 years; however, the bulk of this increase will be accounted for by the addition of patrol craft and frigate size ships. Already the third largest submarine force in the world, PRC submarine strength is also expected to grow.

China's air forces also reflect long-term modernization efforts with modest quantitative improvements. Military transport aircraft production will probably have lower priority than production of combat aircraft with purchases of transports and helicopters being made from foreign sources.

#### PRODUCTION

The PRC's production and research and development efforts have been somewhat uneven, but despite political changes, they have maintained a momentum of their own. China is expected to allocate enough resources for maintaining its gradual defense modernization, and has been acquiring foreign technology intended for improvement of the defense industry as a whole.

#### DEFENSE SPENDING

In order to approximate the size and direction of China's buildup in military equipment, PRC military procurement has been calculated in dollar terms. China's military procurement costs decreased in 1976 as compared to 1975 but were higher than the previous 3 years. Annual procurement remained relatively constant from 1972 to 1974. The future pattern of defense spending will be largely determined by the scale of new or expanded aircraft production and the rate of offensive missile force deployment. In any case, procurement costs are expected to grow as the PRC replaces obsolescent equipment with more modern systems.

## EXCERPTS FROM TESTIMONY

### U.S.S.R. TECHNOLOGY LAG

Senator PROXMIRE. On June 23, Admiral Turner said, and I will quote:

While virtually all of the Soviet inventory of weapons falls within U.S. production technology, the Soviets simply do not have the technology required to produce many of the U.S. weapons, nor could they produce close substitutes.

Do you agree with that statement?

General WILSON. I want to make sure that I comprehend it, Senator—that the Soviets lack some of the technology we have.

Senator PROXMIRE. That they just do not have the technology to produce many of our weapons, U.S. weapons, nor could they produce close substitutes for them.

General WILSON. Yes; I believe that is essentially correct.

The essence of that statement to me is to say that we still have a substantial technological lead over the Soviets and thus are able, in a number of areas, to produce a weapon which is qualitatively superior to those which they produce.

I think that Admiral Turner's use of 70 percent, which would apply in reverse to about a third of the weapons, also probably is correct. I am generally in accord with that statement, sir.

Senator PROXMIRE. Admiral Turner also testified that although the Soviets have improved some of their systems, he said, and I will again quote: "Soviet weapons technology generally lags behind that of the United States."

He went on to point out that the Soviets trail us by [deleted] years in the introduction of certain electronic technologies, at least [deleted] years in computers and electronics, and they lag behind in [deleted] fabrication and production, and in the design and manufacturing technology incorporated in aircraft and missiles.

Do you agree that Soviet weapons technology generally lags behind that of the United States?

General WILSON. Yes, in certain identified areas such as you have listed here.

Do you not go along with that, Mr. Miller?

Mr. MILLER. Yes.

### SOVIET RESEARCH AND DEVELOPMENT

Senator PROXMIRE. You say that research and development in the Soviet Union has been clearly exceeding U.S. efforts, as evidenced by the development of new systems.

Do you mean that they have developed more new systems than we have, or that their new systems are superior or more advanced than ours?

General WILSON. That statement—and I would also like to turn to my expert to make sure that I am on track—refers primarily to the numbers of new systems, to the volume of the effort, as opposed to its quality at the present time.

Mr. MILLER. Yes, sir, that is absolutely correct.

Senator PROXMIRE. To what period of time are you referring when you talk about their having developed more new systems than we have? Is that the last 3 years, 5 years?

General WILSON. I think the last 5 years would be the general framework.

Mr. MILLER. Yes, about the last 5 years.

Senator PROXMIRE. Isn't it true that the Soviets tend to develop and build many more variants of the same new system and employ more engineers than we do, and that their design bureaus compete with one another, and that sometimes the losing designs get built in addition to the winning designs? Don't these factors help explain why the scale of Soviet R. & D. seems to large?

General WILSON. That's a very good question, sir. I think it helps partially to explain the situation. However, I would have difficulty saying that it explains the difference in its entirety.

Senator PROXMIRE. Could you give us any quantitative notion? Could it explain half of it? Two-thirds? One-third? Do you have any feel for that? I know that this has to be an estimate.

General WILSON. The answer has to be somewhat speculative, which I hope you will appreciate. We might easily disagree here at the table.

It might explain half of the difference—that is just a general stab at the question.

Are you comfortable with that, Mr. Miller?

Mr. MILLER. I think it is less than half.

Senator PROXMIRE. You think it would explain less than half?

Mr. MILLER. Yes, sir, there are specific instances that we could cite whereby there have been systems, either aircraft or missiles, that have been in competition, and they have ended up deploying at least some of both.

But I think that over the past 10 or 15 years, that practice has tended to diminish somewhat, and it is somewhat less than half. I would say that considerably less than half are in competition, or have resulted from competition.

#### REDUNDANCY IN SOVIET R. & D.

Senator PROXMIRE. General, you and I discussed the redundant Soviet R. & D. approach in last year's hearing, the fact that in missiles, especially, they build not only the best design model in the system, but the losing design as well.

That struck me as an extreme example of inefficiency, and I thought you agreed.

Do you agree that this is an inefficient practice?

General WILSON. Oh, yes, there may be selected instances; however, where redundancy on a particular item carries with it an advantage, although that would apply in the minority of cases.

Generally speaking, I think it connotes inefficiency in the Soviet system.

## SOVIET MISSILES

Senator PROXMIRE. An example of Soviet redundancy appears to be competition between the SS-11 and the SS-13. I understand that the SS-11 ICBM won out and more than 600 have been deployed, but that about 60 SS-13 were also deployed. Would you comment on this and state whether such redundancy contributes to your conclusion that the Soviets are developing many new systems?

General WILSON. In this area, Senator, I think Mr. Miller, who is with me, is very well versed. If you have no objection, I will turn that over to him.

Senator PROXMIRE. Very good.

Mr. Miller.

Mr. MILLER. The SS-11 was a liquid fueled missile, the SS-13 is a solid propellant missile. I don't feel that they were in competition with each other. This was the first Soviet attempt at an ICBM in the solid propellant field, that is, the 13. It did not prove out very well. They had problems with their [deleted] and they had problems with [deleted]. Therefore there were only a limited number of them deployed, 60 of them, which we think may still be deployed. That 11, however, was their major effort for a mass destruction type weapon, and it was done on an extremely high-priority basis. They [deleted] before the program was very well down the pike; even though they had some problems in the beginning, they went with a highly accelerated R. & D. program and have deployed about 1,000 of these weapons.

Senator PROXMIRE. I understand that SS-11's are still being deployed with MRV's, multiple reentry vehicles, despite the fact that they are being replaced by the newer SS-17's and 19's.

Mr. MILLER. That is absolutely correct.

Senator PROXMIRE. Does that indicate dissatisfaction with the new models which have been tested with MRV's, or does it mean something else?

Mr. MILLER. Well, sir, in my opinion, it is a different role and mission. The SS-11 is a mass destruction weapon intended for a soft target type approach. The SS-17 and SS-19, which are your new generation systems, with the MIRV capability as opposed to the MRV capability of the 11, are in my mind intended as hard target weapons.

General WILSON. I agree with that entirely.

Senator PROXMIRE. How would you compare the deployment rates of the 17's and 19's with the older 9's and 11's? Are they faster or slower? If they are slower, does that suggest lack of confidence in the new missiles?

Mr. MILLER. The deployment rate of the 17, 18, and 19 is slightly slower than it was for the 11 and the 9 at the time that they were initially deployed. You have a different situation here, however, in the fact that the Soviets were attempting to get a force in the field—

General WILSON. Exactly.

Mr. MILLER [continuing]. With the 9 and 11, whereas now they have that force in being and they have a much harder silo that they are building for the 17, 18, and 19.

Senator PROXMIRE. You feel that there is a lack of confidence in the new missiles?

Mr. MILLER. No, sir.

General WILSON. To reiterate, they are replacing a force in being, as opposed to filling a vacuum, as they were earlier.

Senator PROXMIRE. I understand.

#### SOVIET MIRVED MISSILES

Can you say how many MIRVed missiles the Soviets have deployed, including submarine launched missiles, how estimates of Soviet MIRVs are derived, and whether it is possible they have still not mastered MIRV technology?

Mr. MILLER. Would you repeat the question, please, so we can make sure?

Senator PROXMIRE. First, can you say how many MIRVed missiles the Soviets have deployed, including submarine launched missiles?

Mr. MILLER. There are no SLBM MIRV's deployed yet. We are calculating the number for your question now.

I have [deleted] SS-19's and [deleted] 18's at the present time.

Senator PROXMIRE. The next question is how the estimates of these MIRV's are derived.

Mr. MILLER. OK.

We are able to [deleted] and we are normally able to [deleted], which indicate that the [deleted]. The one big problem that we have is the ability to differentiate between whether it is a single RV version of that missile, or whether it is a MIRVed RV version.

There is just no way that we can tell from the means that we have available at the present time to differentiate between the two.

Senator PROXMIRE. So, do you assume that any missile that can be MIRVed is MIRVed?

Mr. MILLER. We are forced to do that, yes, sir.

We are assuming for our own accounting purposes or our own planning purposes that there are some few SS-18's that are single RV versions, either the MOD-1 or the MOD-3. We expect that the Soviets will probably initially deploy some [deleted] of the total of [deleted] that we expect to be deployed in the single version. Those may be—and here it is a conjecture on people's parts—eventually replaced with [deleted] will be deployed in a single RV version, which is being developed at the present time.

#### SOVIET MISSILE ACCURACY

Senator PROXMIRE. Isn't it correct that the Soviet ICBM's now being deployed do not have the accuracy that we thought they would have 5 years ago, that they may not have a hard target kill capability until the deployment of their next generation of missiles, and that our ICBM's are substantially more accurate than theirs?

General WILSON. Don't we have recent evidence that they are more accurate than we thought they were, Mr. Miller?

Mr. MILLER. Yes, sir.

We are getting more and more evidence—as a matter of fact, we are in the process of coming out with a new position right now on

the accuracy of the new systems—that the accuracy of those systems is better than we initially thought it was. We originally thought that there was somewhere between a [deleted] nautical mile accuracy. It now looks like the current operational accuracy of the four new systems is somewhere about between [deleted] nautical miles.

Senator PROXMIRE. Let me get the answer now to the other question.

Does that indicate that they have a hard target kill capability?

Mr. MILLER. The hard target kill capability at the present time is still somewhat limited. The PK's, or damage expectancy numbers, that we come up with based on their accuracy and yield assessments are still down in the more or less unacceptable level for a planner. In other words, they are still in the [deleted] range.

Senator PROXMIRE. Meaning that they may not really have it until the next generation of missile?

Mr. MILLER. Exactly.

Senator PROXMIRE. Would you say that in spite of the reassessment and the indication that their missiles are more accurate than we had thought they were, rather than less, that their ICBM's are substantially less accurate than ours?

Mr. MILLER. Yes, sir.

We are currently getting about [deleted] nautical miles out of Minuteman III, and about [deleted] out of Minuteman II. So, as you can see, we still have more accurate weapons. But we also have a very small yield in that weapon.

Senator PROXMIRE. Some experts believe that Soviet reentry vehicles have much [deleted] than U.S. reentry vehicles and that this contributes to the relative slowness and lack of accuracy of their missiles. It may also mean that they have significantly less payload and less yield than has been believed.

Would you comment on this?

Mr. MILLER. This was true in the older systems, such as the SS-11 and the SS-9, and the SS-13. However, the newer systems, the 16 through the 19, have a higher beta vehicle. But they do appear to have a somewhat [deleted].

We are trying, at the present time, based on some recent data that we were able to get—in other words, when some [deleted] that we had in the broad ocean area—while we have been getting some indications that maybe they do have a [deleted] it is beginning to look like the Soviets may [deleted].

Senator PROXMIRE. That was the point of my question [deleted]. My question is, Does it contribute to the relative slowness and lack of accuracy of their missiles?

Mr. MILLER. That portion is not true; no, sir.

Senator PROXMIRE. It's not true—why not?

Mr. MILLER. Because you still have a high beta vehicle; in other words, you still have betas around 1,500, so consequently I am getting a rapid passage through the atmosphere and it has not affected my accuracy that much.

Senator PROXMIRE. Does it affect the payload? How?

Mr. MILLER. It does my yield, however. It may.

Senator PROXMIRE. It may affect yield and payload?

Mr. MILLER. It may affect yield; yes, sir. But that I do not want to say positively as yet, because that is a study that is ongoing. We are

still trying to determine what this means as far as Soviet technology is concerned.

#### SOVIET MISSILES USE STORABLE LIQUID FUEL

Senator PROXMIRE. Can you explain why the Soviet missiles still use storable liquid fuel when U.S. missiles use solid fuel?

Mr. MILLER. This has always been kind of an anomaly in my mind because the Soviets were some of the grandfathers of solid propellants. However, when they went to their ICBM's, their large systems, they started out in the liquid area, as we did, based on the German technology. They have stuck to this technology, and even though they have tried and do have a solid propellant ICBM operational at the present time, they have had problems with it.

Senator PROXMIRE. So this would be another example of technological lag, at least in the solid fuel area?

Mr. MILLER. Yes, sir. They have a very large R. & D. program in solid propellants going on, but they just have not been able to make it pay off.

#### SOVIET T-72 TANK

Senator PROXMIRE. Isn't it true that the new T-72 Soviet tank is about as good as our M-60, but inferior to the XM-1 tank we are developing, and also inferior to the West German Leopard II tank that is used in NATO forces?

Mr. MILLER. I can only talk about that peripherally, but what you say—it is my understanding—is true.

General WILSON. I believe you said that it is better than our M-60, was that it?

Senator PROXMIRE. No. I said about as good as our M-60, and inferior to the XM-1 tank which we are developing, and also inferior to the West German Leopard II tank used in NATO.

General WILSON. I think that clearly it is inferior to the XM-1. There is no question there.

Here I would have to go back to obtain data to substantiate my point. My feeling is that we regard it as perhaps a bit more advanced than the M-60.

The early version of the Soviet T-62 was slightly behind our M-60. One of its great difficulties was the fact that it was underpowered, that is, that at a certain angle of incline, it could not pull its own weight. This has been corrected with this tank, which is now many horsepower more powerful.

Senator PROXMIRE. How does it compare with the Leopard II?

General WILSON. Favorably, very favorably. I don't have the immediate figures in front of me.

Senator PROXMIRE. Would you say that it is superior, inferior, or about the same as the West German Leopard II?

General WILSON. I would be inclined to put it as inferior to the Leopard II, as better than our M-60, and inferior to the XM-1.

#### UNITED STATES-SOVIET ANTITANK WEAPONS AND PGM'S

Senator PROXMIRE. Do you agree that our antitank weapons, such as the Dragon, Tow, and Hellfire missiles, are superior to theirs?



General WILSON. Yes, sir, I do.

Senator PROXMIRE. Do you agree that while the Soviets have deployed more artillery tubes in the European theater than we have, that our laser-guided artillery shells and other precision guided munitions are superior to theirs?

General WILSON. Yes.

#### SOVIET TACTICAL AIRCRAFT

Senator PROXMIRE. Isn't it correct that while the Soviets have improved their tactical aircraft in the European theater in recent years that we have improved our tactical aircraft even more so; that ours are still superior overall; and that our newer aircraft, such as the F-15, F-16, A-10, and the F-111, promise to widen the gap further in the near future?

General WILSON. I think that we currently have and will continue to have in the future a decided qualitative edge over the Soviets in aircraft, particularly the fighter aircraft.

We have fewer, of course, but our quality edge is decidedly there.

#### SOVIET NAVY BLOCK OBSOLESCENCE

Senator PROXMIRE. I understand that the Soviet Navy has a serious block obsolescence problem. Is it true that about 50 of their 250 major combatant ships are destroyers and frigates built in the late 1940's and early 1950's that an additional 24 *Kotlin* class destroyers were built in the mid-1950's, and that about 12 *Sverdlov* cruisers were built in the early 1950's?

General WILSON. I don't know if we can handle that arithmetic right now. There is a lot of arithmetic there, sir. We would prefer to check that one out and give you an answer as quickly as possible.

Senator PROXMIRE. All right.

[The information referred to follows:]

Of the 228 active and [deleted] reserve principal surface combatants, one light cruiser was built in 1949, about 37 destroyers and 38 frigates were built from 1950 to 1955; an additional 26 *Kotlin* destroyers were built from about 1954 to 1958 and about 12 *Sverdlov* cruisers from 1951 to 1955. However, obsolescence does not appear to be a large problem.

The Soviets have retained principal surface combatants on active service for 20 or more years. For certain types of missions, these ships, though old, are more than adequate. A modernization program has also been underway and the Soviets have been providing older units with improved engineering, weapons, and electronic systems. For example, of the 37 destroyers, about 8 were modernized from 1956-60. Of the 26 *Kotlins*, 11 were modernized during the early 1960's and an additional 8 were converted to guided-missile destroyers from about 1961 to 1971. Of the *Sverdlov* class cruisers, one was converted to a guided-missile cruiser in 1960 and two others were upgraded in 1971 and 1972. Additionally, there is a continuing replacement program for older units. An average of two new guided-missile cruisers and two to four destroyers are added to the inventory yearly.

#### SOVIET NAVAL CAPABILITIES

Senator PROXMIRE. Is it correct that these obsolete ships are armed with relatively ineffective 3- and 5-inch guns, have no missiles, have seaworthiness problems, and are mostly kept in port or home areas and are rarely seen at sea?

Mr. MILLER. That's partially correct.

Senator PROXMIRE. [Deleted.]

Major WALLACE. [Deleted.]

Senator PROXMIRE. Can you also tell us whether their present amphibious capability is limited to coastal areas and are primarily intended to protect against invasion and access blue water?

Mr. MILLER. It appears so, yes.

Senator PROXMIRE. Isn't it also correct that the Soviet Navy lacks underway replenishment ships and that their combatants have very little support at sea, little capability for sustained projection of force over long distances, and that it appears to have one primary mission, that is, to counter U.S. forward-based systems, such as attack carriers that support their nuclear missile submarines?

Major WALLACE. On the underway replenishment, that is one of their weaknesses. But they are taking some steps to improve that.

As far as their broad ocean mission, that is their objective and I think that some of the newer ships they are building may go toward solving that problem.

General WILSON. I have a further comment.

I believe, Senator, that this is a situation that they are seeking to change. We see evidence in their programs that they are much more aware of this, or are certainly sensitive to this. So, you are looking at a situation which is currently changing before you in this area.

Senator PROXMIRE. It is changing, but how would you characterize it at the present time?

General WILSON. At the moment, it is still an area of deficiency, but an area in which they are improving.

#### SOVIET STRATEGIC SUBMARINE DEPLOYMENTS

Senator PROXMIRE. In his current posture statement, General Brown, Chairman of the Joint Chiefs of Staff, says that the Soviets have only about 11 percent of their strategic submarines at sea at any time, while we keep over 50 percent of ours at sea.

Does this mean that the Soviets are having technical problems with their submarines, that they fear they are vulnerable to attack at sea? How do you interpret this low readiness in alert rate?

Mr. MILLER. You are absolutely correct. There is a very limited number of ships at sea on patrol. The exact reason for this is not known to us.

They do appear to have some small deficiency. [Deleted.] However, another thing that you will find is that the Soviets have a different philosophy. In other words, we don't see a large number of ships on patrol. [Deleted.] They seem to be of the opinion that they will have an adequate warning time to bring their force up to peak strength in a crisis situation.

Senator PROXMIRE. Doesn't that contradict our own experience, whether it is aircraft, navalcraft, or land equipment, that if you don't have your weapon systems in use and on some kind of work or patrol, that you are less likely to have an effective readiness, whatever your expectation is, as to warning time?

Mr. MILLER. Yes, sir.

General WILSON. Yes, that is certainly so.

## SOVIET ICBM READINESS

Senator PROXMIRE. I am also informed that Soviet ICBM's are kept at only [deleted] percent readiness, compared to 100 percent readiness for U.S. missiles.

Can you verify that figure and explain why it is so low?

Mr. MILLER. That is our understanding. We cannot prove it one way or the other, but the indications are that they only have [deleted] percent of their force on peak readiness alert. The rest of them are in what we call condition II [deleted].

Senator PROXMIRE. Does the use of storable liquid fuel have anything to do with that, as far as you are concerned?

Mr. MILLER. No, sir. These are storable noncryogenic fuels and they don't need to be topped off. In other words, the missile can go. [Deleted.]

## SOVIET TANK READINESS

Senator PROXMIRE. Is it also correct that Soviet tanks are kept at only about 33 percent readiness, and that as much of two-thirds of the Soviet tanks assigned to combat units are actually kept on blocks? If so, can you explain why they do this and the significance as far as a surprise attack is concerned?

Mr. MILLER. That's a new one to me, I'm sorry.

General WILSON. That's a new one on me, too. I cannot substantiate that, Senator.

Senator PROXMIRE. Let me take it piece by piece.

Our information is, or at least there are allegations to this effect, though I don't know the source nor its reliability, that Soviet tanks are kept at only about 33 percent readiness.

Is that not true?

General WILSON. I cannot substantiate that. My own feeling is that it is higher, though how much higher I don't know. I would be delighted to research that one.

Senator PROXMIRE. Please give us what you can for the record.

General WILSON. Yes, sir.

[The information referred to follows:]

It is estimated that a large number [deleted] of tanks in Soviet combat units are maintained in a short-term storage status at any given time. The Soviets rarely store tanks on blocks, the technique primarily used for storing wheeled vehicles. Soviet tank regiments normally have [deleted] tanks that are used regularly for training. These storage and training procedures result in a reduction in maintenance and repair parts requirements in peacetime and allow for the availability of a maximum number of low mileage battle tanks in case of hostility. Tanks maintained in unit storage can be made ready for combat without delay [deleted].

Senator PROXMIRE. The question continues—also that as much as two-thirds of the Soviet tanks assigned to combat units are actually kept on blocks?

General WILSON. I do not believe that that is so, [deleted].

Senator PROXMIRE. Well, when you give us the submission for the record, if it is anything like that, please give us whatever explanation that you can.

General WILSON. Of course.

## SOVIET SHIP DEPLOYMENTS

Senator PROXMIRE. I am informed that the Soviets deploy only one out of six ships at sea, compared to one out of three, if we use U.S. ships, and that of those at sea, many more Soviet ships are kept at anchor than are U.S. ships. Can you confirm those figures and explain their significance in terms of readiness?

General WILSON. I think that that is generally correct.

Senator PROXMIRE. What is the reason for that much higher degree of inactivity?

General WILSON. It is probably related—and here I am theorizing, although I think on an informed basis—to a central concept of economizing on the wear and tear on the ship, [deleted].

## SOVIET AIRCRAFT FLIGHT HOURS

Senator PROXMIRE. Is it correct that the number of flight hours per month for Soviet aircraft in Europe is about [deleted] of the U.S. Air-Force in Europe?

General WILSON. Theirs is significantly less than ours. What I am trying to do, sir, is to refine the answer.

Senator PROXMIRE. What is the number of flying hours per aircraft—is that [deleted] of ours?

General WILSON. Again, sir, your question is a good question and will drive us right back to our books. We will have to get an answer for you.

## SOVIET READINESS PROBLEMS

Senator PROXMIRE. You see, all of these figures on a low readiness or low alert factor suggest that they do not seem, at least, to have any plan for action. Maybe I am wrong about that. I would like to get some explanation for that situation.

I have heard our forces criticized for being unready.

General WILSON. Yes.

Senator PROXMIRE. I believe when Senator Nunn and Senator Bartlett went to Europe, they were concerned and shocked at our lack of readiness and they came back with an appeal for us to be more ready, more alert, more in action than we have been.

General WILSON. We chastise ourselves very severely in these areas. We have been criticized and then we criticize ourselves [deleted] and maintain that the Soviets keep theirs loaded in a position of greater readiness.

I fathom the thesis or the thrust of your line of questioning very, very well, and I find it fascinating. I want to deal with it as substantively and as soundly as we can. I see exactly what you are after.

Some of the questions that you have posed I have not been faced with before.

## SOVIET SHIP STEAMING HOURS AND AIRCRAFT FLIGHT HOURS

Senator PROXMIRE. Will you provide for the record a table showing the number of steaming hours per month of Soviet ships in the Mediterranean and in the Pacific; the number of flight hours per month for Soviet frontal aviation in Europe?

General WILSON. Yes, sir, I think we can provide that kind of information. Do you want it for the total number of ships in the area, the Eighth Squadron, the Fifth Squadron, and so on?

Senator PROXMIRE. That's right.

General WILSON. All right, sir.

[The information referred to follows:]

Data compiled on Soviet ship employment reflect the number of days in which a ship or submarine is deployed in an ocean area, regardless of actual employment. The following tables, including all naval and naval associated ships, illustrate the employment of Soviet naval forces, by ocean area, since 1965, with a monthly tabulation from January 1976 through June 1977. It should be noted that ships at anchor must maintain ship's power for housekeeping, ship's services, and underway readiness unless the engineering plant is shut down for repairs, in which case support ship provides the necessary utilities.

#### SOVIET OUT-OF-AREA SHIP DAYS

TABLE 1

	Atlantic	Mediterranean	Pacific	Indian
1965.....	1,300	3,500	900	0
1966.....	2,900	5,100	1,100	0
1967.....	5,400	9,100	3,600	200
1968.....	5,500	12,100	4,200	1,200
1969.....	9,500	15,800	5,900	4,100
1970.....	14,000	17,800	7,100	4,900
1971.....	15,200	19,100	6,200	4,000
1972.....	16,100	18,000	5,900	8,900
1973.....	14,400	20,600	6,300	8,900
1974.....	15,100	20,200	7,400	10,500
1975.....	14,300	20,000	6,800	7,100

TABLE 2 [DELETED]

Monitoring of all monthly flying activity conducted by each Soviet combat unit throughout Europe [deleted] based on data acquired on the activity of several Soviet units in the German Democratic Republic, we estimate that monthly utilization is [deleted] hours for single-seat primary combat aircraft and [deleted] for the two-seat trainer aircraft. Since training flights consume [deleted] each single-seat primary combat aircraft will be used for [deleted] sorties per month. While sorties are of short duration in comparison with U.S. experience, the Soviets are known to employ extensive premission planning to maximize the value of each sortie.

#### SOVIET QUALITY STANDARDS IN DEFENSE PRODUCTION

Senator PROXMIRE. The testimony of June 23 showed that the Soviet approach to meeting quality standards in defense production is one of "brute force," an inefficient method characterized by high levels of production.

Do you agree with this description of Soviet quality control?

General WILSON. I generally agree, although I think the statement is a little too simplistic.

Mr. MILLER. You are right.

General WILSON. I generally agree, but it is kind of abstractly simplistic. I think it is a little too all-encompassing. They work at this problem of quality control rather hard and not too successfully; but to sort of lump it all under the two words "brute force" is to me stating it a little too far.

Senator PROXMIRE. If they are trying to make up in quantity what they lack in quality, does that not mean that some of their numerical increases in weapons do not represent an increased effectiveness?

General WILSON. Again, we see in such systems as the [deleted] evidence of some high quality, particularly in those items that make the difference in performance characteristics.

So, while there is a great deal to what you are saying, there are some exceptions, I think, that we have also to be aware of.

Senator PROXMIRE. General, that is a rollcall. I will go to vote and will return in about 12 minutes.

General WILSON. Very well, sir.

[A brief recess was taken.]

Senator PROXMIRE. General and gentlemen, I hope we can complete this hearing now, though we might have another vote right away.

#### SOVIET "BRUTE FORCE" APPROACH INEFFICIENT

Isn't it true that the "brute force" approach to quality control means that some of their estimated ruble spending can be attributed to inefficiency, and would this not also be true of the estimated dollar cost of their defense program; to the extent that additional numbers of weapons are being bought as a hedge against quality control deficiencies?

General WILSON. Mr. Miller, why don't you take a stab at that and then I will follow up behind you?

Mr. MILLER. I believe you are right.

In other words, the fact that they are buying more than they need and that we have a hard time finding targets for all of the weapons that they have available today would probably tend not to exaggerate their ruble cost, because they are spending money, but to say that—

Senator PROXMIRE. But it would explain part of the ruble cost?

General WILSON. It would explain part of it.

Senator PROXMIRE. Perhaps as much as half the ruble cost, something of that kind?

General WILSON. I would think that that is a little high.

Let me turn to my economics expert.

Mr. MICHAUD. As I understand the question that you are asking, it is whether they are making up for quality by increasing quantity.

Senator PROXMIRE. Right.

Mr. MICHAUD. If they are doing that, then we would have to say that the higher values are yes, in a sense duplicative or excessive—if we are simply talking about a greater quantity in order to make up for quality.

Senator PROXMIRE. All these things, of course, have to be estimates.

What I have in mind is that we are always seeking for some explanation when the Soviet Union, our principal adversary is greatly increasing its expenditures and showing, as it shows so dramatically in the chart [indicating], superiority over this country in the amount it is spending and the quantity of weapons and so forth that it is producing.

The question is, Is one motivation for that a recognition that they do not have the quality that we have, the accuracy, the reliability that

we have in some of our weapon systems, and that they are making up for that in quantity, rather than in reaching for a position where they have clear superiority and are therefore in a position for a first strike? As I said, this has to be an estimate.

### SOVIET MILITARY THEORY

General WILSON. Senator, again, you are asking very, very good questions, and they lead into some very useful realms. For example, that particular one I think has a certain basis in Soviet military theory and strategy, specifically in their concept of what constitutes the necessary superiority.

I would like to elucidate on this a little because I think it is helpful and useful to get into it.

We are inclined to feel that when we approach a position vis-a-vis an adversary where we are even with him, where there is parity, or, as we would say, even-steven, we are comfortable with that kind of arrangement, because we have confidence in ourselves and in our materiel, in the quality of our equipment.

That kind of a situation with which we are reasonably comfortable, parity, is one that tends to drive the Soviets up the wall. Furthermore, in Soviet as well as in Russian military history, they have so often been defeated by numerically inferior but higher quality forces. Thus, their concept of what constitutes the necessary numerical superiority is totally different from our own. We teach, in our service schools and colleges, that when you have, generally, a three to one superiority in, say, ground forces over your ground force enemy, the situation is propitious for you to launch your attack—where you have that superiority.

In my view and in that of a number of others who have followed Soviet matters, they begin to be comfortable when they reach the point of [deleted] or even [deleted].

So, I think your question has a great deal of relevance and is further borne out historically in the Soviet approach to military problems.

### SOVIETS LACK VALUE ENGINEERING

Senator PROXMIRE. Admiral Turner testified that Soviet weapons show a lack of any systematic effort to value engineer their weapon design, that is, to adjust basic designs to lower production costs without denigrating performance and so forth.

Do you agree with that conclusion?

General WILSON. It goes a little further than I would go, but again, let me turn to my specialist colleagues.

Mr. Michaud.

Mr. MICHAUD. Will Mr. Miller address the value engineering part of it first?

Mr. MILLER. Yes.

We have seen evidence in some of the exploitation—

Senator PROXMIRE. I suppose everybody does that to some extent. We probably do it, too. After all, if you find that a design is prohibitively expensive, you are going to try to simplify the design and maybe reduce the quality a little bit and knock out some of the “gold

plating." The question is whether or not they tend to have to do that quite a bit.

Mr. MILLER. The Soviets appear to do that and to have to do that. You have to consider that they bring the so-called peasant out of the field and into their army. So they go to a simplistic approach so he does not have to have that much training in order to operate the equipment. So, consequently, the designs, their operational capabilities tend to be much simpler. I think that this tends to reduce their quality many times.

Senator PROXMIRE. Perhaps I misinterpreted Admiral Turner.

I am told by Mr. Kaufman, the committee's general counsel, that Admiral Turner's position was that they show a lack of any systematic effort to value engineer their equipment's design; that once they get a design, they tend to stick with it.

General WILSON. I would have to debate that a little in this connection, if I may, sir. Let us use the [deleted] the [deleted] as an example.

We found that many of the components largely peripheral to the ultimate operational performance of the aircraft were indeed rather crude. But we found that those specific components which were critical to the ultimate performance of the aircraft were well done. I think this is a feature that we frequently find in their weapon systems and their aerial platforms, where the specific component that makes the difference in ultimate performance may be quite well designed.

Would you support that?

Mr. MILLER. [Deleted.]

This is just one example of value engineering to improve the system after it has gone into the field.

Senator PROXMIRE. Well, to the extent that there is an absence of value engineering, is that another indication of inefficiency in Soviet defense production?

Mr. MILLER. Yes.

Senator PROXMIRE. You just pointed out that there is?

General WILSON. To the extent that there is, most definitely, yes.

#### CIA-DIA RUBLE SPENDING ESTIMATES

Senator PROXMIRE. Your use of the Peking Review and statements by Soviet leaders to estimate Soviet defense spending in rubles suggests some dissatisfaction with the CIA ruble spending estimates. This, of course, is a nonanalytical approach in that you are simply taking a few general statements by Soviet leaders, [deleted] and what appears in a Chinese magazine, to construct an entirely different set of figures than those developed elsewhere in the intelligence community.

What level of competence do you place in the Peking Review, Soviet leaders [deleted] figures compared to the estimates made by the CIA?

General WILSON. I don't think that we are very far apart from the CIA. We are talking of 11 to 13 percent, as opposed to 14 to 15 percent. As I indicated to you last year, while earlier there had been some contentiousness between ourselves and the CIA, that has all but disappeared.



Senator PROXMIRE. That marginal difference is very considerable. In terms of rubles, it is several billions of rubles.

General WILSON. Yes, sir. I will come immediately to that.

[Deleted.]

Senator PROXMIRE. [Deleted.]

General WILSON. [Deleted.]

Senator PROXMIRE. How does their government budget compare with their GNP? Is it a very large proportion of their entire GNP? Obviously there are few things on the outside. I understand that they have private plots and little agricultural operations, but it is a highly government-dominated society. [Deleted.]

General WILSON. No, not in this case, not GNP.

Senator PROXMIRE. Well, as I said, the Soviet economy is a socialist economy, and I mean an overwhelmingly socialist economy so that virtually everybody works for the government. There is not a great deal of production outside. In our economy, only 20 percent is the Federal share of the economy, and the combined Federal, State, and local government share is only about 35 percent. Private sector is a big share in our economy. In their economy—

General WILSON. The Government share would be a larger share.

Mr. MICHAUD. It is about 35 to 40 percent.

Senator PROXMIRE. 35 to 40 percent is private? Is that what you said? That would be very surprising.

Mr. MICHAUD. The government state budget is 35 to 40 percent of the GNP, what we estimate as GNP.

Senator PROXMIRE. What is the rest? Is the rest provincial?

Mr. MICHAUD. Well, it is consumer spending in the private sector, industrial output, private consumption, investment.

Senator PROXMIRE. In other words, they have the same as we have? That would be astonishing. Our Federal share is about 20 percent, and our State and local account for another 15 percent, so our total governmental sector is about 35 percent. Are you saying that theirs is the same and that their private sector is as big as ours, proportionately speaking?

Mr. MICHAUD. That's right. Senator, I am not familiar with the U.S. statistics, but that is the case in the Soviet Union. The total state budget, which incorporates all the republican budgets, amounts to 35 to 40 percent of what we estimate as GNP.

Senator PROXMIRE. Well, OK. I think I have gotten off the point a little bit. I would like maybe to get into that sometime, too.

General WILSON. If I could just continue for a second, sir, the statement used by [deleted] alleged to have been made by [deleted] has been used by the CIA as well as by us. It resulted in an increase in their original estimates.

The [deleted] source, which we listed [deleted] was one of several reasons for their revising their previous estimates considerably. So, we have worked with the same data, the same information. We have reacted to it. I think, a little more vigorously than they have.

Senator PROXMIRE. [Deleted.]

General WILSON. That is about where we are, that is right, sir.

[Deleted.]

The big thing that I wanted to get across to you is that we do work very, very closely with the CIA. We share the same data and make contributions to the same common goal, and we come out at the end somewhat differently, but nowhere near as divergent as we were some several years ago.

#### SOVIET USE OF MILITARY FOR CIVILIAN PROJECTS

Senator PROXMIRE. You mentioned the tendency for the military costs to be absorbed by civilian sectors in the Soviet economy. Would you also agree that some civilian costs are being absorbed by the military? For example, Admiral Turner talked about the huge number of military personnel and military trucks used in the annual grain harvest.

General WILSON. There are several areas where they are used in this way, sir.

Senator PROXMIRE. Many experts believe that the military is used in road and other construction projects. Some characterize the military as a national manpower training program in view of the high turnover of conscripts. What is your view?

General WILSON. This is absolutely correct.

I can give you further examples in detail, if you would like.

Senator PROXMIRE. It is pretty hard, then, to ascertain with any degree of accuracy the actual amount of defense, is that right?

General WILSON. Extraordinarily hard.

Senator PROXMIRE. I would like to ask you a general question on the views of Soviet officials on United States-Soviet relations and defense intentions based on your recent conversations in Moscow.

#### VIEWS OF SOVIET OFFICIALS

General WILSON. I would be glad to give you several highlights, sir, and to pursue this in whatever detail you would like.

Senator PROXMIRE. Unfortunately there is a rollcall vote. Perhaps if I stay for another 6 or 8 minutes, we can wrap this up. I do not want to detain you. I think we should be just about through.

Go ahead, please.

General WILSON. I made a couple of notes in case you raised this question. Let me just select from them.

[Deleted.]

It is quite clear that they have hardened their position against Americans and that they are increasingly critical of the Carter administration. I have what are almost some quotes here. They say that President Carter's stance on human rights, especially his letter to Sakharov and the White House visit by Bukovsky, they regard as deeply offensive and, to a degree, I sense that they regard it as threatening to them.

The Soviet leadership was insulted by the President's comment that, "Some people worry every time Brezhnev sneezes." They maintained to me that the U.S. SALT proposal made earlier, in February, was too one-sided to be a serious proposition, and this was why they reacted sharply; but that however, in the long run—and this is a deduction on my part from a more involved conversation—SALT is more

important to the Soviets than the present human rights turmoil and that arms negotiations are eventually going to stand or fall on their own merits, and that human rights as a subject becomes a certain amount of smoke hanging over a more serious subject. [Deleted.]

Senator PROXMIRE. Did you notice any concern about the B-1?

General WILSON. Yes; some.

Senator PROXMIRE. But it was more about the cruise missile?

General WILSON. [Deleted.]

I won't go on with this too far, unless you wish to pursue it.

[Deleted.]

### SOVIET SPLIT WITH CHINA

The big event while I was in the Soviet Union was the declaration and sort of final verification of a complete split with the Communist Chinese signifying that the Soviets would no longer endeavor to try to effect reconciliation in the short run, in the post-Mao Tse-tung period. I regard this as one of the most significant events of the past 12 months, this confirmation of the break.

Continuing further, some of my Soviet colleagues or former colleagues were quite critical to me of comments that I had made publicly; such as the comments that I made before you last summer, which they very carefully obtained from the sanitized record. They were particularly agitated at my comments before one of the other committees, where I had said I believed the Soviets were shifting to a goal of attaining strategic superiority. They were just incensed on this point.

We reminisced a bit one particular evening with three general officers about how well we had made out as allies during World War II, and they said, "You know, what we really need is a common enemy." I did not say at that point, "Do you mean the Chinese?"

I asked one senior general, "Would you accept 'obshaya tsel,' a common goal instead?" He reflected for a moment and then said quietly, "Of course, you are right. That is really what we ought to go for."

I was struck by one comment by a very intelligent Soviet, and it will strike you, too, I believe. He said, "our mistake in viewing you Americans is that we tend to view you in our own terms." For the life of me, although I am fairly fluent in Russian, I could not think of the words for "mirror-imaging," as we would use it. But I was struck by the fact that they seem to suffer a bit from the same dilemma.

### SOVIET VIEW OF CARTER ADMINISTRATION

I asked a group of four senior Soviet officers, one marshall and three senior generals, what did they think of the present American administration and the manner in which President Carter was conducting his affairs, vis-a-vis the Soviet Union. There was a moment of silence, and then one of the individuals stuck his chest out and stepped forward, as though he were speaking for the group, and he said, "Lyudi naivnie," or "They are naive people." "Nam nado terpet'," or "We must be patient." "Poka oni ne uchat'sa," or "While they continue to learn."

Senator PROXMIRE. That sounds like a Republican reaction. [General laughter.]

General WILSON. The Soviets felt at the time that I was there, since they had not heard from this administration on the human rights issue for—

Senator PROXMIRE. General Wilson, excuse me. This is so good that I want to get it completed, and I also have a few more questions.

If it is all right with you, I will leave now and go to the floor to cast my vote. I will be right back.

General WILSON. I am at your service, sir.

[A brief recess was taken.]

Senator PROXMIRE. General, please go right ahead.

General WILSON. Obviously, sir, this could be quite extensive. I will just single out two or three more and then I will respond to anything else you would wish to raise.

[Deleted.]

#### LIFE ON SOVIET SUBMARINES

Senator PROXMIRE. Is there any comparable statistic on U.S. submarine crews with something like this? Do we have any problem at all of that kind?

General WILSON. You know, I don't really know.

Senator PROXMIRE. It just seems to me that the isolation that many people have, even the wives of U.S. Senators, when you are away from your family a lot, the divorce rate goes up, which is an unfortunate fact of life.

Incidentally, the Banking Committee that usually meets here has a very high divorce rate. It is related perhaps to how hard we work.

General WILSON. Yes, sir.

Senator PROXMIRE. I hope it is related to that.

General WILSON. The cramped quarters and the more spartan living arrangements on Soviet ships, as well as in Soviet submarines, I think also contribute to the morale problem.

We do, as you are fully aware, make our people a great deal more comfortable. For Soviet pilots and crews it is quite different in the cockpit of an aircraft, driving a tank. In the T-62, for example, only a left-handed midget really can handle the manual loading problem. So, the Soviets do sacrifice a great deal in human comfort in their systems.

Senator PROXMIRE. I see.

General WILSON. This can certainly be seen in the submarines.

[Deleted].

Senator PROXMIRE. Is that a great change from what you have had in the past, do you think, or is it pretty much the same kind of military phenomenon?

#### SOVIET PROBLEM OF POLITICAL SUCCESSION

General WILSON. I think one of the great dilemmas in the Soviet Government is the inability to succeed themselves smoothly, to effect this kind of smooth transition.

Senator PROXMIRE. My question is that you referred to the fact that you are going to see a period of military force and domination, military elitism, and to what extent does that represent a change from what the Soviet Union has had for the last 50 years?

General WILSON. I think there was a similar peak, following the death of Stalin, to what I have referred to here. There clearly was a peaking of this when Khrushchev successfully wrested power away from Malenkov, and again when Khrushchev was ousted in favor of Brezhnev. The military in this case represents the power that the contender wants to have in his corner. So, while the military occupies an elite position in Soviet society overall, it achieves a rather singular prominence during that period. So, this would be a repetition.

Since we are approaching, because of Brezhnev's health and age, a probable changeover from Brezhnev, I think that this is the kind of reminder that it is useful for us to reflect on.

Senator PROXMIRE. Very good.

General WILSON. I have one other point, Senator.

[Deleted.]

Senator PROXMIRE. I might also add how do the heads of state determine their posture, their position, their attitude, and their willingness to cooperate. This, of course, depends upon the number of people in the Soviet Union in the military and on a number of power party people, I am sure, and in this country it depends upon the position of the President vis-a-vis his Cabinet, the Congress, the press, and the leaders in the public generally.

General WILSON. I think they make a major contribution.

In this same connection, when I talked with another Soviet, he said—and you have heard this before, but sometimes it is useful to see how it is perceived by Soviets and others—“the U.S. political process is an obstacle to progress in this area.” He said, “It takes you 1 year for a new President to get up to speed, and then you lose the last year during the election campaign, so you lose continuity.”

I said, “Well, that is the price we are going to continue to pay for the kind of system that we support.”

[Deleted.]

I have one last comment from another Soviet concerning the SALT proposals earlier this year. He said that they believe that our initial proposals were driven largely by international and domestic political concern rather than by serious proposals for discussions between the two countries.

#### SOVIET ECONOMIC PROSPECTS

Senator PROXMIRE. General, either you or your economic expert might respond to this. I have been, as is this committee, very interested in the Soviet economy, particularly the Soviet economy as it relates to the Soviet military strength. Of course, a major component in the strength of any country, whether it is China, the United States, the Soviet Union, Italy, France, you name it, is the strength of its economy, the capacity for growth in the economy, the technology of the economy, and so forth.

Could you or your economic expert give me any notion on the change in the Soviet Union? Is their economy growing? Is it growing at a satisfactory rate? Is it affected by any agricultural development, for example, or any elements that we should be aware of? Say, in the past year or so, is there anything that we should know about?

General WILSON. I would like to do this in two parts, if you don't mind, sir. I will turn first to Mr. Michaud, and then I believe I have

some notes that I brought back from the very last trip that I would like to highlight quickly on this same subject.

Senator PROXMIRE. Very good.

Mr. MICHAUD. There seems to be a general consensus that the long-run trend of a declining growth rate in the Soviet economy is going to continue into the 1980's. There is no indication—

Senator PROXMIRE. What rate of real growth do you estimate, then?

Mr. MICHAUD. This is fairly difficult. It depends on so many things.

We are talking now in terms of this 5-year period, 1976 to 1980. The Soviets are planning about 4 to 5 percent of growth. They may not realize this. They may realize about 3.5 to 4 percent.

Senator PROXMIRE. Do you think 3.5 percent is a little more realistic estimate of what they will probably achieve?

Mr. MICHAUD. I think so. In the last 5 years, they realized about 3.8 percent, so it should be slightly declining in this 5-year period.

Senator PROXMIRE. They should grow at a slower rate than we would expect to grow? Our projection is substantially higher than that for this country, isn't it? I am talking about American growth as compared to their growth. If they grow at 3.8 percent, I think our expectation is that we would grow at about 5 to 5.5 percent. Indeed, we will have to grow at a rate approximating that or we will have an unemployment increase.

Mr. MICHAUD. We are kind of in a trough, so our growth rate might be high for that reason. But, extending that into the 1980's, we expect that the actual Soviet growth rate may be as low as 2 percent. It could be as high as 3.5 to 4 percent, again, depending on conditions.

Senator PROXMIRE. 2 to 4 percent?

Mr. MICHAUD. I would say that 2 to 4 percent is the range of possibility for Soviet growth into the 1980's.

Senator PROXMIRE. What about their demographic problems? Are they having problems with people getting older, with a smaller group of people coming into the work force?

Mr. MICHAUD. We know that to be the case. The demographic data for the labor force in the 1980's is now available. There is going to be a decline in the rate of growth of the labor force. As a matter of fact, in the 18-year-old group, in which we are particularly interested, there will be an absolute decline in the number of 18-year-olds by the mid-1980's. So, they are going to have problems in terms of the size of the labor force, unless they increase the age span, increase the age of retirement or lower the work age, something of this kind.

Senator PROXMIRE. What effect would this have on the military force? It seems to me that maybe it would have a direct effect if the number of 18-year-olds is absolutely declining, then the opportunity to take prime-age people into the military force would diminish, and to the extent, of course, that they do concentrate so much of their GNP in the military, it means that they have to take it away from agriculture and industry, which are desperately in need of manpower, too. Isn't that correct?

Mr. MICHAUD. There are a lot of implications to this. They could reduce the length of time served by 18-year-olds in order to keep them in the labor force for a longer period of time—that is, 18- and 19-year-olds.

So, there are a lot of things, yes.

Senator PROXMIRE. But if they keep them in for a longer period of time, this takes manpower away from industry and agriculture.

Mr. MICHAUD. What I meant was to reduce the length of time. That was what I meant.

Senator PROXMIRE. If they reduce it, then that reduces their military manpower.

Mr. MICHAUD. Right.

Of course, they could use more females to perform some of the military duties. This is another possibility.

Senator PROXMIRE. How about their steel production, their coal production, their energy production? How does that appear?

#### CIA OIL PRODUCTION ESTIMATES IN THE SOVIET UNION

Mr. MICHAUD. There is quite a bit of concern in regard to their energy production, particularly their oil production in the 1980's. As you heard from the CIA last week, they contend that their rate of oil production will probably decline in the 1980's, as the CIA prognostication at this time shows. We are not in full agreement with that. Other people seem to think that it will continue and not necessarily be a part of the problem.

Senator PROXMIRE. Do you disagree with the CIA on their estimate on oil production?

Mr. MICHAUD. I think I perhaps should refer to the general on this. I think that that is DIA's position at this time, that we do not believe that the rate of flow will necessarily decline in the 1980's.

There is very little information on this whole oil question at this time. There is a great deal of research going into these estimates as to the reservoirs that the Soviets are now exploiting. I think it will be some time before we can get a better fix on the whole situation.

Senator PROXMIRE. Nevertheless, your estimates, roughly, of growth coincide, I think, with the CIA's pretty closely, do they not?

You said about 3.8 percent growth would occur over the next 4 or 5 years; that it might decline to perhaps as low as 2 percent, perhaps not, to as low as 2 to 4 percent in the period of the 1980's; you don't disagree on that, do you?

Mr. MICHAUD. We are pretty much in agreement.

Senator PROXMIRE. What do you disagree on?

Mr. MICHAUD. On how much the oil crisis, if there is to be one, would contribute to that decline.

Senator PROXMIRE. How do you figure the slowdown? Is it primarily demographic? What are the reasons for the slowdown in the Soviet Union, do you expect?

Mr. MICHAUD. The Soviets are becoming a mature society. As a result, the amount of investment that goes into replacement capital is increasing, as opposed to new investment. Their productivity of that capital in contributing to the total output, therefore, is not increasing as fast as it has in the past.

This is one of the factors, along with the labor situation.

Senator PROXMIRE. Do you see a slowdown, even if there is no crunch on energy and oil?

Mr. MICHAUD. Yes, sir, we see this. This is a long-term trend. It has been occurring over the last 15 years. We would expect that to continue. It is a question of degree at this point.

Senator PROXMIRE. So, there is a trade-off here, isn't there? To the extent that they continue to build up their military, it tends to reduce their capacity to invest capital resources in the industrial and agricultural area.

Mr. MICHAUD. Our position has been that the burden rate has actually been increasing over the last 10 years. The CIA maintains that it has been constant.

Senator PROXMIRE. What rate is that?

Mr. MICHAUD. The burden rate, the share of the GNP. The CIA maintains that it has been rather constant over the last 10 or 15 years.

Senator PROXMIRE. I don't understand that term, "burden rate." What is that?

Mr. MICHAUD. The share of the GNP.

General WILSON. Devoted to defense.

Senator PROXMIRE. Therefore, that burden has been an element in slowing down the growth, GNP growth?

General WILSON. Yes.

Mr. MICHAUD. Insofar as it has been an increasing burden on the economy, yes, we believe that it has contributed to it.

Senator PROXMIRE. Thank you, that is very helpful.

General, you had some observations for us?

General WILSON. Just to reemphasize this point, I think that they face a real dilemma to be able to sustain this kind of investment in defense that they have been maintaining all along. They will probably endeavor to do it and probably will carry it off. But it will cost.

Now, at the present time I have some brief notes taken from the streets of Moscow and from talking with our economics counselor in terms of the Soviet attitude toward the way their economy is performing. In brief, it goes this way.

The Soviet economic performance generally is satisfying the Soviet people; however there are some areas that cause dissatisfaction. There are reports of food shortages, particularly in the outlying areas. The primary complaint at present is the lack of meat. You will recall, because of their harvest debacle in 1972, and again a couple of years later, they had to slaughter a number of their cattle and swine in order to divert feed grain for human consumption. This created a difficulty for them, and they are still suffering somewhat from a lack of meat.

For this reason, or partially for this reason, you can still see peasants getting on planes in the Fergana Valley and flying to Moscow with geese and chickens in their laps, and perhaps a basket of vegetables, which they will sell on the free market in Moscow. They will go back to the Fergana Valley, enjoying a considerable profit, even though they paid for their air passage. Since the airlines are so heavily subsidized, the price of the ticket is quite low.

The primary source of complaint in Soviet society concerning the economic situation, however, is the lack of adequate housing. This is a crucial dilemma. It often causes three, sometimes even four, generations of single families to live together in one very small apartment. Frequently a family will be living together in one single room



On the other hand, Soviet automobile production is up to about 1.2 million cars a year, and many of these cars are being produced for export, such as the Zhiguli, which is a version of the Italian Fiat. The Soviets themselves have increasing opportunities to buy automobiles, and the cars are fairly well built. Indeed, a number of our people buy the Soviet Zhiguli and the Soviet Volga, since they are fairly sturdy and well built.

The ordinary Russian is capable of some increased savings. He generally feels that in a relative sense his life is getting better. There are a few more consumer durables available than there were several years ago. The situation has certainly moved a lot since I was there as a student in 1950. Although selection in the consumer area tends to be quite poor.

On the agricultural front, it looks as though we may be facing a bumper harvest in the grain area this year, which is something that the Soviets truly "sweat out," if I may use that term, each year. This is particularly a function of the manner in which they manage their agricultural cycle of production, as well as the effects of the climatological phenomena. But it is an area that can provide them with a crisis very, very readily if they have a failure in the grain area.

They are beginning to replace the swine, poultry, and cattle. The cattle count is now up 2 percent from the 1974 figure, so they are kind of digging themselves out from the results of slaughtering their livestock. But they still have not gotten back to the levels of 1975.

At the moment, government stability does not appear to be threatened by these types of shortages which are not sufficiently severe to have an undue impact on the attitudes of the general populace.

Senator PROXMIRE. Now I should go to the floor right away, but I would like first to ask a few questions on China, because I do not want to neglect that.

#### CHINESE DEFENSE

Some experts believe that the Chinese orbiting satellites appear to be on intelligence-gathering missions. What capabilities do the Chinese have for gathering intelligence on Soviet defenses by satellite or other means?

General WILSON. [Deleted.] I would like to turn to Mr. Romance in this area, if I could.

Senator PROXMIRE. Mr. Romance.

Mr. ROMANCE. Senator, in that regard, I would say that its capabilities right now are [deleted]. It is very difficult to assess what their current capability is.

They have launched these satellites [deleted].

Senator PROXMIRE. [Deleted.]

Mr. ROMANCE. [Deleted.]

Senator PROXMIRE. Despite some reports that the new Chinese leaders have decided upon a major military modernization program, I take it from your statement that you believe any upgrading or modernization will be evolutionary and long term, and, as you said, no dramatic change is expected in the near term. Is that correct?

Mr. ROMANCE. That is correct, Senator.

Senator PROXMIRE. I understand that China conducted four nuclear tests in 1976. Does this mean that it has accelerated its nuclear weapon development program?

Mr. ROMANCE. Again, I would characterize this as evolutionary and ongoing. They are, of course, slowly increasing their nuclear development capability, and again, they are slowly developing their missile delivery capability.

#### CHINESE IMPORTS

Senator PROXMIRE. Then you mention the elimination of opposition within the Chinese Government to imports of foreign technology and equipment and that they are obviously interested in imports from the West. Can you discuss whether China is now importing military equipment, and if so, the kind of equipment and the countries from where they are importing it, or whether negotiations for such imports are going on?

Mr. ROMANCE. There is some military equipment that has been imported in the last year, sir. They made a contract with the French on helicopters.

Senator PROXMIRE. Are they military helicopters?

Mr. ROMANCE. They have military application, sir.

The ones that were imported, a total of 12 under the contract, [deleted].

Senator PROXMIRE. Are they getting any other procurements from overseas, such as military procurements?

Mr. ROMANCE. Yes, sir, in the area of transport aircraft, they have gotten, for instance, the [deleted] from the Soviets.

Senator PROXMIRE. How about actual weapon systems?

Mr. ROMANCE. [Deleted.] But, other than those I just mentioned—the Super Frelon helicopter from France [deleted] contract, and the transports with military application, which in the case of the [deleted] have been incorporated into the PLA Air Force. Over the last year there have been none that I know of in the way of weapon systems.

#### CHINESE SHIPBUILDING CAPABILITY

Senator PROXMIRE. Could you give us a brief summary or discussion of Chinese shipbuilding capability?

Mr. ROMANCE. Yes, sir.

It may be a paradox that they have more shipbuilding capacity than they are actually using and have been using over the years.

I suspect that one of the reasons they have not been employing the shipbuilding capacity that they have is because of a possible shortage of special steels.

Senator PROXMIRE. Military ships?

Mr. ROMANCE. Yes, sir. I am speaking now of military shipyards, naval shipyards. I suggest that the reasons are perhaps that they possibly do not have the quality steels that they needed to build as many ships as they might want. A second reason is the paucity of trained manpower. If you would allow me, I think in that regard the Chinese are their worst enemies, in the sense that during the cultural revolution higher education was decimated. Under radical influence, for instance, such things as exams were dispensed with, and quality standards in university education went by the boards. So, their cadre of trained technicians and so on suffered terribly. I think that that probably explains why in the area of shipbuilding, as an example, they

have not built as many ships as they were physically capable of building.

Senator PROXMIRE. I recall—and perhaps this is grossly in error, but it is a spectacular comparison and gives some indication of the military potentiality of the Chinese—that their GNP is about the equivalent of that of Italy.

Mr. ROMANCE. It is in the area of \$300 billion. Yes, sir.

I'm sorry, though, I don't know what Italy's might be.

Senator PROXMIRE. That is probably larger, but it is dwarfish as compared to ours, which is about \$1.8 trillion.

Mr. ROMANCE. Senator, would you allow me to pass on an interesting statistic in light of what you were discussing earlier about demographic trends in the U.S.S.R.?

[Senator Proxmire nods affirmatively.]

Mr. ROMANCE. As it relates to the military, each year Peking conscripts 800,000 youth between the ages of 18 and 24 for entry into the People's Liberation Army. That is drawn from a pool of 50 million Chinese youth in that age group, 18 to 24. So, if one compares demographic trends in China with those in the Soviet Union, I submit and suggest that it might add to Soviet concern.

Senator PROXMIRE. Unfortunately I find I have to go to the floor. They need me over there right now.

I want to thank you, General and gentlemen, for a superlative briefing. It has been most informative. You have done a fine job. You are very, very forthcoming and we deeply appreciate it.

We would appreciate it, General, if you would work to provide that sanitized summary as soon as is convenient for you.

General WILSON. Senator, may I say, and I can say this since I am retiring shortly, and hope I should not be misunderstood, that it is a very salutary experience to work with you, sir. It is also intellectually a great pleasure.

Senator PROXMIRE. Thank you all very, very much.

The subcommittee stands adjourned.

