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DEPARTMENT OF THE AIR FORCE
42D AIR BASE WING (AETC)
MAXWELL AIR FORCE BASE ALABAMA

September 30, 2014

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Mr. John Greenewald
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Dear Mr. Greenewald

This is our final reply to your August 13, 2014 Freedom of Information Act (FOIA) request, (number 2014-06247-F) for a copy of Soviet War Survival Preparations. We processed your request under the Freedom of Information Act. There are 48 pages which are fully releasable; one page is partially releasable in accordance with the following exemption:

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Secretary of the Air Force
THRU: 42 CS/SCOK (FOIA/PA)
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Maxwell AFB AL 36112-6334

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ANDREA D. TULLOS
Colonel, USAF
Commander

Attachment
Soviet War Survival Preparations

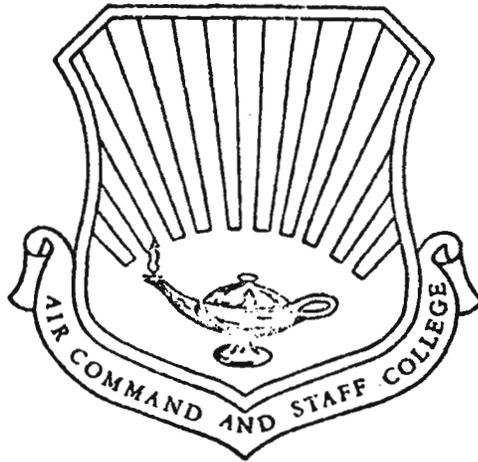
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There has been a marked increase in Soviet war survival preparations since the Strategic Arms Limitation Talks of 1972. The apparent motivation behind these preparations is a desire by the Soviets to attain a strategic superiority that effectively defeats the United States strategy of "assured destruction." This study examines the U.S. and Soviet views of assured destruction, U.S. and Soviet views on civil defense, and the implications of current Soviet preparations in the field of war survival. The study concludes that the Soviets are attempting to thwart U.S. strategic goals through their full scale use of war survival measures.

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ABSTRACT

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TABLE OF CONTENTS

	Page
ABSTRACT	ii
Chapter	
I. INTRODUCTION.	1
Civil Defense	
Assured Destruction	
Perceptions	
Objective of the Study	
II. ASSURED DESTRUCTION	8
Assured Destruction--U. S. Position	
Credibility	
Assured Destruction--USSR Position	
III. U.S. CIVIL DEFENSE.	17
Current Civil Defense Policy	
IV. SOVIET CIVIL DEFENSE.	22
Soviet Civil Defense History	
Current Civil Defense Measures	
Training	
Post-Attack Recovery	
Civilian-Military Interaction	
Current Status	
V. IMPLICATIONS	34
U.S. Lack of Commitment	
Soviet Doctrine	
Essential Equivalence	
Russian Capability	
VI. CONCLUSIONS AND RECOMMENDATIONS	43
BIBLIOGRAPHY	46

CHAPTER I

INTRODUCTION

The Soviet Union is engaged in a massive program to protect its population, industry, and military-economic base from the cataclysmic effects of a nuclear war. To accomplish this feat they have undertaken the largest and most comprehensive war survival program in the world. The cornerstone of their war survival program is based on civil defense, for the Soviets believe that civil defense is a factor of strategic importance in securing the defense of Russia:

. . . the preparation of the country's rear for defense against means of mass destruction has become, without a doubt, one of the decisive strategic factors ensuring the ability of the state to function in wartime, and in the final analysis, the attainment of victory (17:53).

Concern for the defense of the Russian population was evident as early as 1920, but it was the subsequent German invasion of Russia during World War II that instilled in the Russian leaders the importance of defending the people. Lenin's dictum that, "the first productive force of all mankind is the worker, the

toiler. If he survives, we shall save and rebuild everything," is still considered the political foundation on which Russian civil defense is based (5:249).

Civil Defense

Civil defense has become very much a part of Soviet life; it involves nearly all segments of the entire population, the economic system, and state activities. The Soviets have developed and implemented population protection methods ranging from large, complex underground shelters to simple one-person dugouts. Their industrial base has been dispersed--geographically spread out to preclude a concentration that would render a whole industrial segment being lost during an attack. Towns and cities have been architecturally designed to reduce damage from blast, fire, and shock wave. Roads and railroads are constructed to provide a redundant system around and through areas of industrial and population concentrations in order to forestall transportation bottlenecks. Mass training of the population is taking place, with exercises and group instruction involving complete towns and factory complexes. A strong civil-military combination exists with mutual aid and training programs designed for maximum participation. Former U.S. Ambassador to the Soviet Union, Foy D.

Kohler, states:

The Soviet [civil defense] program represents a comprehensive "package" wherein population survival measures are combined with a long-run program of the dispersal of key industries; underground and otherwise hardened industrial sites; hardened facilities for protecting the political leadership and its nationwide command and control structure; and hardened facilities to preserve communications and command and control operations within varied individual elements of the wartime armed forces posture (17:xii).

Civil defense, written off in the United States in the early 1960s as ineffective, is now being expanded in the Soviet Union at a cost of more than a billion dollars annually (9:6).

Assured Destruction

A dichotomy exists between the United States and the Soviet Union in their perceptions of nuclear war. The United States is currently an advocate of the "assured destruction" theory of nuclear deterrence and defense. The prime objective of U.S. nuclear deterrence forces has been to eliminate Soviet incentive for a strike against the United States or the North Atlantic Treaty Organization (NATO). The U.S. strategy holds that if one of the two superpowers launched a preemptive first strike nuclear attack, the attacked state would have enough delivery vehicles and weapons remaining to

launch a counter-strike which would insure the destruction of the attacking power. Acceptance of the "assured destruction" theory therefore would rule out any advantage of a surprise attack by either country.

The Soviets do not agree with this theory. Soviet political and military leaders regard the concept of assured destruction as inherently less than foolproof, recognizing the finite possibility that deterrence could break down. This could happen either through mistake, inadvertence, or through a process of gradual crisis intensification. The Russians, accordingly, see they must prepare for the eventuality of nuclear war, whatever the relative East-West strategic balance (25:123). Russian disagreement with the theory of assured destruction also gives plausibility to their current war survival measures.

War survival lends essential credibility to the Soviet war-fighting and deterrence posture because, according to the Soviet view, no country can rationally threaten another with nuclear war if both know that such a war spells suicide for the initiator of the threat (17:22).

The Soviets take the position that nuclear war is merely an extension of conventional war, and that a nuclear war can be fought, and even more importantly, fought and survived. The Soviets feel that with the

precautions and preparations they are taking, they can maintain a viable society after a nuclear conflict, and emerge as the victor in a war fought against the United States or any other nuclear power.

Perceptions

As the difference between Soviet and U.S. perceptions of nuclear war theory become clearer, the element of war survival has taken on renewed importance. The implications of Soviet preparations to defend their country, people, and economy are only now being realized by some military and civilian strategic planners in the United States. Yet, the Russian civil defense effort was pointed out as early as the 1950s by noted author Herman Kahn:

One of the most important and yet the most neglected elements of the retaliatory calculation is the effect of the Soviet civil defense measures. The Soviets are seldom credited even in calculations by experts with even the most simple and primitive civil defense preparations or capabilities (21:131).

Any quantitative summary of the strategic balance between the forces of the United States and those of the Soviet Union must be complemented by more than the study of civil defense preparations. However, the consideration of war survival as a prime element of Russian

strategy is given renewed importance by the new emphasis on the possibility of fighting a "limited nuclear war." As U.S. policy shifts from fighting a total war to fighting a limited nuclear war, the implications of the Soviet war survival preparations become even more ominous. It is becoming increasingly significant to the United States that the Soviet Union is attempting to develop the capability for fighting and winning such a war. Neither detente nor the Strategic Arms Limitation Talks (SALT) seem to have decreased this Russian drive for strategic superiority.

The Soviets are greatly expanding their level of effort and investment in civil defense programs, and are rapidly improving their state of readiness in all other military areas. At the present time, Soviet war survival is a major state activity, involving all levels of the Communist Party organization, the government, economic and public organizations, and every citizen. The Russians are expanding preparations for their survival of a nuclear war, while the U.S. position has been sporadic and limited.

It is not the purpose of this paper to "cry wolf" in setting forth the implications to the United States of Soviet preparations. It is, however, the position of

this paper that current and long-term efforts by the Soviets have added a dimension to the overall picture of nuclear stability that has been either overlooked or simply not been given sufficient attention by the United States civilian and military planners.

Objective of the Study

The purpose of this paper is to examine and analyze, on the basis of current unclassified information, the implications of increasing Soviet war survival preparations. This analysis will be accomplished in an attempt to influence future decisions on the validity of assured destruction as a viable military strategy. To this end, past and present Soviet civil defense preparations in civil, military, and industrial areas will be considered, and those factors which relate to this question will be presented and analyzed.

CHAPTER II

ASSURED DESTRUCTION

Assured Destruction--U. S. Position

The United States Military Posture statement for fiscal year 1977 authored by the Chairman of the Joint Chiefs of Staff, General George S. Brown, states,

The United States and the USSR perceive each other as the primary potential security threat to each other. These perceptions of threat stem from fundamental differences between the two nations as to the nature, goals, and roles of men, government, and society. These basic convictions are not likely to change soon (7:8).

The United States has stood firm in taking the view that no possible U. S. military posture or politically feasible defense could deny the Soviet Union a capability to wreak catastrophic destruction on the United States or its allies. The stated purpose of our strategic forces is not to make a Soviet attack on the United States or its allies physically impossible, but to make the consequences so unacceptable for the Soviet Union that Soviet leaders will be dissuaded from ever launching that attack. The U. S. Senate Committee on Foreign Relations stated this policy:

For more than ten years strategic nuclear weapons policy has been dominated by a recognition that: (1) neither the U.S. nor the Soviet Union can protect its population and industry from an attack by the other side even by using its entire inventory of weapons in a preemptive first strike; (2) once a nuclear weapon is detonated on the territory of either the U.S. or the U.S.S.R., there would be substantial probability that the exchange could not be terminated before both nations were destroyed. However unpleasant this "balance of terror" may be, there has never been any real prospect of changing the situation in a fundamental way by purchasing new weapons or by adopting new tactics (10:62).

Current U.S. defense strategy has evolved from the 1950s when the United States enjoyed total nuclear superiority in both weapons and delivery systems. With the United States well in the lead, "massive retaliation" became the espoused doctrine. John Foster Dulles, then Secretary of State, declared, "If there is another attack anywhere on one of our allies, we will immediately retaliate with a massive nuclear strike on the real source of the new aggression." (30:21)

As the Soviet Union's nuclear forces developed, this concept of massive retaliation became less and less plausible to U.S. security planners. It became increasingly clear that a large and indiscriminate retaliatory attack on the Soviet Union would probably entail the destruction of the United States and Western Europe as

well. Thus, in the early 1960s, the so-called "flexible response" strategy appeared. This concept envisaged the preparation and execution of various types of wars ranging from unconventional to full-scale nuclear war, with the response tailored to the threat. In accord with this new strategy, the U.S. began an increase in conventional arms. This shifting in the world power balance was recognized by Secretary of Defense Robert S. McNamara who voiced the change from massive retaliation to one of "mutually assured destruction":

Mutual assured destruction should be based on each side's certain knowledge that it could kill enough of the other side's people and shatter enough of its industry to make nuclear war an unacceptable option (27:14).

The succeeding Secretary of Defense, Melvin Laird, further quantified Mr. McNamara's policy with a list of four objectives for force planning:

(1) Maintaining an adequate second strike capability to deter all-out surprise attack on our strategic forces.

(2) Providing no incentive for the Soviet Union to strike the United States first in a crisis.

(3) Preventing the Soviet Union from gaining the ability to cause considerable greater urban/industrial destruction than the United States could inflict on the Soviets in a nuclear war.

(4) Defending against damage from small attacks or accidental launches (10:27).

Mr. Laird's objectives did not represent a major change from the earlier policies, but did represent another step away from the massive retaliation theory of the 1950s. During the 1970s, the United States strategic theory has further evolved into a pragmatic realization that our defense must be based not only on the threat of meeting any provocation with a large nuclear response, but that it must also be based on a concept of flexibility in nuclear options. The United States and the Soviet Union have now reached a nuclear parity of sorts, and the stated position is now known as "essential equivalence." This new strategy recognizes that deterrence of a Soviet conventional attack must be based on improved conventional defenses and not completely on an early resort to nuclear weapons. It also realizes that our nuclear force must be capable of deterring limited as well as massive Soviet use of nuclear weapons.

However, even with this concept of flexibility, the basis of U.S. strategic policy remains one of deterrence through the possession of an assured destruction capability; that is, the ability to inflict an unacceptable amount of damage on the Soviet Union in the event of a first strike by Soviet strategic forces. In 1974 Secretary of Defense James Schlesinger said,

Neither the USSR nor the United States has, or can hope to have, a capability to launch a disarming first strike against the other, since each of us possesses, and will possess for the foreseeable future, a devastating second-strike capability against the other. This almost certainly will deter the deliberate initiation of a nuclear attack against cities, for it would bring inevitable retaliatory destruction to the initiator. Thus, this basic deterrent remains intact (11:30).

The concept of assured destruction has been the primary element used to justify the development of the "triad" of strategic arms and forces the United States foresees would be able to survive a Soviet attack and still retain a potential for attacking the Soviet Union. The "triad" consists of missiles deployed on highly survivable Polaris submarines, intercontinental ballistic missiles emplaced in blast resistant underground silos, and a sophisticated bomber force capable of reaching and attacking the Soviet Union. The U.S. strategic concept of assured destruction may prove to be an untenable theory if the Soviets continue with their development of civil protection.

Credibility

The essence of deterrence lies in the development of strategies and forces that can provide a credible response in the event of direct military assault. The leadership of the United States feels that by maintaining

the "triad" of weapons we can maintain this required credibility, for in the absence of a credible response, deterrence becomes a facade. The issue of what is a credible response is a complex and frequently controversial subject. Deterrence depends on the psychological state of mind of both adversaries, and on how they interact with each other. A deterrent philosophy, to be effective, lies not in the amount of destructive force that theoretically can be delivered, but it lies in the probability and credibility that it can be delivered. One of the key implications of Soviet civil defense lies in its credibility, not only to the Soviets but to the United States.

Assured Destruction--USSR Position

A significant difference in philosophy regarding nuclear warfare exists between the United States and Russia. The U.S., as stated previously, is of the opinion that nuclear war between the two countries would result in total destruction of both societies, therefore the nuclear balance holds each nation in check. The Soviets take the opposite view--that nuclear war is like any other war and can be fought and survived. John Erickson, writing on the Soviet-American strategic relationship states,

Massive air defense systems and the vigorous civil defense program do not suggest that the Russians are prepared to accept the destruction of all of Soviet society in a nuclear conflict. This suggests that for all the shared language of "mutual deterrence," the U.S. and Soviet perceptions of the basis for strategic stability tend to differ and may be altered by the impact of new technology (22:13).

Soviet writings and publications show that Soviet leadership neither shares the U.S. concept of assured destruction nor believes that nuclear warfare necessarily means mutual annihilation. V. Chuykov, writing in the Civil Defense Handbook of the Soviet Union, gives one point of view. "Although the discussed means of destruction are called mass means, with knowledge and skillful use of modern protective measures, they will not destroy masses of people, but only those who neglect the study, mastery and use of these measures." (8:217)

The Soviet war survival capability aims at frustrating the assured destruction posture of the United States, thereby denying the U.S. an effective deterrent to any Soviet action. It also acts to deny the U.S. the ability to penetrate and destroy the Soviet Union in case of actual war. The Soviet emphasis is on survivability and on victory in a nuclear war. The Soviets consequently believe that a nuclear war could take place with a "winner" and a "loser," and that the winner of such a

contest would be the nation which is best prepared for the conflict. Benjamin S. Lambeth, a research staff member of the Rand Corporation, states, "Soviet leaders assume that meaningful victory in nuclear war is indeed possible if the correct strategy is implemented and followed consistently." (25:121) Herman Kahn was one of the first to recognize this position when he wrote in the 1960s, ". . . the limits on the magnitude of the catastrophe seem to be closely dependent on what kinds of preparations have been made, and how the war is started and is fought." (21:10)

If the Soviets were to believe in the U.S. concept of assured destruction, then their war survival preparations would be nothing more than a sham defense. This does not seem to be the case, as Soviet civil defense doctrine views the protection of the Russian people as one of the most essential factors in the preservation of Soviet national power. However, the Russians do acknowledge that in a nuclear conflict, population, industrial, and economic losses would be high; but with the proper preparations, they feel they can survive as a nation:

Soviet sources assert, however, that while a nuclear strike on an unprotected city can inflict up to 90 percent casualties among its residents, with evacuation and dispersal, the losses will not exceed five to eight percent (or some three to four percent of the total Soviet population). (17:87)

The Soviet insistence on the possibility of nuclear war and their belief that assured destruction is not the only alternative is accompanied by an emphasis on the necessity to further strengthen Soviet military capabilities and war readiness: ". . . to prepare the population and members of the armed forces for the actualities of a nuclear conflict. . . ." (10:10) The Soviets believe that the capability to destroy the enemy is not singularly adequate for attaining victory in a nuclear war. One more important step must be taken; it must be paralleled by a capability to survive such a war.

CHAPTER III

U.S. CIVIL DEFENSE

A main element of war survival is civil defense, and as the Soviet Union and the United States have opposing views on nuclear war, they also have opposing views on the nature of civil defense. Due to this difference in philosophies, we find a lack of civil defense preparations in the United States while at the same time civil defense is flourishing in the Soviet Union. Paul Nitze, writing in Foreign Affairs on this subject, states:

In the Soviet Union, the view has been quite different. Perhaps initially because of the U.S. monopoly, Soviet leaders from the outset discounted the impact of nuclear weapons to their people. But as the Soviet nuclear capability grew, the Soviet leaders still declined to depict nuclear war as unthinkable or the end of civilization. On the contrary, they directed and still direct, a massive and meticulously planned civil defense effort, with expenditures that run at approximately a billion dollars a year (compared to U.S. civil defense expenditures of approximately \$80 million a year)(31:211).

In 1960 Herman Kahn foresaw the possibility that a nuclear war between the U.S. and Russia need not be the end of civilization as we know it. He stated in his book, On Thermonuclear War:

It is the thesis of this lecture that if proper preparations have been made, it would be possible for us or the Soviets to cope with all the effects of a thermonuclear war, in the sense of saving most of the people and restoring something close to the prewar standard of living in a relatively short time. But there is no reason to believe this will be true unless both nations investigate the problem more thoroughly than has been done so far, and then take the necessary preparations (21:71).

The origin of civil defense in the United States may be traced back to August 1916 when Congress created the Council of National Defense. The Council underwent varying degrees of importance and funding until 1951 when President Truman, realizing a need for a more comprehensive plan, signed into law the Federal Civil Defense Act of 1950. In August 1961, the Secretary of Defense was given responsibility for civil defense of the United States. This responsibility was then transferred to the Secretary of the Army in 1964. The latest significant change in the civil defense structure occurred in 1972 when then Secretary of Defense Melvin Laird established the Defense Civil Preparedness Agency and disbanded the Office of Civil Defense within the Army. This new agency took responsibility for developing an effective civil defense program, and for preparing assistance and guidance policy to help state and local governments achieve total disaster preparedness (12:1, 2).

The United States has throughout the years maintained only a very modest civil defense program, with the last significant upsurge in interest and funding occurring in the 1960s. The apathy concerning civil defense dissolved rapidly during the Berlin crisis of 1961. The public interest in civil defense was sustained during and shortly after President Kennedy's confrontation with the Soviet Union over their attempt to send missiles to Cuba.

During the Cuban missile crisis in October, 1962, the nation and its leaders felt for several days the reality of the nuclear threat under which we live. The public exhibited a sudden concern about civil defense; where does my family go for protection if there is an attack? (42:72)

If war had broken out after the 1962 Cuban missile crisis, said President Kennedy, the United States and the Soviet Union would have suffered 150 million fatalities in the first eighteen hours (27:13).

The public support for civil defense abated soon after the period of crisis was over, however, and today the United States has only minimal preparations for survival of nuclear war.

Current Civil Defense Policy

The current U.S. civil defense policy was stated in a subcommittee report to the U.S. Senate in 1975. It details two major objectives concerning nuclear protection, in addition to the general goal of "protecting the

population." The two stated options are,

The first option, which would be designed against the threat of a Soviet counterforce attack would involve the relocation of a population from high risk areas near key military installations

The second option, which would be designed against an all-out Soviet nuclear attack, would involve the evacuation of the population from cities, as well as from near key military installations (10:37, 38).

Both of the above options, relocation and evacuation, rest on the basic assumption that a period of increased tension between the two superpowers would occur. This period of increased hostilities is postulated to last from a few days to several weeks before actual hostilities start. The possibility of a Soviet preemptive strike, with only a few hours warning, is not addressed in the plan. In Secretary of Defense Schlesinger's civil defense plan, the Secretary argued, "that in a crisis situation there will be ample time--days or weeks while diplomats debate matters--to evacuate citizens from the cities to rural areas, mines and caves." (27:15)

The evacuation and relocation options present at least two serious problems, the first being the difficulties involved in a mass evacuation from American cities. Secondly, the Russians, observing an evacuation taking place, may perceive that diplomacy has failed and

therefore an all-out attack by the United States is imminent; so why not take the initiative and preemptorily start the attack? At the very least, implementation of an evacuation program by either country would lead to an increase in international and domestic tensions.

CHAPTER IV

SOVIET CIVIL DEFENSE

Modern Soviet civil defense is a multi-faceted program. It encompasses such things as sheltering and evacuation of the population, voluntary and compulsory training, post-attack recovery and repair, measures designed to restrict economic damage, and civil-military interactions.

Soviet Civil Defense History

The Soviet preoccupation with war survival preparation has a history that dates back to the days of the Soviet revolution. Since 1931 they have had programs in effect to disperse their industrial base, and during World War II this dispersal was carried out extensively:

In the course of that war, the Soviet Union evacuated large numbers of civilians and industrial plants from the war zone, including at least a partial evacuation of the largest Soviet cities in European Russia. However, this movement was carried out over a period of months and its primary purpose had been not so much to protect the population from German fire as to prevent their capture by the advancing German armies (17:80).

Soviet philosophy regarding shelter construction throughout the years has seen the constant construction of new facilities and the upgrading of older shelter sites. Shelter construction has also been marked by surges and declines in funding as the official policy towards sheltering the population met the economic reality of the costs involved.

Following World War II, Soviet civil defense was concerned mainly with the sheltering of the population as the primary means of protection. Thoughts were then in terms of conventional warfare and the related means and methods of protection. In the 1950s the realities of a nuclear war were fully realized by the Soviet strategists. The development of large yield nuclear weapons and the increased ability of the United States to deliver them forced the Soviet planners to face the problem of dealing with a nuclear threat. The Soviets also came to the realization of how costly it would be to their economy to build shelters for the entire population. This fiscal awakening caused a significant change in their previous goal of sheltering the total urban population. A tradeoff was made, and a switch to a dual concept of partial sheltering and partial evacuation of the population was instituted. It was reasoned

that a timely evacuation of the unsheltered population, especially from the large cities, would significantly reduce the number of casualties.

. . . previous plans had provided that the urban population was to remain where it was. However, the people to be evacuated are apparently to be limited to certain groups, such as children, aged persons, and invalids; most others are to stay in the cities (21:441, 442).

During the 1960s, the economics of trying to provide shelter for even a majority of people was determined to be too expensive, and consequently, new shelter construction was reduced to only industrial sites and new public buildings.

In 1972, the Soviet philosophy on shelters for the entire population again changed direction. General-Colonel Altunin, head of the Soviet civil defense organization, asserted that "it is essential for civil defense to be constantly prepared to shelter the entire population in protective shelters," and:

Modern shelters must protect against all harmful effects of nuclear and chemical weapons. Under present conditions, when the accuracy of delivery of nuclear weapons has sharply increased, while their yield has enormously grown, civil defense will seek to provide the entire population of cities and installations, which will be the most likely targets for a nuclear strike, with such shelters (17:119)(emphasis added).

Current Civil Defense Measures

Present indications are that shelter construction in the cities and construction of fallout shelters in the rural areas has been stepped up, and that sheltering and evacuation of the population continues to be of major Soviet concern. Currently the Soviets are continuing to develop both a large scale pre-attack and dispersal plan as well as continuing to fund a large-scale sheltering program. Soviet economic doctrine stresses the maintenance of essential production, even during wartime. Therefore, a distinction by the Soviets has been made between nonessential people and those workers required for essential production. The "essential" workers are to be either dispersed to outlying areas or sheltered at the production site after their work shift. The non-essential workers and their dependents will be evacuated to rural areas (17:86). Effectiveness of the evacuation of a population depends upon a number of complicated estimates such as advance warning, estimate of target potential, transportation, and surrounding geographical areas. Based on these calculations of probable destruction, a safe distance for evacuation can be mathematically calculated. According to Soviet publications, pre-attack urban evacuations and dispersal may reduce losses

from nuclear attack to five to eight percent of the urban population (e.g., 7.5 to 12 million out of an urban population of 151 million)(31:212). According to these calculations, losses could conceivably be held below the estimated 20 million suffered by the Soviet Union during World War II.

The Soviets can adopt a rural fallout program for almost no cost. Most peasant houses have earth walls 2 to 3 feet thick. In addition, most Russian villages have large refrigeration cellars, which could easily be adapted to provide quite adequate fallout protection (21:99).

Soviet civil defense manuals suggest that the evacuation of cities and towns is expected to be carried out in approximately 72 hours. This would generally be within the means of Soviet transportation capability. Since 1974, however, civil defense authorities have sought to expedite the rate of evacuation by requiring the younger workers and residents to walk out of the target cities in organized groups (17:21).

Training

Soviet authorities have always placed great emphasis on the need to train the entire population in civil defense procedures and methodology. They believe that

such training is essential to assure that the population will know what to do, when to respond, and how to act in the event of an attack or post-attack damage limitation situation. They assert that such knowledge will significantly reduce casualties, will boost morale, and will help prepare the population psychologically for the extreme destruction of a nuclear war (3:9).

It was also during the early 1960s that the difference in training philosophy between the United States and the Soviet Union began to be voiced:

A different view seems to have been held by Khrushchev and the Soviet military. They agreed that war would be horrible, but at the same time they argued that this was no reason for the Soviet Union to drop its guard; given sufficient preparations only the capitalists would be destroyed. With some important modifications their views seem to have prevailed (21:10).

Prior to the 1960s the Soviets kept the nuclear aspects of war fairly low key. As they began to acquire a credible nuclear capability, they also began to conduct training courses in nuclear survivability. Soviet emphasis is now concentrated on the practical aspects of training, with courses conducted in lifesaving, recovery, and rescue work. Practical training of the population is considered very important in teaching the people what to expect and how to act in a disaster situation. It is

felt that training will reduce the possibility of panic and insecurity among the population. Individual and small group training sessions are conducted, with practical demonstrations taking place and tests given to reinforce the knowledge gained. These smaller groups are then brought together in larger formations with the desired end result being a complete exercise. Use is being made of training villages and simulated areas of destruction with totally integrated factory, industry, or even city-wide participation striven for (17:113).

Soviet writings assert that the inclusion of civil defense training will contribute to the reduction of casualties among the population, limit collateral damage, improve the prospects of survival of industry, and aid in rescue and restoration work (1:3). Marshal A. A. Grechko, a member of the Politburo of the CPSU Central Committee and the Soviet Minister of Defense, stated his thoughts on civil defense as:

. . . the first and most important area is moral, political, and psychological preparation . . . to teach them to display self-control, persistence, and courage during critical moments--these are the most important tasks of party organizations, political agencies, and the entire management and command staff of the country's civil defense (3:9, 10).

Post-Attack Recovery

To facilitate post-attack recovery and repair, the Soviets are relying on urban planning, dispersal, redundant construction of vital industries, and dual lines of communications and vital facilities.

Urban planning is to encompass the following measures: restriction on the growth of large cities and the reduction of the population density in them; development of a network of satellite towns and where possible, removal to them of important or potentially dangerous industrial plants from the cities; construction of wide thoroughfares, creation of greenbelts and park strips to facilitate the evacuation of the population and the access to the disaster area by civil defense forces as well as for the purpose of acting as fire-breaks; building of protected water reservoirs to help fire-fighting, and of highway and railroad bypasses around the cities (17:142).

There is also a growing emphasis on decentralization; the dispersal of large metropolitan centers into a number of small communities, the locating of factories outside of present industrial centers, and the stretching out of likely nuclear targets into extended areas which cannot be covered by one nuclear weapon. The Soviets also have the advantage of redundancy of industries. This is due to the utilization and integration of the Warsaw Pact countries which use the same arms and equipment. This redundancy allows the Russians to plan as

backup production facilities the industries of their satellite countries.

The Soviets view the maintenance of essential industrial production and the concept of conducting large-scale repair and restoration operations after a nuclear attack to be of prime importance. Soviet post-attack repair and restoration plans rest on the assumption that it will be possible to assure either the survival of significant elements of the economy through defensive means, or to limit the damage they may suffer in an actual attack. The Soviets have instituted a number of measures designed to decrease the damage to industrial areas. These include site hardening, reduction of secondary damage situations, preparation of wartime work schedules, and creating a plan for the rapid restoration of interrupted production. In conjunction, they have created a reserve supply of raw materials, fuel, machinery, and equipment (17:147).

Civilian-Military Interaction

In 1972, as an indication of the importance placed on civil defense, the Russians placed it on an equal ranking with the other military services of the Soviet armed forces. In the Soviet view, civil defense is integrally connected with the overall Soviet defense

capability. Soviet sources, since the signing of SALT I in 1972 have listed Civil Defense Troops on a par with the other five Soviet services--Strategic Rocket Troops, Ground Troops, Troops of National Air Defense, Air Force, and Navy. Since October 1972 civil defense has been the responsibility of the Ministry of Defense, and the Chief of Civil Defense is a Deputy Minister of Defense directly under Marshal A. A. Grechko (34:29). Supervision of Soviet civil defense is exercised by the Council of Ministers of the USSR. Therefore, Soviet state policies determine the aims and tasks of the civil defense program. The interaction between civil defense agencies and their counterpart military agencies are continually becoming stronger and tighter. The number of Soviet troops assigned to civil defense is now thought to be about 75,000, including 56 active duty general officers under the command of General Colonel A. T. Altunin, a member of the Soviet Central Committee (40:27).

The combination of civilian and military interaction occurs in many areas throughout the civil defense system, but the primary areas are in the planning and conducting of joint training. Soviet Civil Defense Chief, General Colonel Altunin, in a statement commenting on this interrelationship, stated,

Civil defense formations should be able to operate together, hand-in-hand, with Army and Navy subunits. While helping one another they will be able to successfully fulfill their assigned missions. This means that extensive cooperation between installations and military subunits in creating and using physical facilities for training, in conducting training periods and exercises, and in organizing party political work and civil defense propaganda are urgent missions (2:36, 37).

Current Status

The primary job of the civil defense organization consists of the defense of the entire Soviet population against nuclear attack and the effects of an attack. Specifically, Soviet civil defense focuses on preparing for and conducting dispersal and evacuation of the population from cities, organization of an early warning system, and the acquisition of group and individual means of protection.

During 1973 the CPSU Central Committee and the Soviet government directed an organizational restructuring of the civil defense program. The new program was designed to improve all areas of civil defense, concentrating on new forms of training for defense against modern armament. The new training program also covered areas of administration, communications, logistics, civil-military liaison, and nonmilitary civil defense formations (2:22).

Since 1973 the Communist Party and the Soviet government have continued to increase efforts to further strengthen the readiness of the civil defense program. After the signing of the Helsinki Agreement in 1976, which concluded the Conference on Security and Cooperation in Europe, General Altunin noted that they were taking "necessary steps" to further strengthen and support the high state of readiness that has been achieved in both the armed forces and the Soviet civil defense system (1:2).

CHAPTER V

IMPLICATIONS

The implications of the Soviet war survival preparations are numerous, and may be considered ominous. In considering these implications, this chapter will address the lack of U.S. commitment, Soviet doctrinal views, and the credibility of Soviet civil defense preparations.

The question of why the Soviets are going to such an expense and manpower drain must remain foremost in our thoughts. If the Soviets truly believe that a nuclear war can be survived, then their preparations are in line with past teachings and thoughts. If they do not believe that a nuclear war can be survived, or that the price to be paid would be too great, then the preparations must be looked at in a different light. In the first case, where they actually believe in the probability of nuclear survival, then the war survival preparations could be considered as defensive measures, designed to thwart a nuclear attack by the United States. In this case Soviet civil defense could be considered

an integral part of a complex system of Soviet defensive and offensive measures. In the second case, where it could be postulated that the Soviets don't really believe that a nuclear war could be survived, then the question comes down to one of credibility. In world opinion the Soviets would have the most credible nuclear force, therefore, the strongest position in case of international conflict or crisis. Over a period of time this could cause an erosion of American strength and the commitment of American allies.

U.S. Lack of Commitment

A great deal has been written about the impact of the Cuban missile crisis upon the evolution of the two separate strategic doctrines. American strategy during and after this period shifted more toward the avoidance of nuclear war. The U.S. position was to rely less on nuclear capabilities while building up the role of conventional forces. At the same time the Soviets, after suffering their humiliation at the hands of the United States during the Cuban blockade, began to concentrate more on the problems of nuclear strength and the means required to reduce American superiority. It was also during this period that the United States began rejection of the validity of civil protection for the U.S.

population.

The United States now essentially has no civil defense system. This lack of protection is a combination of two basic factors. The first factor is the lack of public support for such a program. In the United States, the political desires for a strong civil defense program are not evident at the present time. The attention given to civil defense by the Soviet Union perhaps cannot be duplicated in a free society such as ours; however, this does not mean that prudent planning should not attempt to prepare ahead of time for such a contingency. The Soviet leadership has physically and psychologically prepared its people for the possibility of nuclear war. Western leaders have not. The second factor relating to the American lack of civil protection is based on the fact that we do not protect the American people as an implied assurance to the Russians that we believe in the theory of assured destruction. We have left the American people unprotected, acting as hostages to prove to the world that we will not initiate a nuclear war.

Soviet Doctrine

To the Soviets, war is a political act that is carried out in the continuing process of struggle between the communist world and the capitalist societies. To

the Soviets, modern warfare does not change the basic teachings of Marx and Lenin. Soviet military strategy has always been conditioned by the teachings of these two men. To better understand the role that civil defense plays in the Soviet concept of war survival, it is necessary to return to their basic doctrinal teachings. Lenin, in his writings, formulated the essence, character, and peculiarities of modern war for the Soviets. He also pointed out the ways and means of mobilizing all the national forces for the struggle against the enemy, defined the overall trends of Soviet military development, and laid the foundation of present Soviet military science (29:23). Soviet civil defense preparations viewed as a continuation of Marxist-Leninist teachings are in line with those teachings and do not necessarily indicate a totally new facet of Soviet strategy. The Soviets have been strong advocates of war survival preparations since their inception as a nation. The one disquieting factor that must be raised, however, is the strong emphasis civil defense has received from the Soviets since the completion of the SALT talks of 1972. It is best to remember that Soviet doctrine is one of continuing class struggle, stressing rivalry and confrontation, though not necessarily direct military confrontation.

Essential Equivalence

The Soviet Union, in comparison with U.S. forces, has now achieved essential nuclear equivalence (33:6). The Soviets have never deviated from their long-term goal of becoming militarily stronger than the United States. The picture of Russian nuclear strength has evolved from a position of nuclear inferiority through the stages of nuclear parity and is now reaching a point where they may be attaining nuclear superiority. Projecting the current trend of Soviet nuclear acquisitions forward a number of years shows the USSR significantly ahead of the United States. With this capability, the possibility of a nuclear war initiated by the Soviet Union becomes a distinct possibility. It is difficult for most people to believe that any nation would initiate a thermonuclear war against an opponent capable of retaliation, no matter what capabilities it had and no matter how much it was provoked. Yet today, the Soviet Union is adopting such programs. As the Soviet civil defense program becomes more effective, it tends to destabilize the deterrent relationship between the two countries. No longer can the United States hold a significant portion of the Soviet population as a hostage to deter a Soviet attack as the Soviets can do to the United States.

A decade ago it was obvious that the United States had a considerable nuclear superiority; today that fact is held in question by many. The Soviets, while pursuing detente, have not slackened in their efforts to increase their nuclear forces. Indeed, the buildup has been sufficiently aggressive to indicate that they would not stop at parity unless restrained by some such agreement as SALT limitations. In fact, there is every prospect that under the terms of the SALT agreements the Soviet Union will continue to pursue a nuclear superiority goal that is not merely quantitative, but designed to produce a war-winning capability. Further, there is a risk that such a condition, once achieved, would result in policies and actions that would undermine the present tense situation, with results that could only increase the danger of nuclear confrontation. It appears that the Soviet strategic policy will continue to be the pursuit of some degree of superiority over the United States, with a force designed to seize the initiative at the outbreak of war, and a capability designed to ensure survivability of the Soviet Union.

In August 1976 U.S. Secretary of Defense Donald H. Rumsfeld stated,

When all factors are considered, the net assessment is that parity in strategic nuclear forces exists today between the United States and the Soviet Union. However, the growing numbers and technological sophistication of Soviet strategic forces suggest that unless countered, the strategic balance that exists today could shift in favor of the Soviet Union in the period ahead (33:8).

Russian Capability

Soviet civil defense must be viewed as only a single facet of the Soviet buildup, a facet that is closely related to the total overall picture of Soviet military power. It is one of the means whereby the Soviets hope to gain their objective of neutralizing U.S. military capability.

A basic implication of the Soviet civil defense program lies in the credibility of the program. Credibility, as discussed earlier in this paper, is very much a psychological phenomenon. It relies on what people believe and perceive, not on what is or may be. If we believe that the Soviets have an effective, all-encompassing program that will reduce destruction of their industrial base, cut population losses to an "acceptable level," and allow them to achieve certain victory even if the United States were to initiate a first strike attack, then this very belief of ours will do a great deal for the Soviets toward gaining those

very goals. The essence of deterrence lies in the development of strategic forces and a strategy that together will provide a credible response, whether an attack takes place or not. The capacity to threaten a credible response is what makes deterrence effective. In the absence of this credibility, deterrence becomes a facade and may even invite aggression. Soviet military doctrine projects a credible external image of Soviet military power and thereby enhances the deterrent role and psychological effect of the Soviet strategic power in the eyes of U.S. experts. If the Russians do actually acquire an effective combination of civil and other defenses, they will have a decisive advantage at any bargaining table. Russia, with its growing war-survival capability, may conclude that the U.S. threat of massive retaliation has no credibility, and that it would not be used except as an act of sheer desperation. The Soviets may well determine that the United States' will to live up to its commitments has been too weakened, and consequently, they will take the risk of making tough demands based on the theory that they need not suffer a defeat. The Soviets' growing military and civil defense capability may well win important victories through sheer intimidation.

If a war should occur in which the Soviet Union and the United States were to engage in either a limited nuclear battle or an all-out nuclear exchange, it is probable that the country which is better prepared would be the victor, as survival depends heavily on previous planning and preparation.

As the U.S. concept of war moves further away from the idea of an all-out nuclear exchange and moves toward the possibility of limiting the destruction, the question of civil defense preparation becomes even more critical. Civil defense and military defense are simply two factors in the overall problem of national defense. If war becomes necessary, the two must work in conjunction to minimize the damage to the country so that, as a minimum, enough people and physical assets remain to reconstruct the nation. The Soviet Union, with a strong, active civil defense program is gaining an advantage over the United States that we may not be able to overcome.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Consideration of the facts and analysis presented in this paper has led to the following conclusions:

1. The Russians believe nuclear war is not unthinkable, and therefore, the Soviet Union is attempting to achieve clear nuclear superiority over the United States in strategic weapons and in war survival capability.

2. The Soviet Union is currently engaged in a massive civil defense program designed to protect its population and industry.

3. The Soviet civil defense program is creating an instability in the nuclear balance between the United States and the Soviet Union. This instability could give the Soviet Union the motive for a profitable first strike attack on the United States, with little fear of the U.S. counterstrike. It is conceivable that the Soviets could strike the U.S. military installations in a limited attack, and then hold the U.S. population as hostage to deter retaliation by U.S. forces.

4. While Soviet civil defense writings may contain a certain amount of propaganda, the overall war survival program lends an essential element of credibility to the total Soviet military posture.

5. If the trends in Soviet thinking continue to evolve along their present lines, the prospects for a military confrontation will continue to be present and ever-increasing.

6. Currently the United States does not have a viable civil defense program, and public opinion runs counter to achieving this goal.

Recommendations

1. The Soviet military force is a formidable opponent, and the Soviet threat can only be contained by a countervailing U.S. nuclear posture and strategy that provides a reasonable assurance that the Soviet threat will never be implemented. The United States must take positive steps to maintain strategic stability and high quality deterrence. To do this the United States must bring to bear its scientific and technological resources to increase its offensive strategic capabilities in a way that would counter the growing war survival capability of the Russians.

2. Civil defense preparations may determine the

balance of power in some future crisis. This crisis need not be a shooting war. Therefore, a renewed civil defense program in the United States could strengthen our ability to deter provocative actions on the part of Soviet policymakers, and would show the Russians our willingness and ability to retaliate to hostile actions if necessary.

3. U.S. military strategy may need to be reevaluated. Both our present and future weapon systems should be examined to see how effective they would be against a country with an existing or modified civil defense system.

4. An adequate deterrent posture must be maintained by the United States to insure that the Soviets realize that no matter how skilled or ingenious they are, an attack on the United States would lead to an unacceptable level of destruction to Soviet civil and military forces.

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