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STUDENT REPORT

BOOK ANALYSIS: THE ABSOLUTE WEAPON: ATOMIC
POWER AND WORLD ORDER

MAJOR MARK A. HOMRIG

REPORT #88-1265

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BOOK ANALYSIS: THE ABSOLUTE WEAPON: ATOMIC
POWER AND WORLD ORDER

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PREFACE

This paper analyzes The Absolute Weapon: Atomic Power and World Order, edited by Bernard Brodie, to establish whether this book still has merit as a guide for US nuclear policy. First, a biographical sketch of Brodie will be presented. Second, the historical perspective on state-of-the-art technology prevalent at the time of its writing in 1945, which is important in understanding the context in which the book was written, will be examined. Next, the book will be summarized. Lastly, four aspects of the book will be analyzed.

Major Gary Williamson provided the following biographical sketch on Brodie in the "Evolution of US Nuclear Strategy: 1945-1965."

Bernard Brodie was born in Chicago in 1910. He attended the University of Chicago where he received his Ph.D. in international relations in 1940. After graduation, he spent most of his career as an educator in various universities throughout the United States. From 1945 through 1951, he was Associate Professor and Director of Graduate Studies at Yale University. In 1946 he was a member of the faculty which organized and opened the National War College, and he later served on the advisory board of the College. From 1951 through 1966, he was a Senior Staff Member of the RAND Corporation (RAND standing for "Research and Development"). From 1966 until his death in 1978, he was Professor of International Relations at the University of California at Los Angeles. During his lifetime he wrote many influential books on navel strategy and nuclear strategy. The following is only a partial list of his best known works: A Guide to Navel Strategy; Sea Power in the Machine Age; Strategy in the Missile Age; Escalation and the Nuclear Option; and The Absolute Weapon. Although he was only one of many theorists who emerged during the so-called "golden age" of nuclear strategy, he was without question the one whose works have best stood the test of time.

In order to understand the time in which this book is written and what the authors based their assumptions on, it is important to put into context the technology of 1945. World War II had just ended and the US had a complete monopoly on atomic weapons. The carrier of these weapons was

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a B-29 bomber with reciprocating engines. Chuck Yeager did not break the sound barrier until 1947 and the first active jet-bomber wing of B-47s was not fielded until 1953. (8:160; 11:33) The transistor was invented in 1948 and the hydrogen bomb was first exploded in 1952. (8:160) The first intercontinental ballistic missile unit was not activated until 1958. (11:59) It is important to remember the historical context of technology when this book was written to understand the authors' frames of reference.

Chapter One is a quick synopsis of The Absolute Weapon, which provides a framework for the reader as a basis of understanding the entire analysis.

The four most significant aspects of this book, from a historical perspective, are as follows.

Chapter Two seeks to determine if Brodie's concept of deterrence was, and is, the basis for US nuclear deterrence policy since World War II.

Chapter Three explores Brodie's theory for conventional force requirements and whether it has been, and is appropriate, for the United States.

Chapter Four analyzes Arnold Wolfers' presumption of how the United States and the Soviet Union would conduct negotiations to settle their nuclear differences.

Chapter Five evaluates the book's expectation of a "bolt out of the blue" nuclear war with the Reagan administration's appraisal of the likelihood of a Soviet preemptive strike. Finally, a brief conclusion based on the analysis of this paper will be presented.

ABOUT THE AUTHOR

Major Mark A. Homrig is a Missile Staff Officer, currently attending the Air Command and Staff College at Maxwell AFB, Alabama. He began his Air Force career in 1975 as a Distinguished Graduate from the Reserve Officer Training Corps at Drake University in Des Moines, Iowa. After graduation he attended missile launch officer training at Vandenburg AFB, California, and was subsequently assigned to the 321 Strategic Missile Wing in Grand Forks, North Dakota. While there he was a Deputy Missile Launch Officer, an Instructor Deputy, an Instructor Crew Commander, Chief of Codes Training and an Emergency War Order Instructor. In 1981 he was transferred to the Strategic Air Command's (SAC) Command Center, in Bellevue, Nebraska, where he performed Warning Systems Control duties. This involved monitoring world-wide missile launch activity and providing emergency warning to the Commander-In-Chief of SAC when required. Following this he was Chief of the Operations Security Branch. His last assignment before attending the Air Command and Staff College was at the National Security Agency. He was the Chief of Strategic Operations in the National Information Security Assessment Center, where he analyzed the strategic nuclear communications vulnerabilities of the United States.

Major Homrig holds a Bachelor of Science Degree in Secondary Education from Drake University and a Master of Science Degree in Guidance and Counseling from the University of North Dakota.

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EXECUTIVE SUMMARY

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REPORT NUMBER 88-1265

AUTHOR(S) MAJOR MARK A. HOMRIG

TITLE BOOK ANALYSIS: THE ABSOLUTE WEAPON: Atomic Power and World Order, edited by Bernard Brodie.

Bernard Brodie is one of the many theorists who emerged from the so-called "golden age" of nuclear strategy, and is, without question, the one whose works have best stood the test of time. This paper scrutinizes four of the book's theories in relation to the historical record to check these theses. More importantly, this paper confirms that these theories continue to have merit as a guide for US nuclear policy.

Each presidential administration since Truman's implemented Brodie's concept of deterrence. The heart of his theory was that the United States should be able to return the same level and type of devastation as its attacker. In modern terms this is called retaliation in kind. To ward off an attack and not be a tempting target, the nation must be strong militarily. The enemy must understand that nothing will be gained by attacking this country but their own destruction.

Brodie's theory about the conventional force structure has also stood the test of time. He correctly foresaw that general purpose forces would be required when the United States

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and the Soviet Union reached nuclear parity. He understood the need for such forces for low-intensity conflicts and for United Nations peacemaking and peacekeeping functions.

Another proven point is the portrayal of the nuclear treaty negotiations between the two superpowers. Both nations could resolve their differences amicably, or be characterized by acrimony, if they mistrusted one another. This accurately foretold the arms race that continues to this day. Also, the prediction was made that the two superpowers could come to a common understanding and reduce their nuclear stockpiles through treaty negotiations. These negotiations were to be based on equality of commitment, a system of verification, and a lengthy step-by-step approach to reach significant arms reduction, such as the INF Treaty.

Finally, the paper concludes by examining Brodie's hypothesis on the probability of a Soviet "bolt out of the blue" nuclear strike that preemptively defeats the United States. Neither Brodie nor the Reagan administration believe such an attack by the USSR is very plausible. Ultimately, the conclusion is that these four concepts have stood the test of time and can continue to provide guidance for US nuclear policy.

Chapter One

This chapter will summarize the book edited by Bernard Brodie, The Absolute Weapon: Atomic Power and World Order. The book encapsulates the views of five different authors including Brodie. Therefore, each chapter, as well as the introduction, is looked at in succession to examine the authors' thoughts. The summaries of the last two chapters are significantly shorter than the rest, since they give support to earlier arguments and need not be expanded.

The introduction, "The Common Problem," by Frederick S. Dunn, pessimistically points out that the only reliable defense against atomic attack is the threat of retaliation. He finds fault with international agreements, alliances, and pledges. The best way to end war today is the atomic threat but scholars should find a sensible solution to the atomic problem.

International control of atomic warfare by voluntary agreement is unlikely to work. States that have such ability are not inclined to restrict use based on other states promises. However, if a majority of the states agreed to such control, the greater reward would go to a transgressor.

Alliances also fall short. An alliance based upon the precept of attacking an aggressor is all well and good until atomic weapons are used. An ally may not wish to risk its very existence to fulfill a promise, especially if losing is likely. In the same manner a simple pledge not to use atomic weapons may not give adequate assurance to opponents.

Pledging nonuse or outlawing atomic weapons by nations ". . . could not long survive the strains which would be put upon it." (4:14) The only way to assure the pledge would be to perform compliance inspections. This safeguard could not provide 100 percent confidence that peaceful uses of atomic energy were not being converted to weapons. The violator of such an agreement would have complete victory.

Only the fear of instant, complete retaliation would deter an aggressor from use of atomic weapons. His prize for violation would be ashes. "Thus we come to the final paradox that while the best way to avoid atomic warfare is to get rid of war itself, the strongest present ally in the effort to get rid of war is the capacity to resort to atomic warfare at a moment's notice." (4:17) Until scholars find a better

solution, this is the best that can be hoped for.

Chapter One, "War in the Atomic Age," by Bernard Brodie postulates the effect of the atomic bomb on the character of war. Currently no defense exists, conventional forces are still needed, new carriers will be developed, sabotage should not be overlooked and the US monopoly cannot be maintained.

At present there is no adequate defense against an atomic attack and finding one in the near future is remote. "The power of the . . . bomb is such that any city in the world can be destroyed. . . ." (4:24) Even having a larger number of weapons than the adversary does not guarantee safety. Because of its destructive power, some have said the day of conventional forces is over. This is simply not so.

Fleet Admiral Chester W. Nimitz cautioned the American people about doing away with armies and navies as obsolete. President Truman said that so far there has never been a weapon developed for which a countermeasure was not found. That being the case, conventional forces would play their traditional roles, and new means of carrying atomic bombs would be developed.

Even though the atomic bomb extends the destructive range of existing carriers, new and longer-range ones will be built. Rockets with longer range are an excellent means of transportation because of their anti-defensive nature and all-weather capability. Aircraft, however, are destined to be the prime movers since they have the greater range and accuracy.

Due to the nature of the bomb, it would be an effective subversive tool. Atomic bombs could easily be smuggled into a country's large cities or aboard ships in busy ports. For this reason sabotage must not be underrated. The large size and weight of atomic weapons would limit some of their effectiveness. There is no indication that they could ever be made small enough to fit in a suitcase, but nonetheless, they are still formidable weapons of sabotage.

Lastly, the US monopoly of the weapon cannot go on indefinitely. It must be conceded that the resources for its production in the world are abundant. "Regardless of American decisions concerning retention of its present secrets, other powers besides Britain and Canada will possess the ability to produce the bombs in quantity within a period of five to ten years hence. (4:63)

The second chapter, "Implications for Military Policy," also by Brodie, expands Dunn's argument of deterrence through

atomic retaliation; i.e., the best security against an attack is for a defender nation to be well-armed. He contends there are now three ways that wars will be fought and describes the types of forces required. Lastly, he states that vital resources should be dispersed to prepare for such a war. The primary goal, though, is to ". . .reduce our vulnerability in order to reduce the chances of being hit at all." (4:104)

Three war scenarios may arise since the invention of atomic warfare: 1) a conventional war without the use of atomic weapons; 2) atomic weapons used only after protracted conventional conflict; or 3) atomic weapons used at the outset of a war. In each scenario, the same types of forces will be required.

Each nation will require three types of forces in the atomic age: 1) aircraft and rocket atomic-bomb carriers under an independent commander who, has the authority to launch under attack; 2) conventional forces to invade and occupy enemy territory to ensure atomic attack ceases; and 3) conventional forces to resist an enemy invasion. Conventional forces will also be required for United Nations policing actions.

Dispersal of resources is necessary so forces will not be paralyzed after an atomic attack. Industrial production, essential services, military forces and populations need to be as widely dispersed as possible to prevent being overwhelmed in an attack. If this should happen, retaliation may prove to be impossible. Obviously it will be easier for totalitarian governments to accomplish dispersal than the democracies.

Arnold Wolfers in Chapter Three, "The Atomic Bomb in Soviet-American Relations," agrees with Dunn and Brodie about deterrence. He continues with the need to demonstrate resolve, and ends with the limitation of US power.

The US must demonstrate resolve. "There could be no more serious threat to our policy of determent than if we were to create the impression that we 'could not take it.'" (4:142) It would be fatal to the Russians and the peace of the world if they misjudged our actions. The bottom line is this country will not accept the idea of ultimate defeat. There are, however, practical limits to US power.

Even though the US has a monopoly on atomic energy, a preemptive strike against the USSR would have no public support or justification. The US is not likely to attack Russia over issues of democracy in Eastern Europe or "autonomy movements" in Asia. US and British statesmen will not use the bomb as diplomatic pressure.

Percy E. Corbett in Chapter Five, "Effect On International Organization," states the soundest way to world peace is the hardest to achieve. Nations must give up some of their sovereign rights to a world government to avoid an atomic holocaust. A good idea, but it is almost impossible to achieve. Mr. Herbert Evatt, Australian minister of External Affairs, put it this way:

The plain fact is that the nations and people of the world are not yet prepared to surrender the rights of self-government in order to be governed by a central executive and central legislature on which most of them would have a tiny and very insignificant representation. (4:151)

Most nations would be extremely reluctant to do this, especially the Soviet Union.

The last chapter by William T.R. Fox, "International Control of Atomic Weapons," concedes Corbett's point that world government is impractical; agrees with Wolfers' about a forceful takeover of the Soviets and the failure of world government. He amplifies Dunn's work on the pitfalls of verifying atomic control measures and Brodie's theme of deterrence. He concludes that statesmen and social scientists need to come up with better solutions than these.

The conclusion that can be drawn from these five authors is simple. The US has a monopoly of atomic weapons which will not last indefinitely. Many courses of action are open at present, but each day that passes, may close some doors on these actions. The authors advise caution about radically altering the structure of the armed forces in the name of atomic superiority; in fact more conventional strength is required. Entering into alliances and international agreements that prevent atomic proliferation is commendable, but is unlikely to offer 100 percent protection. Until politicians, scholars or statesmen can offer a better solution, it is in the US's best interest to remain strong and prevent becoming a tempting target.

Chapter Two

This chapter will compare Brodie's concept of atomic deterrence with the historical record of each presidential administration from World War II to the present. Therefore, a review of Brodie's concept of deterrence will be given first. Following will be a capsulated description of the atomic or nuclear deterrence policy of each administration from Truman to Reagan. This comparison will explain how each administration implemented Brodie's concept of deterrence and demonstrated its merit as a guide for US policy.

Bernard Brodie's concept of atomic deterrence is composed of three basic principles. To start with, in order to reduce the chances of being attacked with atomic weapons, the nation must be able to return the same level and type of devastation to its attacker. "Thus, the first and most vital step in any American security program for the age of atomic bombs is take measures to guarantee to ourselves in case of attack the possibility of retaliation in kind." (4:76) The second principle is almost an undisputed maxim: to ward off an attack a nation needs to be strong militarily; ". . . a nation which is well girded for its own defense. . . is not a tempting target to an aggressor." (4:107) Lastly, to dissuade an atomic attack, the attacking nation must be aware of the consequences of retaliation which will negate any potential profit that they might gain.

If the aggressor state must fear retaliation, it will know that even if it is the victor it will suffer a degree of physical destruction comparably greater than that suffered by any defeated nation in history. . . . Under these circumstances no victory, even if guaranteed in advance--which it never is--would be worth the price. (4:74)

These are the principles that this paper will use to evaluate each administration's nuclear policy.

Truman had the difficult task of deciding on a policy for the weapon that ended World War II and for which the United States had a short-lived monopoly. He was against using the weapon and was surprised that the American public and Europe expected him to use it in the event of a Soviet attack. (5:53) According to General Omar Bradley, then chairman of the Joint Chiefs of Staff, ". . . our greatest strength lies in the threat of quick retaliation in the event

we are attacked. (22:5) Since the Soviets developed their own "weapon" in 1949, Truman felt forced to increase both atomic and conventional armaments. (5:71) Truman said he would use the weapon to punish aggressors as he had done against Japan. (5:38-39) The Secretary of the Air Force summed up the Air Force position by saying, "The atomic bomb plus the air power to deliver it represents the one most visible deterrent to the start of any war. . . the one means of unloosing prompt crippling destruction upon the enemy. . . ." (22:5) This administration, then, accepted the Brodie thesis.

The Eisenhower administration took a "New Look" at the use of atomic and nuclear weapons that ". . . led to the adoption of the new strategic doctrine of 'Massive Retaliation' in the winter of 1953-54." (20:7) The Secretary of State, John Foster Dulles, said the way to deter aggression was to ". . . depend primarily upon a great capacity to retaliate instantly, by means and places of our choosing." (20:7) He later clarified this to mean the United States had a wide range of nuclear options up to and including an exhaustive strike against the Soviet Union. (5:76) It was Eisenhower's aim to keep the US strong militarily through "low cost" nuclear weapons. (5:81) Commander in Chief of the Strategic Air Command, General Curtis LeMay, pointed out the deterrent force needed to be large enough to threaten the Soviets with more ". . . bombs or explosive force than he is willing to accept." (22:16) Again this administration pursued the Brodie concept.

Both the Kennedy and Johnson administrations will be discussed together since Robert S. McNamara was the Secretary of Defense for most of both administrations. The massive retaliation strategy was extremely attractive to presidential administrations because of its cost effectiveness. It was much cheaper to threaten the Soviets with extinction rather than expend the funds to meet their conventional forces head to head. This all changed, however, when they also developed thermonuclear weapons and improved their long-range bomber force. "If deterrence failed, the US would face a two-sided, city busting war." (20:7)

This was not a very satisfactory solution, "Therefore, [McNamara]. . . began to implement procedures designed to attain a 'flexible response' capability." (20:7) Massive Retaliation and Flexible Response were really part and parcel of the same thing:

The two strategies differ mainly on the emphasis that each places on the concepts of deterrence and defense. Massive Retaliation strategy relied almost exclusively on the threat to deter the USSR

from initiating any type of aggression anywhere in the world. It ignored conventional forces or war fighting capability of armed forces, relying instead on the forward deployed US ground forces to act as a "trip wire" to signal the strategic nuclear retaliatory attack. Flexible Response created a conventional war fighting capability that could be used, under the nuclear umbrella, to counter Communist aggression at lower levels of violence. (25:2)

Flexible Response gave the US the military strength to assure the USSR that it could gain nothing in a war against US vital interests. This position of strength enabled President Kennedy to state, "Any potential aggressor contemplating an attack on any part of the Free World with any kind of weapon, conventional or nuclear, must know that our response will be suitable, selective, swift and effective." (1:15) The Kennedy/Johnson years likewise followed closely the precepts of Brodie.

For much the same reason as above the Nixon/Ford years will be addressed together. In this case Secretary of Defense James R. Schlesinger acted as a bridge between the two presidents. Even though the administrations changed, the military force structure remained much the same and the strategy of deterrence remained similar. President Nixon labeled his strategy "Selective Response" and later "Realistic Deterrence." Secretary of Defense Melvin R. Laird described it as having ". . . the force structure of strategic nuclear and theater nuclear and adequate US and allied conventional defenses for a 'Total Force Approach.'" (1:25) This meant the US could answer aggression across the spectrum of conflict. As under Kennedy, the only response was not a cataclysmic spasm of nuclear weapons, but that option still existed if required, according to Secretary of Defense James R. Schlesinger, ". . . by advocating an assured destruction reserve and threatening to destroy Soviet cities in retaliation to a Soviet countercity attack. . . ." (26:11) But the goal was to prevent the "city busting" phase of war altogether through a flexible counterforce strategy. Secretary Schlesinger said, "if deterrence fails, we may be able to bring all but the largest nuclear conflicts to a rapid conclusion before cities are struck. Damage may thus be limited and further escalation avoided." (24:7) A strong defense establishment was the key to limit Russian provocation in the nuclear arena as Secretary of Defense Donald H. Rumsfeld stated in 1977, "Any effort by the Soviets to erode US capability, for assured retaliation by means of major damage-limiting measures must lead to adjustments on our part to maintain a credible deterrent." (1:33) From this it is obvious the Nixon/Ford administrations adhered to the

Brodie thesis.

President Carter's administration was the first that had to admit they were dealing with a Soviet nuclear arsenal that matched the US arsenal. President Carter's position was to respond to Soviet belligerence at any level of conflict appropriately, ". . . we have maintained. . . to be ready to meet any challenge by Soviet military power." (1:38) Secretary of Defense Harold Brown meant to keep the US sufficiently strong to deter the Soviets. "It is essential that we retain the capability at all times to inflict an unacceptable level of damage of a minimum of 200 major Soviet cities." (1:36) Furthermore, in 1981 he wanted to make it clear to the USSR, that they would gain nothing through aggression:

. . . our potential adversaries must be convinced that we possess sufficient military force so that if they were to start a course of action which would lead to war, they would be frustrated in their effort to achieve their objective or suffer so much damage they would gain nothing by their action. (1:9)

The Carter administration firmly acknowledged the Brodie terms of responding in kind to an attack, remaining strong militarily, and deterring the Soviets through a retaliation policy that would negate any profit they might expect.

The last administration to be examined is the current one, President Reagan's. Secretary of Defense Caspar W. Weinberger's position was that the US should be strong militarily. "Our principal difference with our immediate predecessor arose from our judgment that it was urgent to fund defense at levels adequate to restore our neglected military. . . ." (19:679) This military strength would be necessary to respond to any type of attack in kind. Indeed this is not a change from the past administrations:

. . . every president and every secretary of defense since the early 1960s has said we should maintain the capability to respond to a range of possible Soviet attacks with a range of appropriate options. Our Administration has accelerated the development of more selective, discriminate and controlled responses, and, most important, has sought and voted much of the resources to accomplish this. (19:680)

President Reagan's main thrust is to make the Soviets aware that they will gain nothing through war. "We seek to prevent war by maintaining forces and demonstrating the determination

to use them, if necessary, in ways that will persuade our adversaries that the cost of any attack on our vital interests will exceed the benefits they could hope to gain." (19:676) Thus, this administration also adheres to the Brodie construct of deterrence.

This chapter has demonstrated that each administration, from Truman to Reagan, has followed the concepts of deterrence outlined by Bernard Brodie in 1946. The Truman and Eisenhower administrations did not place the same importance on being able to respond across the spectrum of conflict, like the later administrations did. Truman and Eisenhower did not have to; they had an atomic monopoly. All the later administrations did, to varying degrees, uphold this principle. All the administrations believed in keeping America strong. The emphasis of this strength was placed on different aspects of the military, nuclear and/or conventional forces, but the bottom line was strength. Lastly, all the administrations dissuaded attack through a policy of retaliation that would negate any potential profit an adversary might gain. Therefore, all the administrations, including the present one, have used the Brodie concepts of deterrence. Until there is some truly unconventional scientific or political breakthrough that revolutionizes one or both of these two fields, Brodie's concepts will continue to be a guide for now and the foreseeable future.

Chapter Three

This chapter will examine each Presidential administration's non-nuclear force policy since Truman, and compare this record with Bernard Brodie's theory on what conventional forces the US should have. First, a review of the two reasons Brodie thought the US needed conventional forces will be given. Then each administration will be examined to see if it subscribed to Brodie's theory.

Two of the reasons for conventional force requirements ascribed by Brodie are treated here. First, if both adversaries had roughly the same level of atomic destructive capacity they would be deterred from using them. Therefore, a war between the two nations would employ conventional forces. (4:85) Secondly, he recognized that there would be military flare-ups in the world where the use of atomic weapons was inappropriate.

We know also there are certain policing obligations entailed in various American commitments, especially that of the United Nations organizations. The idea of using atomic bombs for such policing operations, as some have advocated, is not only callous in the extreme but stupid. (4:98)

Thus, Brodie theorized conventional forces would be needed when the superpowers reached an atomic stalemate and would be used for low-intensity conflicts against US allies and friends.

President Truman recognized that soon the Soviet Union would catch up to the United States in atomic power. In 1950 the National Security Council memorandum NSC-68 stated that "'within four years the Soviet Union would have enough atomic bombs and sufficient capability of delivering them to offset substantially the deterrent of American nuclear weapons.'" (6:2) NSC-68 continued by saying the United States would no longer be able to depend solely on atomic bombs to deter the Soviets; conventional forces would have to be built up. ". . . it argued the case for an across-the-board buildup of capabilities to be completed by 1954, when it was estimated that a nuclear stalemate between the United States and the Soviet Union would be reached." (6:2) If not for the outbreak of the Korean War, a United Nations policing action, President Truman would not have had the impetus to build up

the conventional force structure. President Truman, therefore, did see the wisdom of Brodie's concepts for conventional forces.

President Eisenhower ended the Korean conflict and at the same time diminished the need for conventional forces. The health of the economy was his top priority, which left little support for conventional forces. (22:12-13) He supplemented nuclear power as the mainstay of America's strength. "No longer should the services attempt to prepare for purely conventional general war or large-scale limited war." (22:13) Eisenhower's "New Look" at America's war-fighting strategy did not follow Brodie's concepts for conventional force requirements. Instead, massive atomic retaliation was called for.

When President Kennedy took office he and his Secretary of Defense (SECDEF), Robert McNamara, were uncomfortable with only a nuclear deterrent. "Their approach to defense policy was dominated by skepticism about nuclear capabilities as the prime instrument of military containment. . . threats of nuclear retaliation were not a credible way to deal with the dangers that seemed to lie ahead." (6:4) They understood the need for general purpose forces, but, "by 1960, the conventional forces, which had been increased rapidly during the Korean War, were back close to where they had been during the austere years before the war." (6:3) In order to restore the conventional balance, the SECDEF planned to help our allies increase their general purpose forces. "Because our general purpose forces must complement those of our allies, it is in our interest to assist them in supporting adequate forces when they cannot do the job alone." (9:51) The Kennedy administration did follow the Brodie line. The nuclear response was not appropriate in all cases of aggression and therefore conventional forces were built up. His administration placed more emphasis on building allied conventional strength.

The Johnson administration carried on in much the same way as Kennedy's because of the influence of SECDEF McNamara. McNamara still felt a reliance on the nuclear umbrella to settle all differences was wrong. To deter the Soviet aggression in Europe, the US needed strong conventional forces ". . . large enough to meet and withstand a major Soviet non-nuclear assault in central Europe for a reasonable period of time." (10:68) Also, to support America's other obligations he said ". . . we must. . . have other forms of military power, both to deter lesser aggressions and to defeat them if deterrence fails. We need these other forms of military power. . . for the support of our commitments to other nations." (10:65) This administration also followed the conventional force principles of Brodie. It recognized

the need for general purpose forces to further deter the Soviets in Europe and for the support of our other allies.

Melvin R. Laird, SECDEF for President Nixon, reiterated much the same line his predecessor did. He knew the policy of massive nuclear retaliation would not work in all cases to prevent aggression. Conventional forces were still required. President Nixon stated in his Foreign Policy Report in 1971 "'To deter conventional aggression, we and our allies together must be capable of posing unacceptable risks to potential enemies. We must not be in a position of being able to employ only strategic weapons to meet challenges to our interests.'" (7:80) The Nixon administration, like Johnson's, wanted to shift more of the burden for conventional forces to those allies that were likely to need them. The United States would not provide the forces to defend the free world everywhere, but admitted their importance. Under the total force concept America's allies must accept more of the burden of self-defense. "'It is our policy that future guerrilla and subversive threats should be dealt with primarily by the indigenous forces of our allies.'" (7:80) President Nixon heeded the Brodie conviction that general purpose forces were needed, in addition to nuclear forces, to curb aggression in Europe and to stem future subversive threats.

The Ford administration upheld the tenets of Nixon on the need for non-nuclear forces. SECDEF Donald Rumsfeld stated plainly ". . . the United States has a clear requirement to maintain an unquestionably strong conventional posture. . . ." (12:92) Rumsfeld astutely comprehended the importance of strong general purpose forces to supplement the nuclear.

Although this is a nuclear age, conventional capabilities are increasingly important to the security of the nation and to peace and stability in the world. Conventional military power remains a principal instrument for pursuing international objectives where military power is to be used at all. . . the primary burden of deterrence now falls increasingly on conventional forces. (12:22 Executive Summary)

He knew as his predecessors did, ". . . choices are needed between passivity and the risks of nuclear war." (12:91) As previous administrations came to expect allies to help in their own defense, so did this one. It also realized in some contingencies only US conventional strength would be available. (31:49) For these reasons, it is evident that the Ford administration followed the Brodie doctrine for conventional forces.

The Carter administration carried on the tradition reestablished by Kennedy that strong conventional forces are required. Carter's SECDEF, Harold Brown, firmly believed this.

US land forces must be capable of supporting the worldwide interests of the United States. Much of the effort to improve US land combat capability is directed toward improving their ability to fight in Europe against Warsaw Pact forces. It is recognized, however, that the capability must be versatile enough to function in a large number of other international situations. (2:138)

SECDEF Brown was convinced allied conventional forces should receive more attention than the nuclear forces to enhance world security. (2:73) He proclaimed, ". . . we continue to believe that we and our allies are best served by basing our collective security on a firm foundation of conventional military power. What we seek in conjunction with our allies is a major conventional capability sufficient to halt any conventional attack." (2:79) This demonstrated the Carter administration's adherence to the Brodie principles for conventional forces.

Casper W. Weinberger, President Reagan's SECDEF for the majority of his term, very clearly advocated the need for conventional forces due to the nuclear stalemate.

. . . since the Soviet Union has acquired nuclear capabilities at least as strong as ours, the credibility of nuclear responses to deter conventional attack has weakened. Therefore, our nuclear forces do not relieve the US or its allies from the need to maintain adequate conventional forces. (15:47)

He went on to say, "A robust conventional force posture provides us with the safest, most reassuring deterrent at the lowest feasible risk of nuclear war, indeed of any major war." (15:56) The Reagan administration, as all the previous administrations, staunchly supports all of its allies. "US conventional forces are designed to help deter attacks on ourselves, our allies, and our friends." (15:29) This clearly demonstrated this administration's observance of the Brodie theory for conventional forces.

Accordingly, with the exception of President Eisenhower, every administration conformed to the principals of Brodie's conventional force concept. All understood that with nuclear equivalence between the superpowers came a nuclear stalemate. The choice of going to nuclear war over every confrontation

or doing nothing was not a choice at all. The only rational decision was to maintain conventional forces. In order to manage United Nations police actions or other low-intensity conflicts the use of general purpose forces was required. The use of nuclear weapons for these cases in Brodie's words would be "callous" and "stupid." Brodie's concept of conventional forces has been adopted by the majority of administrations since World War II.

Chapter Four

This chapter will compare Arnold Wolfers' characterization for nuclear treaty negotiations between the United States and the Soviet Union with the historical record of their major treaties. Wolfers' first contention was that the two superpowers could limit atomic power, but if mistrust developed between them, an arms race would ensue.

The Russians and we, concerned about our cities and industries, might be led to combine in a vigorous common effort to bring atomic power under control. However, it would be a mistake to overlook the other possibility, if not probability, that our fear of Russian bombs and their fear of American bombs will prove more powerful than our common anxiety about the bomb in general. If that should turn out to be the case, the new weapon will tend to strain the relations between the two countries rather than associate them in a common enterprise. Those who take this second and more pessimistic view incline toward the belief that Russia's possession of the bomb will unleash a dangerous and unbridled Soviet-American armament race which will further strain and poison relations between the two countries. (4:129-130)

A second concept Wolfers warned against, was entering into one-sided or unequal agreements with the Soviets. This would not bring peace and might prevent it.

The peaceful settlement of disputes is not a one-way affair. A policy of one-sided concessions, instead of bringing us nearer to our goal, might have the opposite effect. It might lead the Soviet leaders to believe that we would continue to retreat indefinitely and that further demands or even unilateral acts on their part would not endanger peace. (4:131-132)

He also emphasized the necessity of an inspection system to verify compliance and "serious consideration. . . should be given only to those types of solutions which stand a chance of being accepted by both the United States and the Soviet Union." (4:132) Lastly, Wolfers pointed out "control is to be established step-by-step." (4:132) The major treaty negotiations between the two superpowers will now be compared

to Wolfers' road map.

Wolfers' contention that American-Soviet relations would become strained and result in an "unbridled" arms race came to be. "In May 1955, Harold Stassen, President Eisenhower's new disarmament advisor, concluded after a major study of the arms race that the goal of total nuclear disarmament was now unobtainable and more modest objectives were required instead." (5:198) The quest for more military hardware was also displayed in the 1960's, when the fear was that the superpowers were spiraling into an arms race based on misperceptions of each others intentions. (5:204) In the 70's, the mood was still pessimistic: "if arms control agreements are not reached, the ever accelerating 'arms race' will get further out of control and greatly increase the chances of war." (13:92-93) Today, on the eve of the Intermediate Range Nuclear Missile Force treaty, the arms race continues, but may show signs of slowing. ". . . what the United States can hope to achieve is an end to the arms race--although not the abolition of armaments. . . ." (17:25) Perhaps after all these years of the arms race, the first part of Wolfers' theory may come to fruition after all: "The Russians and we, concerned about our cities and industries, might be led to combine in a vigorous effort to bring atomic power under control." (4:129) Next, is a review of how the superpowers got to this point.

Both the United States and the Soviet Union agreed to the test ban treaty of 1963 because of their mutual concern over nuclear tests in the atmosphere, underwater and space. Both countries had contributed to accidental contaminations of innocent people and realized they had to stop. The US test at Bikini atoll in 1954 contaminated a Japanese fishing boat and the Soviets accidentally produced a radioactive rain which fell on Japan. (14:34) There was some disagreement initially over the extent of the treaty, i.e., total disarmament, and how adherence could be verified. The complete disarmament issue was dropped as well as the on-site verification matter. In the end it was signed because it was mutually appropriate, both parties wanted it, and it had a chance of being accepted.

The Treaty for the Prohibition of Nuclear Weapons in Latin America started the negotiation process in 1963 and was eventually signed by the Soviets in 1978. This treaty encompassed the Wolfers' points also. From the superpower perspective it was not a one-sided concession. Also, it was the will of the region after witnessing the Cuban missile crisis. This verification was to be handled by the International Atomic Energy Agency. (14:59-81) The superpowers offered no lasting objections to the tenets of the treaty, and they were willing to limit their policy to

accommodate the desire of the region for the nuclear free zone. Similar rationale can be applied to the earlier Antarctic and Outer Space Treaties that sought ". . . to limit the spread of nuclear weapons by preventing their introduction into areas hitherto free of them." (14:59)

The Treaty on the Nonproliferation of Nuclear Weapons, ratified in 1970, ". . . obliged the nuclear-weapons powers not to transfer nuclear weapons to the national control of any country not having them." (14:83) Although the United States and the Soviet Union disagreed on the particulars of the treaty, ". . . it was apparent that both sides recognized the desirability of an agreement on nonproliferation." (14:84) Once the provisions were adequately balanced, verification placed with the International Atomic Energy Agency, and both superpowers were resigned to the limits and conditions for nuclear weapon deployment, they signed the treaty. This indeed follows the Wolfers outline.

The first of the Strategic Arms Limitations Talks (SALT I), signed in 1972, sought to limit the number and locations of anti-ballistic missiles (ABM) and set ceilings on the number of offensive nuclear weapons each side could stockpile. (3:55) Both the US and USSR were concerned that they were moving to a ". . . competition in defensive systems that threatened to spur offensive competition to still greater heights." (14:132) The United States pushed for the ABM treaty because of the ". . . debate on the strategic value of ABM, its efficacy as a system, and possibly most critical of all, the economic and social sacrifices attendant to the deployment of an ABM system. . . ." (22:121) The ABM treaty was exactly proportional--both were limited to only two ABM deployment areas. Once again a problem area was compliance verification. The superpowers finally agreed on "national technical means of verification." (14:135) They also agreed that ". . . both sides undertake not to interfere with national technical means of verification. In addition, both countries are not to use deliberate concealment measures to impede verification." (14:135) While the ABM Treaty was approved for an indefinite period, the second part of SALT I, the Interim Agreement, was only to last five years. The ABM portion of the treaty followed the Wolfers precepts, but the Interim Agreement did not.

The Interim Agreement did not offer equality in the eyes of the superpowers, due to the differences in their forces. "In view of the many asymmetries in the two countries' forces, imposing equivalent limitations required rather complex and precise provisions." (14:148)

Largely because the agreement on the number of launchers allowed the Soviet Union to retain

considerably more offensive missiles than the US had deployed, the Interim Agreement proved to be controversial. In the Senate, Henry M. Jackson, D-Wash., succeeded in adding an amendment to the pact stating that any permanent strategic arms treaty should "not limit the United States to levels of intercontinental strategic forces inferior to "those of the Soviet Union, but rather should be based on the "principle of equality." (3:55)

Instead of lasting agreement, it had a more narrow scope as a "... holding action, designed to complement the ABM Treaty by limiting competition in offensive strategic arms and to provide time for further negotiations." (14:148) So while this part of the agreement did not follow Wolfers' outline, it was to be of limited duration.

Article VII of the Interim Agreement proposed that both sides continue negotiations, which began in 1972 as SALT II.

The principal US objectives as the SALT II negotiations began were to provide for equal numbers of strategic nuclear delivery vehicles for both sides, to begin the process of reduction of these delivery vehicles, and to impose restraints on qualitative developments which could threaten future stability. (14:239)

The negotiations bogged down over disagreements on how to categorize cruise missiles and the Soviet Backfire bomber. "In 1974 at Vladivostock, President Ford and Secretary Brezhnev agreed on a framework for a new treaty which would allow ceilings of 2400 strategic nuclear delivery vehicles ... and dealt with MIRVs [multiple independently retargetable vehicles] by counting not warheads but MIRVed missiles..." (5:357) Again another dispute emerged concerning the distinction between "heavy" and "light" intercontinental ballistic missiles. Talks did not resume until after President Carter took office in 1977. He broadened the scope of the negotiations by his call for elimination of nuclear weapons.

"We will move this year toward our ultimate goal--the elimination of all nuclear weapons from this earth." Two months later, Secretary of State Cyrus R. Vance went to Moscow with a hastily formulated proposal for deep arms cuts in the nuclear arsenal of both countries. The Soviets immediately rejected the plan. (3:57)

Many high level meetings finally produced a completed treaty

that President Carter and General Secretary Brezhnev signed in 1979. (14:241)

This treaty violated many of Wolfers' rules. First, Carter asked the Soviets for more than they were willing to deliver--total nuclear disarmament. There was no chance of acceptance because more limits were placed on the Soviets' policy than they were willing to accept. Second, the certification of compliance was in doubt, "A major concern of many treaty critics was verification of Soviet compliance. The verification procedure itself was not verifiable. . . ." (3:60) Lastly, without a better verification process, this treaty could have been interpreted by the Soviets to violate the Wolfers maxim of one-sided concessions. Perhaps it led them to believe that ". . . unilateral action on their part would not endanger peace," when they invaded Afghanistan. (4:132) That action placed Senate approval of the treaty on indefinite hold.

The last arms control treaty for discussion is the Intermediate Range Nuclear Force (INF) Treaty signed by President Reagan and Kremlin leader Gorbachev in December 1986.

President Reagan and Gorbachev hail the INF agreement as a mutual victory that would eliminate about 2,200 nuclear missiles from Europe and Asia, about 3 percent of their arsenals, and might lead early next year to a pact that would slash overall superpower nuclear arsenals by 33 to 50 percent. (16:1)

This treaty is different from many of the previous treaties because it follows all of Wolfers precepts. There are no one-sided concessions. All INFs are eliminated in Europe and Asia. There is to be an "intrusive system. . . allowing unprecedented on-site inspection of each other's territory. . . ." (18:26) This treaty has a good chance of being accepted because both parties want it. "The Soviet Union's economic travails are driving its foreign policy. Gorbachev and his colleagues need a period of international calm so that they can concentrate on reconstruction at home." (17:23) Finally, President Reagan began asking in 1981 for these types of arms reductions. Only time will tell if this treaty succeeds and ultimately confirms Wolfers' concepts.

This chapter compared the historical record of major US - USSR nuclear arms control negotiations with the way Wolfers depicted them. It showed how Wolfers foresaw an arms race if mutual distrust developed between the superpowers. He also felt that with common understanding, agreements such as the INF Treaty could be fruitful. Next he warned against

entering into one-sided agreements that could send the wrong signal to the adversary and cause them to take unwise unilateral actions. Wolfers said for an agreement to be useful there must be an inspection system and only solutions that stand a chance of being accepted by both parties should be considered. Lastly, he said that arms control is to be established step-by-step. This chapter demonstrated that a step-by-step approach works. Both countries accepted the test ban treaty as the first step. Then they continued on through the more comprehensive agreements of SALT. When President Carter jumped the gun by asking for a complete disarmament package, the Russians balked. This was a step that had no chance of success. President Reagan has brought this back on track by resuming the step-by-step approach: first, the INF Treaty; then more meaningful cuts in strategic weapons later. Thus Wolfers' characterization of the major nuclear treaty negotiations between the United States and the Soviet Union has been supported by the historical record.

Chapter Five

This chapter will compare Bernard Brodie's theory on the doubtful probability of the Soviets launching a nuclear surprise attack against the United States, or "bolt out of the blue" scenario, with that of the Reagan administration's own reservations on such an attack. Also, it will provide the conclusion for this paper.

Brodie did not believe the likelihood of a nuclear "bolt out of the blue" or Soviet preemptive attack was high. The fear of retaliation would inhibit an opponent's aggression. He felt that preparation for an attack on the part of the adversary would tip their hand. They would not escape the destruction of their "enormous physical plant which is contained in the cities and which over any length of time is indispensable to the life of the national community. Thus the element of surprise may be less important than is generally assumed." (4:73)

Secretary of Defense Caspar Weinberger, in his Annual Report to the Congress Fiscal Year 1988, expresses the same doubt about a Soviet surprise attack as Brodie. He states, "The Soviet leadership must be convinced that our response to their aggression would inflict an unacceptable cost for any possible benefit." (15:25) This expresses exactly Brodie's "fear of retaliation" concept that would inhibit an opponent's aggression. Weinberger goes on to say, "Our forces must be survivable (so that an enemy nuclear strike cannot disarm us of our ability to respond). . . ." (15:25) Thus the Soviets would be deterred from attacking us, for fear of an ever present retaliatory response that would be unacceptable to them.

In conclusion, this paper summarized The Absolute Weapon: Atomic Power and World Order, edited by Bernard Brodie, and four aspects of the book were analyzed to examine their merit as a guide for US nuclear policy. The first aspect looked at was Brodie's conception of deterrence. He believed in retaliation in kind, remaining strong militarily and assuring any attacker they would reap unacceptable damage that would out-weigh any gain they might hope to attain. His farsighted three-pronged approach has been, and continues to be, the cornerstone to the United State's nuclear deterrence policy.

The second feature looked at was Brodie's theory about the conventional force structure that he thought this country should maintain. He correctly foresaw the need for general

purpose forces as demonstrated by the historical record. They would be required when the superpowers reached an atomic stalemate, for low-intensity conflicts, and for United Nations police actions.

The next facet investigated was Wolfers' depiction of the nuclear treaty negotiations between the US and USSR. He understood there was a chance for the two superpowers to resolve their differences, but even more likely was the possibility of mistrust and misunderstanding. He precisely anticipated the resultant arms race. He predicted that if the two superpowers could agree on an equal, verifiable treaty based on a methodical step-by-step approach, such as the INF Treaty, it would be accepted.

The concluding Brodian point examined was the "bolt out of the blue" nuclear scenario. Brodie did not believe that the Soviets could conceal and win a preemptive war against this country, and neither does the Reagan administration. Hence the four aspects of this book have been confirmed by the test of time and continue to provide guidance for US nuclear policy.

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