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The function of massive retaliation in the evolution of
United States military strategy

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THE FUNCTION OF MASSIVE RETALIATION
IN THE EVOLUTION OF
UNITED STATES MILITARY STRATEGY

by

Thomas McCarthy Wallace
Lieutenant Commander, United States Navy

Submitted to the
Faculty of the School of International Service
of The American University
In Partial Fulfillment of
The Requirements for the Degree
of
MASTER OF ARTS

ABSTRACT

THE FUNCTION OF MASSIVE RETALIATION IN THE EVOLUTION OF
UNITED STATES MILITARY STRATEGY by Thomas M.
Wallace, Lieutenant Commander, U.S. Navy

This thesis traces the function the doctrine of Massive Retaliation played during the evolution of US military strategy from World War II through 1964. It includes a discussion of the development of strategic bombardment, the impact of strategic atomic weapons, the development of a strategy based on massive retaliatory capability, and a short discussion of overkill. Additionally, British, French, and Russian strategies and those countries' reactions to US strategy are briefly discussed.

The major conclusions are that subsequent to WW II a strategy relying on massive retaliatory capability was a logical eventuality, that the US relied primarily, but for a short period, upon this strategy, and that by the mid-1950's the US required balanced forces in order to implement the strategic concept. Since at least 1955 the trend to provide more balanced military forces, containing both strategic retaliatory and conventional limited war capabilities, has continued.

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The purpose of this document is to provide information on the status of the program and to advise the appropriate personnel of the progress of the program.

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CHAPTER I

INTRODUCTION

Massive Retaliation, as an officially recognized doctrine, was formulated in the early nineteen-fifties. It was specifically outlined by the prospective Secretary of State John Foster Dulles in May, 1952, though he had advocated a strategy approximating Massive Retaliation as early as 1950.¹ A national defense strategy which relied on a single, "pure", long-range means of ensuring United States security, and failing that the quick and thorough defeat of an enemy, appealed to the American people especially during the years immediately subsequent to the Second World War. The development of political and military philosophies of strategy in the early post-war years prompted by weapons technology and the disillusionment of the Cold War culminated in this stand-off national security defense strategy.

Massive Retaliation was, and remains to this day, a doctrine of deterrence and as such was not a true doctrine of

¹From April 6, 1950, until March 21, 1952, John Foster Dulles was Consultant to the Secretary of State who was then Dean Acheson. During this period Dulles' primary missions were with respect to concluding a Japanese Peace Treaty and three Pacific Security Treaties. At this time he also made several pronouncements on United States defense strategy which were at variance with those currently in force. They are quoted in Chapter III within the context of the discussion concerning the formulation of the doctrine of Massive Retaliation.

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SECTION

SECTION 1. The Board of Directors shall have the authority to manage and control the affairs of the Corporation, subject to the power reserved to the stockholders.

SECTION 2. The Board of Directors shall have the authority to declare dividends on the assets of the Corporation.

SECTION 3. The Board of Directors shall have the authority to borrow money for the Corporation and to mortgage the assets of the Corporation to secure the same.

SECTION 4. The Board of Directors shall have the authority to sell, lease, convey, or otherwise dispose of all or any part of the assets of the Corporation.

SECTION 5. The Board of Directors shall have the authority to execute any contract that may be necessary or proper for the Corporation.

SECTION 6. The Board of Directors shall have the authority to do all such other and various acts and things as may be necessary or proper for the Corporation.

SECTION 7. The Board of Directors shall have the authority to make and alter the bylaws of the Corporation.

SECTION 8. The Board of Directors shall have the authority to fill any vacancies in the Board of Directors.

SECTION 9. The Board of Directors shall have the authority to sue and be sued in the name of the Corporation.

SECTION 10. The Board of Directors shall have the authority to do all such other and various acts and things as may be necessary or proper for the Corporation.

SECTION 11. The Board of Directors shall have the authority to do all such other and various acts and things as may be necessary or proper for the Corporation.

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warfare. "The strategy known as deterrence is, in essence, a form of diplomacy, because it aims to prevent certain moves by nations believed to be hostile by threatening them with military retaliation."² Its primary purpose was to prevent war rather than to serve as a means of waging warfare. This primary objective of deterrence is not so much to threaten a prospective enemy but to load up his cost/risk factor above his tolerable level of acceptance.³ "The concept of deterrence is central to strategic theory because present-day diplomacy wants to substitute, once and for all, the threat of force for the use of it."⁴

The search for a strategy which would ensure national security during the pre-Korean War years was increasingly dominated by the dread of another war. The revolution in warfare, heralded by the development and successful application of the atomic bomb, lent great impetus and urgency to this search. Henry Kissinger aptly summed up the quandry represented by a strategy based on nuclear deterrence by stating that:

²Raymond Aron, The Great Debate: Theories of Nuclear Strategy, trans. Ernst Pawel (Garden City: Doubleday and Company, 1965), p. vi.

³Charles O. Lerche, Jr. and Abdul A. Said, Concepts of International Politics (Englewood Cliffs: Prentice-Hall, 1963), p. 202.

⁴Aron, op. cit., p. 199.

The problem of deterrence is novel in the history of military policy. In the past, the military establishment was asked to prepare for war. Its test was combat; its vindication victory. In the nuclear age, however, victory has lost its traditional significance. The outbreak of war is increasingly considered the worst catastrophe. Henceforth, the adequacy of any military establishment will be tested by its ability to preserve peace.

The paradoxical consequence is that the success of military policy depends on essentially psychological criteria. Deterrence seeks to prevent a given course of action by making it seem less attractive than all possible alternatives.⁵

Specifically, then, the function of Massive Retaliation, as it was originally formulated, was to create the proper image in a prospective enemy's mind. He is, theoretically, to be beset by uncertainty as to whether he will be retaliated against in any specific crisis. If he does not commit aggressions due to this line of reasoning he is deterred. The pure form of Massive Retaliation forces the opponent in each instance of contemplated crisis or aggression to ask himself: "Is this worth a nuclear war?"

In this respect the doctrine of Massive Retaliation was wedded to the policy of containment. One could say that the United States contained in order to show unambiguous provocation for retaliation, and conversely one could say that the United States retained a retaliatory capability in order to contain.

⁵Henry A. Kissinger, The Necessity for Choice (New York: Harper and Brothers, 1961), pp. 11-12.

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Dulles spent a significant portion of his time constructing and welding together unilateral, bilateral, and multilateral pacts and treaties in order to draw the line across which Communism was to be deterred from setting its foot.

As the doctrine of Massive Retaliation evolved into the middle nineteen-fifties, complete reliance upon it was no longer attempted because of the Russian strategic nuclear delivery capability and Massive Retaliation's apparent failure to constitute the complete solution to international crises.

From the outset, the credibility of the deterrent was marginal. Undoubtedly, the United States had the means and the ability to obliterate Russia. However, the doubt pivoted on the question as to whether the United States would actually launch a retaliatory strike in response to lesser aggression. The consensus was that the United States would not, and this was borne out during the Suez Crisis, the Indochinese War, the Hungarian Revolution, and the Quemoy and Matsu (The Formosa Straits) Crisis. The deterrent was available but its credibility, with reference to the psychological factors, was very seriously impaired.

The actual period during which Massive Retaliation was the sole defense strategy of the United States was quite short. Historically it dates from late 1953, until early 1955. Though the former date may be pushed back as far as Dulles'

statement in Life Magazine in May, 1952, Dulles was not yet the Secretary of State. Furthermore, it was apparent before 1955, that the credibility of the deterrent was not sufficient to stop all levels of crisis and aggression. This was due to the fact that the United States had not set a finite limit on the level of provocation necessary to trigger retaliation, nor could it have been conceivable to do so except in any given circumstance and that would have been after the fact.

For the deterrent to be credible, it is necessary that the enemy know beforehand what level of aggression will provoke retaliation. If he is left completely in doubt, or if he has even restricted freedom of action, the deterrent becomes unstable and invites preventive or pre-emptive attack.

The Great Debate of the middle and late fifties was a soul-searching on the part of full and part-time strategists to formulate a credible deterrent strategy. Obviously, Massive Retaliation as the solution had failed. However, the trend which was becoming more general, favored a balanced military establishment. This was opposed, vigorously and vehemently, by the advocates of counterforce--the successor to Massive Retaliation. George Lowe characterizes the two opposing camps in terms of being either Traditionalists or Utopians:

A Utopian in the realm of strategic theory is anyone who makes little or no distinction between the traditional uses of force and the new dimensions of nuclear violence. A Traditionalist, in the field of strategic thinking, is anyone who, although granting the need for an effective military establishment, is convinced of the absolute

necessity for using no more force than necessary to implement foreign policy decisions made by the constituted authorities.⁶

The proponents of a pure nuclear strategic theory, the Utopians, advocated more of the same. They insisted that the United States maintain itself in an unassailable position in the arms race by building the most formidable retaliatory force imaginable. Theirs was a strategy of "winning the war," and they were not averse to advocating a pre-emptive strike. On the other hand, the Traditionalists believed that minimum deterrence (or a finite deterrent) was necessary only to counter mutual deterrence, thereby stabilizing the stalemate. They further believed that balanced forces backing up this deterrent were essential to provide graduated, or selective, response to either crises or aggressions. They believed that the function of Massive Retaliation was only to counter opposing nuclear strength.

Utopian arguments notwithstanding, the general trend away from strict reliance on the deterrent of Massive Retaliation continued. The stalemate of mutual deterrence from 1955 on rendered the policy of Massive Retaliation suicidal. The popular analogy of two men holding cocked guns at each other's heads is apropos. A solution would have to be found to this

⁶George E. Lowe, The Age of Deterrence (Boston: Little, Brown and Company, 1964), pp. 1-2.

intolerable situation. That solution would be to insert in front of Massive Retaliation a number of lesser responses. Rather than Massive Retaliation being the only recourse, it would now be relegated to that of the last, and ultimate, response available in the strategic arsenal.

The Democratic victory of 1960 ushered in another national security policy. Variouslly called the "Kennedy Shift," it is now known as the strategy of the Flexible Response. This "new" strategy in reality differed only in detail and terminology from the last policies of the previous administration. Flexible Response guaranteed that force would be met with equal or superior force regardless of the type or degree of aggression committed. In this respect, though it made limited or conventional war more likely, it made nuclear war more unlikely at the outset. Because of the United States commitment to engage in and successfully conclude any aggression, by definition it was an escalation strategy.

In the strategy of Flexible Response, nuclear bombardment was retained as the ultimate recourse. Though the name had changed, massive retaliation remained as a strategic deterrent. Its role as a doctrine had changed. Rather than attempting to deter all aggressions by retaining the choice to retaliate at places and at times of our own choosing with nuclear bombardment, it had now been relegated to one niche

in the forms of response available to the strategist. Now strength would be countered with graduated and appropriate comparable strength. It is interesting to note, however, that President Kennedy in explanation of the doctrine of Flexible Response stated that the United States reserved the right to respond with nuclear capability to a sub-nuclear provocation.⁷ In this respect he was maintaining the credibility of the deterrent while continuing to provide a more balanced defense establishment. The psychological problem involved was that of maintaining the credibility of the deterrent in the Russian mind while at the same time implicitly acknowledging that the United States would not rely solely on massive nuclear retaliatory power.

This thesis will trace the doctrine of Massive Retaliation, and it will not restrict itself to the critical period of 1953-1955. It will outline, in Chapter II, the history of contemporary strategic bombardment, discuss the critical years during which Massive Retaliation was the work horse of national defense strategy, and outline some of the arguments and criticisms then prevalent, both within the United States and abroad. This will be followed by a discussion of the evolution of United States strategy during the

⁷The similarity between Kennedy's words and those of Dulles are striking with respect to this issue. They are considered in more detail in Chapter IV.

The first part of the report deals with the general situation of the country and the progress of the work done during the year. It is followed by a detailed account of the work done in each of the various departments. The report then goes on to discuss the financial position of the country and the measures taken to improve it. Finally, it concludes with a summary of the work done and a list of recommendations for the future.

The second part of the report deals with the work done in each of the various departments. It is divided into several sections, each dealing with a different department. The first section deals with the work done in the Department of Agriculture. The second section deals with the work done in the Department of Education. The third section deals with the work done in the Department of Health. The fourth section deals with the work done in the Department of Public Works. The fifth section deals with the work done in the Department of Finance. The sixth section deals with the work done in the Department of Justice. The seventh section deals with the work done in the Department of the Interior. The eighth section deals with the work done in the Department of the Navy. The ninth section deals with the work done in the Department of the Army. The tenth section deals with the work done in the Department of the Air Force.

The third part of the report deals with the financial position of the country and the measures taken to improve it. It discusses the revenue and expenditure of the country and the measures taken to increase revenue and reduce expenditure. It also discusses the measures taken to improve the efficiency of the public services and to reduce the cost of government.

late fifties, when Massive Retaliation lost its credibility to deter lesser aggressions. This was the critical period of transition between the all-or-nothing solution and the eventual development of graduated deterrence--or as it is now known--the Flexible Response.

It was the Kennedy election of 1960 that epitomized the shift away from the strict reliance upon Massive Retaliation, though the roots of its successor strategy may be found as much as five years earlier. The initial concept had given way to more flexible and less precipitous policies. However, during the five or so years preceding the election of 1960, national security policy had broadened in scope and definition. In the late nineteen-fifties the United States had developed a national defense strategy that did not rely completely upon Massive Retaliation, but had considerably more flexibility in its responsiveness than critics attributed to it.

Critics of the doctrine of Massive Retaliation severely criticized its advocates on two counts prior to 1960. In the first place, and the most popular argument, they accused the Utopians of risking all-out war, and failing that the surrender of the Free World to Communism in piecemeal fashion. In the second place they accused the administration of not having either a credible deterrent or a sufficient one. This latter accusation centered around the "bomber gap" and then the "missile gap." That the administration repeatedly refuted

The first part of the report deals with the general situation in the country and the progress of the work done during the year. It then goes on to discuss the various projects which have been undertaken and the results which have been achieved. The report concludes with a summary of the work done and a list of the recommendations which have been made.

The second part of the report deals with the financial position of the organization. It gives a detailed account of the income and expenditure for the year and shows how the funds have been used. It also discusses the various sources of income and the methods of raising funds.

The third part of the report deals with the personnel of the organization. It gives a list of the staff and their duties and discusses the methods of recruitment and selection. It also discusses the methods of training and the methods of promoting staff.

The fourth part of the report deals with the relations of the organization with other organizations and with the public. It discusses the methods of public relations and the methods of co-operation with other organizations.

The fifth part of the report deals with the future of the organization. It discusses the various projects which are being planned for the future and the methods of financing them. It also discusses the methods of evaluating the work done and the methods of improving it.

both these accusations did very little to still partisan accusations that increasingly took on political overtones as the 1960 election drew near.

In retrospect it can be said that both these accusations were erroneous, however they did serve their political purposes. National defense strategy subsequent to 1961 was a continuation, albeit a strengthened continuation, of the strategy of the Republican administration that preceded it.

Needless to say the role of strategic nuclear forces in the formulation of national security policy was, and continues to be, one of the most partisan subjects of debate in American foreign policy. In this respect the critics ran the gamut from unqualified justification of the strategies to vilification of the strategists and doomsday prophecies of the eventualities of their strategies.

CHAPTER II

THE ORIGIN AND HISTORY OF STRATEGIC BOMBARDMENT

The introduction of the aircraft into the theatre of battle during the First World War heralded a revolution in warfare tantamount to that brought by the submarine. Though its war-time applications had been largely tactical in nature -- fighter sorties, reconnaissance, some close ground support, plus a few abortive, inconclusive raids on major cities well behind the lines, for instance London in 1917 -- it presaged the revolution that would transform land combat into the three dimensional conflict that is now familiar and accepted. During the inter-war period the advocates of the new form of warfare fought mightily, and in many respects vainly, to gain acceptance for it. However, just as military strategists thirty years later, they were plagued with a less than optimum vehicle, budgetary restrictions, and the entrenched forces of reaction.

The controversy over the use of this new weapon begun between the two World Wars continued through World War II, and its influence determined, to a great extent, the reorganization of the United States defense establishment in the late nineteen-forties. Further, the increasing dominance of air power in the determination of strategy led to a major controversy between the United States military services. The

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proponents of a pure air power strategy wanted totally to rely on strategic air power, while the other services were convinced that balanced forces were essential to maintain United States security and defend its commitments.

The Writings of Guilio Douhet

The first formal recognition of air power as a weapon with strategic applications is credited to Brigadier General Guilio Douhet, an Italian Flying Officer, who set forth his thesis in The Command of the Air, published in 1921. Though some officers in the services of each of the combatants of the first World War were aware of the new dimension in warfare with its nearly unlimited potential, Douhet was the first to prophesy the long-range strategic implications of the airplane.

In his treatise he defined the selection of the proper aerial strategy as including selection of objectives, the grouping of zones, and the determination of target priorities.¹ The phrase selection of objectives had reference to those targets that would inflict the most serious strategic damage upon an enemy. Douhet was preoccupied with strategic rather

¹Bernard Brodie, Strategy in the Missile Age (Princeton: Princeton University Press, 1959), Chapters 2-3. This contains excellent discussion of the early gropings for an aerial strategy, and Brodie devotes Chapter 3 entirely to strategy as developed by Douhet. See also Guilio Douhet, Command of the Air, trans. Dino Ferrari (New York: Coward-McCann, 1942); and Louis A. Sigaud, Douhet and Aerial Warfare (New York: Putnam, 1941).

than tactical applications for aircraft. He had been convinced that the aerial dogfights of the first World War were a wasteful application of the airplane. His preferred targets included primarily factories and cities utilizing explosives on the former and gas and explosives on the latter.

The expression the grouping of zones was an early attempt to define the expected area that a unit of aircraft could destroy by saturation bombing. This was certainly foresighted, but premature, considering the vastly reduced loads that early aircraft could carry coupled with the range restrictions involved. However, Douhet formulated the conception that aircraft properly grouped and carrying the proper weapons could lay waste to large areas of an aggressor's industrial and urban complexes. The weakness of Douhet's reasoning lay in the inability of aircraft contemporary to his time to carry enough weapons to be effective. Further, they had severe range limitations which had been the result of a preoccupation with the development of only fighter aircraft.

Though the mass bombings of the second half of World War II in large part vindicated Douhet, preoccupations with tactical aircraft had also hampered United States efforts, especially in the development of an aircraft with long-range strategic capabilities.

The determination of the priorities of targets showed Douhet as a true forerunner of strategic thinking. His

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The fifth part of the report is devoted to a detailed account of the work done during the year. It is followed by a summary of the results and a list of references.

essential concern was with the forces that could oppose the strategic force. In this case it was the aircraft factories, refineries, and ground support facilities. Douhet virtually ignored any consideration of support to ground operations of conventional armies. In this respect he had been disillusioned by the stalemated trench warfare of the first World War, and could not foresee the implications of a truly mobile land force such as the German Panzer concept or the Allied armored divisions of the next war working in close coordination with aircraft to extend its range.

Douhet, then, foresaw the role of air power not as a contributory aspect of warfare but as the way to win the war. All other forms and applications of military force were subservient to, and at best contributory to, the role of air power.

The three concepts of objectives, weapons applications on the target, and priorities are common to all forms of warfare. However, the import is that Douhet had recognized the penetrative and potentially destructive nature of airborne weapons. Needless to say, his efforts were not wasted on a small but dedicated group within the embryonic United States Army Air Corps, and the role of this new dimension in warfare gave rise to heated controversy between World Wars I and II.

Air Power in the Second World War

During the second World War the British and the Germans,

tentatively and then with increasing intensity, bombed each others' homelands mostly at night. This was the extension of conflict in another dimension in that it had no direct effect on the front line battles. The direct effect was that it now ensured that the war could be defined as total. Not only were the combatant troops engaged, so was the population under direct attack.

American entry into the field of strategic bombing in Europe began in 1943, and reached significant proportions in 1944, utilizing daylight raids for greater accuracy and target discrimination. The development of the B-17 as a weapons system suitable to this task took approximately eight years, and even then it was not profitably effective without long-range fighter protection. As was earlier referred to, the Army had concentrated on tactical aircraft to the detriment of the development of an effective long-range aircraft. The B-17 enjoyed a dubious reputation until it had been properly armed and given the necessary range and load-carrying capability to be nearly self-sustaining.

It was no secret among airmen that the Army was reluctant to undertake a program of long-ranged aircraft development, fearing that it might lead the Air Corps away from what the Army regarded as the paramount job of air power: direct support of ground troops.²

²Alexander P. De Seversky, Victory Through Air Power (Garden City: Garden City Publishing Company, Inc., 1943),

In the Pacific Theatre the B-29 Superfortress was introduced, flying raids upon Japan from China in 1943, (another example of range restrictions), and then from the Pacific island bases of Guam, Tinian, and Saipan in 1944. Their objective was to deliver either large weapons or a large bomb load at extreme ranges, which had the corollary effect of encouraging explosives and bomb development, and longer range self-protected vehicles. By the same token, carrier air strikes were in many instances strategic by definition in the sense that the carrier task force only moved the vehicle closer to the target prior to launch.

Even during the War, however, the controversy over the role of the air forces continued. In 1943, De Seversky could say that: "The most significant single fact about the war in progress is the emergence of aviation as the paramount and decisive factor in wairmaking."³ But this statement was subjected to serious doubt by the men responsible for the successful prosecution of the war effort. The significant controversy during the war concerned target selection. It was on this

p. 245. Two other books which are useful in understanding the considerations of the application of air power in World War II are: Frank W. Craven and James L. Cate, The Army Air Forces in World War II (Chicago: University of Chicago Press, 1948); and Steven W. Sears, Air War Against Hitler's Germany (New York: American Heritage Publishing Company, Inc., 1964).

³De Seversky, op. cit.,, p. 3

The first section of the report is devoted to a general

description of the project and its objectives.

The second section describes the methodology used in the

study, including the data sources and the statistical

techniques employed.

The third section presents the results of the analysis,

and the fourth section discusses the implications of these

findings for policy-making.

The final section concludes the report and offers some

thoughts on the way forward.

The report is organized as follows:

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Methodology

Chapter 4: Results

Chapter 5: Discussion

Chapter 6: Conclusion

Chapter 7: References

Chapter 8: Appendix

Chapter 9: Glossary

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Chapter 13: List of Figures

Chapter 14: List of Tables

Chapter 15: Summary

Chapter 16: Bibliography

Chapter 17: Index

Chapter 18: Glossary

subject that purists like De Seversky and Mitchell came into direct conflict with men who had the actual responsibility for mounting the total war effort.

Combat generals and the civilian war leaders initially committed the bomber force to target systems more directly in support of tactical operations.⁴ These were, for instance, marshalling yards, other transportation systems, and assembly plants. The proponents of the more pure strategic concepts argued for the targeting of basic industrial and resources refinement plants. In this latter category are chemicals, oil refineries, and the most well known -- the German ball bearing factories.⁵

Strategic bombing during World War II culminated in the two atomic bomb drops on Japan. This symbolically, and in reality, freed strategic bombing adherents from tacticians completely. The United States had reached the point where strategic target systems were an entity. It had become a

⁴Indirect tactical support includes targets to the rear of the combat zone such as bridges, airfields, marshalling yards, etc. These targets are suitable for medium or high level bombing. Tactical close air support, on the other hand, is airborne firepower in direct support of front line troops. Targets such as tank or troop concentrations and support of troop advances are best handled by the fighter-bomber or light and medium bomber types at shorter ranges and directly controlled by forward observers with the troops.

⁵Walt W. Rostow, The United States in the world Arena (New York: Harper and Row, 1960), p. 64. Rostow presents a complementary discussion of the development of Army Air Corps Strategic bombing in World War II, to that referred to earlier.

separate planning and implementing capability. "Strategically, the term air power applies to that force of aircraft and missiles which is operated more or less independently of other forces."⁶

The Second World War represented a revolution in warfare on two counts; the development and mass application of aircraft and the atomic bomb. However, a victorious side in war had traditionally tended to lapse into the state of complacent self-satisfaction of being invulnerable. It is unquestionable that the United States was the preponderant world power, but the lessons of air power were available to all.

One of De Seversky's premonitions accurately reflected this:

1. The rapid expansion of the range and striking power of military aviation makes it certain that the United States will be exposed to destruction from the air, within a predictable period, as are the British Isles today.

2. Those who deny the practical possibility of a direct aerial attack on America are lulling the American people into an utterly false sense of safety which may prove as disastrous to us as the Maginot Line mentally proved to France.

3. To meet this threat to the existence and independence of our country we must begin immediately to prepare for the specific kind of war conditioned by the advent of air power. That can mean only an interhemispheric war direct across oceans, with air power fighting not over this or that locality, but by longitude and latitude anywhere in the uninterrupted "air ocean." Such preparedness calls not merely for more aviation but for new military organization and new strategic conceptions.

⁶Brodie, op. cit., p. 20.

⁷De Seversky, op. cit., p. 6.

Strategic Nuclear Bombardment

The atomic bomb had tremendous impact on military strategy, but the United States had to resort to discrete targeting and needed many delivery vehicles. These aircraft were still susceptible of being opposed by conventional air defense methods. The German V-1 and V-2 missiles were acknowledged as a threat but their long-range implications were vague. For the foreseeable future the United States would rely upon an atomic bomb delivered by conventional means as its strategic mainstay.

The United States Strategic Bombing Survey made the conclusions that: (1) strategic bombing brought the German War economy to the point of collapse, (2) that this result came very late in the war, too late to develop full potential with regard to effects on ground and naval forces, and (3) with better understanding, especially target selection, results would have come sooner.⁸

The United States emerged from the war, then, with a fairly intact philosophy of strategic bombing with the Army Air Corps as its custodian for the following reasons: (1) the size of the weapon required a large vehicle for delivery at strategic ranges, (2) the Army Air Corps had developed these vehicles, the tactics, and the delivery system, (3)

⁸Brodie, op. cit., Chapter 4.

GENERAL PRINCIPLES

The above are the general principles which are followed in the selection of the material for the book. The material is selected on the basis of its importance and its interest to the student. The material is selected on the basis of its importance and its interest to the student. The material is selected on the basis of its importance and its interest to the student. The material is selected on the basis of its importance and its interest to the student.

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intricate safety precautions of stowage and handling made them the logical possessor, and (4) they had had the initial possession of it.⁹

After roughly two years of desultory and obscure development of strategic capability hampered by demobilization and drastically reduced defense budgets, the contemporary controversy over national security policy blossomed forth during 1948-1949. Proponents of the B-36, the ultimate in reciprocating long-range aircraft collided head on with Navy interests which advocated an attack carrier construction program in a time of reduced budgets. This brought to a head the necessity for the selection of the defense strategy that the United States would settle on. The administration had decided that it would not afford what it considered duplicative strategies within the Army and the Navy, and then the Air Force.

The proponents of air power and a separate Air Force, which was established as an autonomous service in 1947, maintained that the bomber and consequently the Air Force, was going to become the United States' unchallenged protector. However, the Navy and the Army thought that this concept of reliance on one form of offense and/or defense should be challenged, and could be challenged quite successfully. This dichotomy of viewpoints contained the basic argument for the

⁹Ibid.

selection of a national strategy and consequently the size and mix of forces to implement it. The basic argument remains to this day, and although its effects have been somewhat alleviated by increased defense expenditures, there is a hard core of supporters on each side who continue to resist any dilution of their strategy by the presence of what they consider to be other over-lapping or duplicative strategies.

The National Military Establishment, brought into being by the National Security Act of 1947, was experiencing growing pains which centered on the inter-service rivalry. An indication of the bitterness involved is suggested by James Forrestal, the first Secretary of Defense. "Radford particularly aroused Symington's and Norstad's ire by asking what foundation there was for the Air Forces to believe that there was a place in the war of the future for a strategic force."¹⁰ Radford apparently based this glib remark on the Air Corps' wartime difficulties in Europe, their belated development of long-range fighters, and the virtual destruction of Japan without materially effecting the serious fighting which was still in process in the Pacific Theatre.

Forrestal attempted to remain objective through this period of unification, definition of missions, and selection of strategies. He firmly supported the administration and was

¹⁰Walter Millis (ed.), The Forrestal Diaries (New York: Viking, 1951), p. 225.

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convinced of the necessity for civilian supremacy within the national security machinery. As early as 1945, while still Secretary of the Navy, he had said:

Both the Army and Navy are aware that they are not makers of policy but they have a responsibility to define to the makers of policy what they believe are the military necessities of the United States both for its own defense and for the implementation of its responsibility for maintenance of world peace.¹¹

Forrestal's great contribution was to mold the United States' post-war defense establishment into a viable, effective organization at a time when such subjects were eminently unpopular with the general public. His tragedy is that he did not survive to see the organization put to its first test in Korea. He was preoccupied with the organization of the Department, feeling that if the proper one was established and made effective, a successful national defense policy would emerge as a logical consequence. To this end he not only held firm convictions on what that strategy should be, he worked for the emergence of that strategy by laboring to define the missions of the services within the Department.

Molding a Defense Establishment during the period 1945-1949, as was mentioned earlier, was hampered by budgetary limitations. Forrestal realized this:

As long as we can out produce the world, can control the sea and can strike inland with the atomic bomb, we can assume certain risks otherwise unacceptable in an effort to restore world trade, to restore the balance

¹¹Ibid.

of power-military power-and to eliminate some of the conditions which breed war.¹²

But in implementing this strategy he was susceptible to Navy arguments which advocated balanced forces and which seriously doubted the success of the long-range aircraft to bring an enemy to his knees. "The most urgent strategic and tactical problem to be solved by the Air Force is the question of usefulness and capabilities of the long-range bomber against jet fighter and radar defense."¹³ And on the subject of balanced forces he quoted General Marshall, then the Secretary of State, as saying "that the trouble was that we are playing with fire while we have nothing to put it out."¹⁴

The service rivalry was particularly painful in view of the fact that the Air Force received the lion's share of the budget throughout the period. If strategic capability was the key to increased appropriations, the other two services wanted their shares. The Key West Agreement in March, 1948, would have hopefully mediated these differences, but it was unsuccessful. As a consequence of that conference, Forrestal had explicitly laid out the missions of the services with an eye towards balanced forces.

6. Function of strategic bombing is the Air Force's.

¹²Ibid., p. 350.

¹³Ibid., p. 355.

¹⁴Ibid., p. 373.

7. The Navy is to have the Air necessary for its mission, but its mission does not include the creation of a strategic Air Force.¹⁵

However, the Air Force objected to the Key West Agreement because it set a limit of 70 Groups on its bomber force, and the Navy opposed it because it was relegated to a purely supporting role.

As a result of the inconclusiveness of the conference at Key West, Forrestal and the Joint Chiefs met again, this time at Newport during late August, 1948. In substance the conferees agreed on three points. First, the Chief, Armed Forces Special Weapons Project would report to the Chief of Staff of the Air Force. This, in essence, gave full control of atomic weapons to the Air Force. Secondly, the primary mission of the Air Force was reiterated. It was that of atomic bombing. The Air Force, further, had authority to utilize any strategic bombing capabilities that the Navy might develop. Third, in order to properly evaluate weapons systems in operation and those in research and development, a Weapons Systems Evaluation Group was established to assist in the selection of weapons systems by providing comparative data on their cost, effectiveness, and potentialities.¹⁶

Even though these were strong unequivocal statements, Forrestal was attempting to define the missions of the services,

¹⁵Ibid., p. 391

¹⁶Ibid., p. 476.

and especially that of the newly formed Air Force. This must not be confused with his desire to have balanced forces available to implement United States strategy. On this subject he told the President that:

With reference to the budget (Fiscal Year 1949), I said on the 14.4 billion ceiling limitation we would probably have the capability only of reprisal against any possible enemy, in the form of air warfare, using England as a base.¹⁷

Previously he had written that reduced expenditures within the Defense Establishment prevented the development of balanced forces and posed a calculated risk.

At the present time we are keeping our military expenditures below the levels which our military leaders must in good conscience estimate as the minimum which would in themselves ensure national security. By so doing we are able to increase our expenditures to assist European recovery. In other words we are taking a calculated risk in order to follow a course which offers a prospect of eventually achieving national security and also long-term world stability.¹⁸

Further, considering the Fiscal Year 1949 budget in his diary, Forrestal wrote in late October, 1948, after his conversation with the President quoted above that:

I do not believe that air power alone can win a war any more than an Army or naval power can win a war, and I do not believe in the theory that an atomic offensive will extinguish in a week the will to fight. I believe air power will have to be applied massively in order to really destroy the industrial complex of any nation and, in terms of present capabilities, that means air power within fifteen hundred miles of the targets -- that means an Army has to be transported to the areas where the air-

¹⁷Ibid., p. 498

¹⁸Ibid., p. 350

fields exist -- that means, in turn, there has to be security of the sea lanes provided by the naval forces to get the Army there. Then, and only then, can the tremendous striking power of air be applied in a decisive -- and I repeat decisive -- manner.¹⁹

The Key West and Newport Agreements were attempts to compromise the differences between the services, but they were unsuccessful. At best they only delayed the controversy over the proper selection and mix of weapons systems to implement national strategy. The formulation of the Fiscal 1949 defense budget, with the subsequent appropriations hearing, reopened the controversy. Navy dissatisfaction concerning the direction of United States strategy culminated in the "Revolt of the Admirals," which was triggered by cancellation of the aircraft carrier UNITED STATES and the corresponding increased procurement of B-36's.²⁰

Navy planners remained convinced that national security would not best be gained by recourse to a single weapons system and especially such a single purpose weapon as the strategic bomber with its inherent vulnerabilities. The carrier, they reasoned, possessed the advantages of mobility coupled with a striking power equal to the planned Air Force strategic striking force.

However, the school of strategic thinking which was to

¹⁹Ibid., p. 514

²⁰Henry A. Kissinger, Nuclear Weapons and Foreign Policy (Garden City: Doubleday Anchor Books, 1958), pp. 26-27.

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Notary Public in and for the State of Texas.

Notary Public in and for the State of Texas.

advocate and support a single purpose strategic force for United States defense was gaining in strength and popularity. Continued travel along this road would lead to reliance upon a strategy of deterrence. The definition of the political objectives of such a strategy, however, was not to be expounded explicitly until after the apparent failure of the Korean War.

The beginnings of the debate concerning the American strategic dilemma centered, in 1949, on the decision whether to resort to strategic, that is atomic, retaliation or whether to maintain a mixed capability. 1949 was another austere year both in budgets and in force levels. The political situation was clouded and aggravated by Chiang Kai-shek's defeat and retreat to Taiwan, with the attendant emergence of the Chinese People's Republic on the mainland. This blow to American prestige and policy, coupled with the East European Communist consolidation certainly highlighted a need for a reappraisal of American foreign policy. Furthermore, the Greek-Turkish Aid program of 1947, and the formation of the North Atlantic Treaty Organization in 1949, highlighted the fact that militarily and politically the United States was becoming increasingly committed abroad. The problem was whether the United States would be capable of backing up its commitments with military force where it could conceivably be required and in the amount desired to achieve the objectives, or even defense,

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of those commitments.

During this same year, in September, 1949, President Truman announced that the Soviet Union had exploded an atomic device. This event, three years early according to the scientists' predictions, only heightened the arguments while, at the same time, the event introduced a note of hysteria into the debate. Up until this time the United States atomic monopoly had seemed to assure that the Soviet Union would not act aggressively in direct confrontation with the United States interests. Now the Soviet Union had an atomic bomb and an existing delivery system comparable to that of the United States.²¹ For the first time in American history since the War of 1812, policy planners had to take into account the vulnerability of the territorial United States.²² This fact was bound to have a profound psychological impact on the American citizen. The Strategic Air Command (SAC) was not only the guardian of the free world, it was now the guardian of the veritable existence of the United States.²³

²¹Harry S. Truman, Memoirs of Harry S. Truman: Years of Trial and Hope (Garden City: Doubleday, 1956), II, p. 307.

²²Robert E. Osgood, Limited War: The Challenge to American Strategy (Chicago: The University of Chicago Press, 1957), p. 190

²³The following table of achievements is presented at this point in order to provide historical perspective. It is partially drawn from: John Luckacs, A History of the Cold War (Garden City: Doubleday and Company, Inc., 1962) p. 164:

The North Korean aggression of June 25, 1950, which triggered United States entry into the Korean War can be viewed from the point of view of a logical extension of the Truman Doctrine of 1947, and as being a contradiction of the outcome of the controversy of 1949. On the one hand the United States intervened because of its commitment to South Korean independence, the strategic proximity of Japan to Korea, and the implicit support of a policy of containment. On the other hand, United States conventional military forces had steadily declined in strength and readiness since 1945, due to budget austerity and a growing reliance on strategic bombardment forces.

Regardless of the academic arguments of intervention, the United States committed herself to a limited war and her preparation, not to speak of her psychological adjustment to intervention, was debatable.

During 1950-1951, the administration stepped-up atomic production and in 1952, the Hydrogen, or Thermonuclear, device was successfully tested. Other than these two developments, strategic bombing moved into the background for the

| <u>Weapon</u> | <u>U.S.</u> | <u>U.S.S.R.</u> | <u>Britain</u> | <u>France</u> |
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| Atomic Bomb | 1945 | 1949 | 1952 | 1960 |
| H - Bomb | 1952 | 1953 | 1957 | |
| Satellite | 1958 | 1957 | | |
| IRBM | 1956 | 1956 | | |
| ICBM | 1960 | 1960 | | |

first two years of the Korean War. However, there is one footnote and that is that the Air Force, at this point in time, and not of its own volition, became committed to the policy of aircraft priority that was not to be modified or solved until medium and long range missiles became operational and the services were supported by larger conventional warfare budgets. During the Korean War the first-line bombers, in this case the B-36 and later the B-47, were to be reserved for strategic missions, and the obsolescent or replaced bomber, the B-29, was therefore available for tactical conventional use.

Much as in World War II, the Air Force was caught in the dilemma of forces versus doctrine. The Air Force had won the strategic bombardment argument; however it did not have the forces necessary to retain that capability independently of its tactical commitment. In the case of the Korean War the tactical commitment was sacrificed in favor of retention of a full strategic capability.²⁴

²⁴As early as 1950, though, it was debatable exactly how much a B-36 type of aircraft would have contributed to the prosecution of the war. This was the first clear-cut case that the evolution of Air Force strategic vehicles was proceeding to the development of a truly single purpose weapon, epitomized by the ICBM. In 1965, the same logic may be applied to the use of the B-52 in Vietnam.

The first part of the document is a letter from the Secretary of the State Department to the President, dated January 1, 1947. The letter discusses the current situation in the world and the need for a new approach to international relations. It mentions the recent end of the Second World War and the emergence of two major superpowers, the United States and the Soviet Union. The Secretary expresses concern about the potential for a new world war and the need for a policy of containment to prevent the spread of Communism. He also discusses the importance of maintaining a strong alliance with Great Britain and France, and the need for a new international organization to maintain peace and stability.

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CHAPTER III

MASSIVE RETALIATION 1953-1960

The controversial strategic defense policy that became known as the doctrine of Massive Retaliation was set forth by the Republican administration during 1952-1953.¹ However, the new President, Dwight D. Eisenhower, was never as voluble a spokesman of policy as was his Secretary of State, John Foster Dulles. The Eisenhower method of executive control was by a staff approach, in some ways similar to the process of determining solutions to command problems in the Army. Therefore, Dulles as the Secretary of State, had almost sole responsibility for the determination of recommendations concerning foreign policy and for their dissemination.

It was Dulles who formulated the doctrine of Massive Retaliation and who concluded the series of treaties which implemented the policy of containment. Massive Retaliation in his estimation was to be the organ of punishment wielded against the Communists for any infractions on their part of the containment agreements. Massive Retaliation was to be,

¹Lowe, op. cit., p.9. A shorthand statement of the theoretical modifications of Utopian strategic concepts includes: strategic bombing (1945-1949), air-atomic power (1949-1952), new look (1953), massive retaliation (1954-1957), limited nuclear war (1954-1961), counterforce (1958-1963), controlled thermonuclear war (1962), and controlled peace (1963).

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of a people who have grown from a small colony of immigrants to a great nation. The story begins with the first settlers who came to the shores of North America in search of a better life. They found a land of vast resources and a people who were determined to build a new society. The story continues through the years of struggle and triumph, from the days of the American Revolution to the present. It is a story of a people who have always been determined to live by the principles of liberty and justice for all.

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THE HISTORY OF THE UNITED STATES
 BY JAMES H. SMITH
 NEW YORK: THE CENTURY COMPANY, 1900

initially, the sole organ of punishment. However, the doctrine was never utilized operationally though the policy of containment was given repeated serious tests.

The doctrine in this pure form was abandoned as early as 1954, though United States defense policy was not officially altered until 1955. At that time the need for more balanced forces within the Defense Department became a requirement for the effective prosecution of United States policy. The Defense Department that Forrestal had moulded, fortunately, was capable of producing and organizing these forces. Had the supporters of complete reliance upon air power had their way, the United States would have been unable to develop balanced armed forces without a major reorganization of the Defense Department.

By the end of the decade of the fifties, the United States had developed those balanced forces and the national defense policy that could utilize them effectively. Massive Retaliation was still present, as it is today, but its role was relegated to being that of the ultimate recourse. It was now, rather than being the sole instrument of response, one form of the available responses.

John Foster Dulles and the Nuclear Monopoly

John Foster Dulles, as his family before him, served the United States through a long and distinguished government career. Though a Republican, he had served the State

Department well during the two years which preceded the Eisenhower victory of 1952. He had been the primary instrument in concluding the Japanese Peace Treaty and the first of a series of Pacific security treaties.

In his capacity as Consultant to the Secretary he also made foreign policy statements which were somewhat outside the sphere of his responsibility and which were at variance with the administration's policies. In these he was preoccupied with the problem of containment of Communist power, and with the means to defeat it should that become necessary. As early as late 1949, he had begun advocating the policy that would become known as the doctrine of Massive Retaliation.

He first advocated the policy in December, 1949, in an address in New York in which he discussed United States policies to counter the Communist threat and the direction that he believed these policies should take in order to successfully prosecute the Cold War. "When it comes to strategic military strategy, the free world seems momentarily, in a mood of some confusion and without any agreed deterrent."²

He then went on to discuss the policy of encirclement

²An address made before the American Association for the United Nations at New York, New York, on December 29, 1949, quoted in: John Foster Dulles, "Where Are We? A Five-Year Record of America's Response to the Challenge of Communism," Department of State Bulletin, XXIV-602 (January 15, 1950), p. 88.

by stating that:

Enough economic and political vigor, enough military strength, and enough will to resist so that these areas cannot be cheaply conquered by subversive methods, by trumped up "civil wars," or even by satellite attacks.

That leaves to be dealt with the possibility of full scale attack by the Soviet Union itself. As against that there is only one effective defense, for us and for others. That is the capacity to counterattack. That is the ultimate deterrent.

When I was in the Senate working for the ratification of the North Atlantic Pact, I took the position that it did not commit the United States to the land defense of any particular area; it did commit us to action, but action of our own choosing rather than action that an aggressor could dictate to us.³

Dulles also considered the limited war in Korea as being such an example. In Korea the United States had to fight a limited war in a limited geographic area, at the time, and with the methods chosen by the communists. Korea was utilized as an example of the futility of trying to counter each Communist aggression. It handed over the initiative to the Communists in each instance. Dulles would retain that initiative by selective response; selective in time, place, and method.

With more than 20 nations strung along the 20,000 miles of Iron Curtain, it is not possible to build up static defense forces which could make each nation impregnable to such a major and unpredictable assault as Russia could launch. To attempt this would be to have strength nowhere and bankruptcy everywhere.

Against such military power as the Soviet Union can marshal, collective security depends upon capacity to counterattack against the aggressor; and I pointed to

³Ibid.

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our strategic air force and our stock of weapons as constituting an arsenal of retaliation.⁴

The month previously he had spoken clearly of the threat of Russian imperialist aggression, and outlined what he considered to be the best method for the containment and neutralization of the Communist threat.

How do we stop that? The old fashioned way would be to try to build enough military strength in each country to check on the spot, any armed attack which the Russians might launch.

Let the free nations combine to create a striking force of great power and then rely more upon the deterrent of that punishing power, and less and less upon a series of many local area defenses.

It must, of course, also be made clear that that punishing power will never itself be an offensive threat or strike except in retaliation for open, unprovoked aggression.⁵

The presidential election of 1952, boded ill for the incumbent party. As the Republican party's foreign policy spokesman, Dulles continued to advocate and harden the policy, which in another year would become known as the doctrine of Massive Retaliation. In May, 1952, in a national magazine, he published an article that was to receive wide publicity, and in which he described the national defense policy which the

⁴Address made before the American Association for the United Nations in December, 1950, quoted in: John Foster Dulles, "Challenge and Response in United States Foreign Policy," Foreign Affairs, XXXVI-1 (October, 1957), p. 30.

⁵Address made before the Advertising Council in Detroit, Michigan, in November, 1950, quoted in: John Foster Dulles, "Can We Stop Russian Imperialism?" Department of State Bulletin, XXV-650 (December 10, 1950), pp. 939-40.

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Eisenhower administration was initially to rely on.

There is one solution and only one: that is for the free world to develop the will and organize the means to retaliate instantly against open aggression by Red armies, so that, if it occurred anywhere, we could and would strike back where it hurts, by means of our own choosing.

The cumulative weight of these deterrents has proved great. It could be made overwhelming by the creation of a community punishing force known to be ready and resolute to retaliate, in the event of any armed aggression, with weapons of its choosing against targets of its choosing at times of its choosing.⁶

This was the heart of Massive Retaliation. Dulles subsequently spoke of the doctrine essentially in unaltered terms from these, and as a concise statement of the doctrine it was never improved upon. The United States, rather than attempting to stem the tide of Communism at points where it might attempt to break out of the line of containment, would go directly to the cause of the outbreak. It would no longer be satisfied with coping with the individual effects of imperialistic Communism. Given adequate provocation, the United States would choose the targets, the weapons, and the times of retaliation. Unquestionably, local forces would provide enough resistance to indicate the unambiguity of the Communist intentions, while the massive retaliatory force, the United States Strategic Air Command, would provide the response. It would deal with the causes.

⁶John Foster Dulles, "A Policy of Boldness," Life, (May 19, 1952), pp. 151-52.

In this respect Massive Retaliation was a rigid doctrine. It would not countenance fighting a series of small or limited wars, but would escalate directly to Massive Retaliation as the form of response to any aggression.

The majority of the criticism of this doctrine in its early stages hinged on exactly that point. Dulles, by an arbitrary decision, made in response to what could be an insignificant challenge to the line of containment, could plunge the world into an atomic war.

Dulles, however, and as his supporters believed, had formulated this doctrine in response to the frustrations of the Cold War. Communism, to them, was a relentless and grasping foe who was insensitive to the normal amenities of diplomacy, and who repeatedly provoked local unrest in order to consolidate and spread its area of domination. Dulles thought that to meet each and every small crisis would be a futile policy that would spread the free world defense effort too thinly, and which would therefore bankrupt United States defense efforts. The solution was to draw the containment line which would encircle Communism, and rely on United States Massive Retaliatory power to contain Communism.

However, reliance on terms such as "at times and places of our own choosing" raised many questions. Whom do you bomb, and do you send them an ultimatum to cease and desist before unleashing your forces? If so, you would permit him to attack

The first part of the report deals with the general situation of the country and the progress of the work done during the year. It then goes on to discuss the various departments and the work done in each of them. The report concludes with a summary of the work done and a list of the recommendations made.

The second part of the report deals with the financial statement for the year. It shows the income and expenditure for each department and the total for the year. It also shows the balance sheet at the end of the year and the changes in the various assets and liabilities.

The third part of the report deals with the personnel of the organization. It shows the number of staff employed at the end of the year and the changes in the various grades of staff. It also shows the distribution of staff in the various departments and the work done by each of them.

The fourth part of the report deals with the progress of the work done during the year. It shows the number of projects completed and the progress of the work done on the various projects. It also shows the results of the work done and the recommendations made.

The fifth part of the report deals with the recommendations made during the year. It shows the various recommendations made and the progress of the work done to implement them. It also shows the results of the work done and the recommendations made.

first, pre-supposing that the bluff would not stick. It is doubtful whether the United States would resort to these ultimatums. Even though there was a segment of opinion which believed the United States might as well call the Soviet's bluff and get it over with.⁷

At the same time Dulles was making statements inferring a desired policy of liberation which was not so well defined. Later these two doctrines would be shown to be contradictory in operation. However, for the present the United States was caught up in election politics while fighting a distasteful war.

In 1953, the Korean War came to a close and the country's leadership changed hands. What were the considerations that turned the United States to a policy of Massive Retaliation? What ingredients inspired the New Look? Broadly speaking they can be divided into psychological, military, and political aspects.

Probably the major psychological reason for embracing such a one-sided policy was the generally felt revulsion towards the Korean War. To this was added, in 1954, the lesson of the Indochinese War. This was popularly known as the "Never Again Club." The United States turned its back on the lessons

⁷Norman A. Graebner, The New Isolationism; A Study in Politics and Foreign Policy Since 1950 (New York: The Ronald Press Company, 1956), pp. 160-61.

of the war. The preponderant feeling was one of not desiring again to commit that much conventional, particularly ground, strength to resistance in that form, particularly at the expense of the American psyche. The inconclusive results of the War went against the mental grain of the American people who traditionally have been victory conscious.

Another aspect of the New Look is the contradictory and usually confusing image we have of the figure of Dulles, even after these few short years. Was he really committed to a personal battle with Communism as a choice between good and evil? Did he believe that there was no middle ground of compromise and coexistence? Was he convinced that it was literally a waste of time to negotiate with the Communist hierarchy? Or on the other hand, did he believe, and convince President Eisenhower, that Massive Retaliation was a rational policy which could effectively contain Communism by deterring aggression?

In his press conference in December, 1953, Dulles summed up his philosophy of containment and deterrence by stating that: "Today the Soviet Union, with rapidly mounting atomic power, is deterred from attacking by the fact that we could retaliate with a devastating blow against the vitals of Russia."⁸

⁸Department of State Bulletin, (December 14, 1953), pp. 811-12

Dulles, as the "embodiment of American power," elicited a plethora of criticism.⁹ The criticism, both affirmative and negative, was very strong, and one of the most significant reasons that it is difficult to approach the development of United States strategy during this period objectively is the partisan character of the commentators. From the supporters on the reliance on strategic air power came unqualified support for Massive Retaliation and rejection of balanced forces, or any other defense measure or treaty that would detract from the deterrent or disperse United States defense efforts from "fortress America."

On the other hand, there were cries of alarm at the policy of total war or nothing, and the advocacy of the belief that unless the United States was willing to meet the Communist threat with balanced, and therefore realistic, force structures, eventually the world would be reduced to the two camps of the territorial United States on the one hand, and a hostile Communist world on the other.

However, Dulles moulded the defense strategy that he believed would not only successfully prosecute the Cold War but would be victorious. Drummond and Coblenz have aptly summed up the ambivalent feelings that we have towards Dulles:

⁹Roscoe Drummond and Gaston Coblenz, Duel at the Brink, John Foster Dulles' Command of American Power (Garden City: Doubleday, 1967), p. 13.

"It will be a mixed verdict. It will be marked by minuses and pluses. It will record that Foster Dulles was an extraordinary person exercising extraordinary power in extraordinary times."¹⁰

Politically, the choice of Massive Retaliation would again allow some respite for the budget but again at the expense of other, more conventional, forces. One of the Republican campaign promises had been the advocacy of fiscal responsibility, and in this respect about half of the Republican budgets during the next two administrations were balanced.

The administration subscribed to the long haul view in the fight with Communism. They cancelled some defense contracts of duplicative items and in general stretched out the build-up of forces in anticipation of an indefinite period of uneasy peace. The world in the mind of the policy maker in 1953, was truly bi-polar. Massive Retaliation would put the gun against the enemy's head, and so far there was still only one head and one gun, which simplified the problem.

Furthermore, the military arguments ran, the huge Russian army backed by a seemingly bottomless manpower pool made adherents of conventional land forces appear rather shortsighted. At a signal, theoretically, the 150 Russian army divisions in Europe could march straight to the English Channel.

¹⁰ Ibid., p. 12

It will be a great honor to have you as a guest at the dinner. We will be glad to have you and your family. The dinner will be held on Friday, the 15th of June, at 7:30 P.M. at the Waldorf-Astoria Hotel. We will be glad to have you and your family. The dinner will be held on Friday, the 15th of June, at 7:30 P.M. at the Waldorf-Astoria Hotel.

Very truly yours,
John D. Rockefeller

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All that the United States needed was enough of a ground force in Europe, either American or indigenous, which could provide enough conventional resistance to indicate the unambiguousness of Communist intentions. These forces preferably would be local defense forces. Dulles stated in early 1954 that: "There is no local defense which alone will contain the mighty land power of the Communist world. Local defense must be reinforced by the further deterrent of Massive Retaliatory power."¹¹ In the same vein President Eisenhower stated in a press conference that, "If you could win a big one, you would certainly win a little one."¹²

The argument ran that the United States' most precious asset was manpower and therefore the number of men used in warfare must be reduced. For this loss in manpower would be substituted power, speed, mobility and flexibility.

This, then, logically led into the theorem of disengagement. United States forces would not be deployed, by commitment, to any specific place; therefore they would be available to go anywhere. In a pure deterrent environment there would not be any deployed or deployable conventional forces.

Though Clausewitz stated that policy has to control

¹¹William W. Kaufmann, The McNamara Strategy (New York: Harper and Row, 1964), p. 25

¹²Ibid.

operations, in 1953 it was felt by strategic planners that the advance of technology had made it increasingly difficult if not impossible to limit wars politically. The uniqueness of modern weapons systems was out of the realm of conventional armaments. Massive Retaliation could become a substitute for diplomacy. This logic fell easily into place in Dulles' mind in view of his opinion of the Communist world.

Needless to say, the effects of and ramifications upon United States allies of these arguments were demoralizing to an extreme.

Militarily the arguments for Massive Retaliation were criticized vehemently. But the advocates of Massive Retaliation forwarded the assumptions that: (1) Russia has a large air force of comparable ability to that of the United States; (2) they have an immense army, well trained and with modern equipment; and (3) their navy is of modest size with the exception of the submarine force which to many observers meant that the United States Navy, and especially the aircraft carriers, would quickly be destroyed in the initial stages of a war.

Thus, at the end of 1953, Massive Retaliation as a philosophy and as a national defense policy had briefly jelled. It was defined as the ability to prevent war by threat of atomic annihilation. However, the doctrine was bound to break down due to its inherent inflexibility and the continued emergence

and full realization of Russian comparable strategic capability. Soviet counter-deterrence emerged in the form of a fine medium jet bomber.¹³ Due to the availability of this Russian strike force the United States deterrent force would, therefore, in all probability be deterred from resorting to Massive Retaliation in lesser aggressions or provocations. The United States had plainly lost the initiative with respect to strategic bombardment. Later this was to be borne out in the Hungarian Revolt and the Suez crisis. The theory of Massive Retaliation was breaking down; it was not the whole answer.

Nuclear Bi-polarity and the Approaching Stalemate

In the face of the development of a Russian strategic atomic bombardment capability would the United States counterforce be credible? Modern weapons systems, in this case the strategic striking force, had suffered a loss of the defensive function which had been an inherent capability of a major offensive force. That is, regardless of the responsiveness, speed, and accuracy of United States offensive forces, they could not defend the United States from a similar attack. Offensive power alone, in 1954, constituted deterrence as it does today, because the defensive capability lags immeasurably. Barring unforeseen technological developments the United

¹³Neville Brown, Nuclear War; the Imending Deadlock (New York: Praeger, 1964), p. 21

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States would be, in the interim, liable to intolerable damage. The impact of this upon the national security image and the formulation of national security policy has been penetrating, far reaching, and still haunts strategists at the present time, a decade later.

For defense planners this meant that as hopeless as it might seem the defense must be attempted. The United States has in 170 metropolitan areas, 75 per cent of its industrial capacity and 55 per cent of its population. In the event of nuclear attack there is less warning time as the attack would be directed initially against the United States. There is little or no warning, or no buffer action. The duration of the attack would be quite short, the value of shelters is highly debatable, and the added dimension of radioactivity is added as a continuing menace. Furthermore, the lethal destructive diameter of the H-bomb has made targeting academic. One could not only wipe out whole cities but also the contiguous industrial complexes.

The United States, therefore, embarked upon a series of defensive measures which consisted of overseas radar installations and the North American Air Defense Command (NORAD) system of the DEW, Pine Tree, Mid-Canada lines and the SAGE system coupled with metropolitan radar and missile coverage. One of the primary, though less publicized, reasons for these systems was to protect the vulnerable SAC forces. These de-

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fensive systems can be defined as strategic in that they were to prevent the enemy from destroying SAC's retaliatory capability by surprise. General LeMay stated in 1957 that: "SAC's residual punch must be able to deter the enemy."¹⁴ General LeMay meant by this that the enemy must never be able to assume that he will be capable of reducing SAC's striking capacity to a level that could be defended against by him, or that would be small enough to deliver to him an acceptable level of damage.

The doctrine of Massive Retaliation as the sole method of response to crisis or aggression was subjected to increasingly adverse criticism as the prospective enemy continued to develop a similar strategic capability. The criticism was largely based on the fact that now that the United States no longer had an atomic monopoly, it was necessary to develop more flexible and non-nuclear methods of response, because the United States could be subject to nuclear attack either in a preventive or retaliatory manner.

In the field of national security, we have rigidly pursued patterns which may have been adequate when they were developed but which have become dangerously dated in the interval.¹⁵

¹⁴Paul Peeters, Massive Retaliation: The Policy and Its Critics (Chicago: Henry Regenery Company, 1959), p. 29.

¹⁵Kissinger, The Necessity for Choice, p. 3.

The first part of the report is devoted to a general survey of the
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This was first shown to be specifically evident in the case of reduced European conventional defense forces.

To attempt to maintain the doctrine of massive retaliation in the face of these developments (Russian land power and strategic nuclear capability) by deliberately leaving a vital area inadequately defended is to conduct a policy of reckless bluff.¹⁶

These arguments were germane and to the point. But Dulles also, as early as 1954, was beginning to perceive the rigidity of his policy and to acknowledge the requirement for more flexibility.

But such power (the SAC deterrent), while now a dominant factor, may not have the same significance forever. Furthermore, massive atomic and thermonuclear retaliation is not the kind of power which could most usefully be evoked under all circumstances.

Some suggested that the U.S. intended to rely wholly on large-scale strategic bombing as the sole means to deter and counter aggression. What has already been said should dispose of this erroneous idea. The potential of massive attack will always be kept in a state of instant readiness, but our program will retain a wide variety in the means and scope for responding to aggression.

To deter aggression, it is important to have the flexibility and the facilities which make various responses available. In many cases any open assault by Communist forces could only result in starting a general war. But the free world must have the means for responding effectively on a selective basis when it chooses. It must not put itself in a position where the only response open to it is general war. The essential thing is that a potential aggressor should know in advance that he can and will be made to suffer for his aggression more than he can possibly gain from it. This calls for a system in which local defensive strength is reinforced by more mobile deterrent power. The method of doing so will vary according to the character of the various areas.¹⁷

¹⁶Ibid., p. 108. See also pp. 105-7 for an excellent discussion for the necessity of European conventional defense.

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Dulles reiterated the necessity of the desirability of balanced forces backed up by massive retaliatory power later that same year.

We must have the capacity to respond at places and by means of our choosing.

This, however, does not mean that any local war would automatically be turned into a general war with atomic bombs being dropped all over the map. The essential thing is that we and our allies should have the means and the will to assure that a potential aggressor would lose from his aggression more than he could win. This does not mean that the aggressor has to be totally destroyed. It does mean a capacity to inflict punishing damage.¹⁷

This was the policy of graduated deterrence. The United States would maintain its retaliatory capability and its retaliation would be massive with respect to an aggressor's expected gains. The United States would be able to retaliate on a selective basis to any type of aggression. Local aggressions would be deterred at a level of lesser intensity. Therefore, expansion of hostilities would be the aggressor's prerogative and consequently his doom. There was significantly less talk about retaliation against the mother countries of China and Russia, though the threat had never been withdrawn.

However, the policy came into serious conflict with the

¹⁷ John Foster Dulles, "Policy for Security and Peace," Foreign Affairs, 32-3 (April, 1954), p. 355, 363.

¹⁸Address made before the National 4-H Club, quoted in: John Foster Dulles, "The Goal of Our Foreign Policy," Department of State Bulletin, (December 13, 1954), p. 308

capabilities and size of the conventional forces within the Defense Department. There were not sizable enough forces to fight another Korea, and they were spread quite thinly throughout the free world. It was necessary to publicize the policy of graduated deterrence, though, in order to neutralize the Russian deterrent. If the deterrent on both sides became mutually deterred, lesser forms of response were the only recourse.

Our aim, therefore, should be to shun atomic warfare, primarily because such warfare would inevitably lead to total and unlimited war from which no victory and no stable political results could be expected by anyone.

To achieve this aim, we must paradoxically, maintain two fundamental capabilities -- the capability of waging an atomic war unequalled in destructiveness by any opponent and the equally important capability of waging a victorious war without utilizing atomic weapons.¹⁹

President Eisenhower wanted it made plain that the United States would never initiate atomic hostilities, in a further attempt to relay to the Russians that nuclear war is unnecessary.

Above all, its (United States military establishment) purpose is to prevent aggression and war. Our forces will never be used to initiate war against any nation; they will be used only for the defense of the free world.²⁰

Though both Eisenhower and Dulles had qualified the

¹⁹Hanson W. Baldwin, "Nagasaki Plus Nine Years," Bulletin of the Atomic Scientists; X (October, 1954), p. 318.

²⁰Address made at the American Jewish Tercentenary Dinner at New York, N.Y., on October 20, 1954, quoted in: Dwight D. Eisenhower, "Peace An Freedom," Department of State Bulletin, November 18, 1954), p. 675.

The first part of the report, which is a preliminary report, is devoted to a general description of the work done during the year. It is followed by a detailed account of the work done in each of the various departments. The report concludes with a summary of the work done during the year and a list of the publications of the Institute.

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role of Massive Retaliation in defense strategy, the criticisms continued because force structures did not reflect the shift.

This hypothesis exercised by weapons of mass destruction by making military strategy too dependent on one set of tools, has deprived the nation of flexibility. With a rigid military strategy, no policies can be formulated and no objectives can be achieved which cannot be implemented by nuclear destruction. It is one thing to negotiate through strength; it is quite another to negotiate on the basis of a power which breeds self-destruction. Americans today are not only power-minded but nuclear power-minded. Their rigid strategy did not help them in Korea; it gave them little if any additional strength to deal with the Suez situation, and none for the Hungarian crisis. In a sense, it has tied their hands by tying their minds to a single objective: total peace or total war -- deterrence or self-destruction.²¹

And the Navy's position was clearly stated by Commander Williams' writing in March, 1955:

But we must now face a situation in which it is possible even for the weaker side to deny victory to the stronger simply by delivering a sufficient number of nuclear weapons. A nation need not have "superiority" in atomic air power. It needs only to have enough.²²

Clearly, Massive Retaliation as the primary United States response was explicitly abandoned. Both the Secretary of State and the President had made statements to that effect. Previous to the President's 1955 State of the Union Message,

²¹Gorden B. Turner and Richard D. Challenger (eds.), National Security in the Nuclear Age (New York: Praeger, 1960), p. 65.

²²Ralph E. Williams, Jr., "America's Moment of Truth," United States Naval Institute Proceedings, LXXXI (March, 1955), p. 349.

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
5708 SOUTH CAMPUS DRIVE
CHICAGO, ILLINOIS 60637

TO: THE DIRECTOR, NATIONAL BUREAU OF STANDARDS
433 RIVERSIDE DRIVE
WASHINGTON, D.C. 20535

FROM: DR. J. H. GOLDSTEIN, CHICAGO
5708 SOUTH CAMPUS DRIVE
CHICAGO, ILLINOIS 60637

SUBJECT: [Illegible]

RE: [Illegible]

Enclosed for the Bureau are two copies of a report on the results of the work described above. One copy of the report is also being furnished to the [Illegible] at [Illegible].

Very truly yours,
J. H. Goldstein

cc: [Illegible]

Dulles in discussing the requirement for mobile forces necessary to reinforce the defenses of the Free World had said that:

Therefore we are relying, in most of the areas of the world, primarily upon the deterrent of striking power as an effective defense.

The process of building up a strategic reserve of land forces and relying at the front line on sea and air power, is a policy which we adopted a year ago, and what is going on now is merely an anticipation of that policy.²³

President Eisenhower followed this by also voicing the limitations of Massive Retaliation in his State of the Union Address:

To protect our nations and our peoples from the catastrophe of a nuclear holocaust, free nations must maintain countervailing military power to persuade the Communists of the futility of seeking to advance their ends through aggression. If the Communist rulers understand that America's response to aggression will be swift and decisive -- that never shall we buy peace at the expense of honor and faith -- they will be powerfully deterred from launching a military venture engulfing their own peoples and many others in disaster. Now this, of course, is a form of world stalemate.²⁴

He then defined stalemate thusly:

When I said stalemate, I was trying to describe where neither side is getting what it desires in the whole world struggle, but that, at least, have sense enough to agree that they must not pursue it deliberately and through force of arms: that is all.²⁵

²³Secretary of State's Press Conference, Department of State Bulletin, (January 3, 1955), p. 375

²⁴Peeters, op. cit., pp. 70-71.

²⁵Ibid., p. 72

By the end of 1955, the credibility of the deterrent had become seriously doubted both within and without the administration. The problem that confronted the policy maker now was what type of strategy would be effective in deterring Communism without recourse to total war. The consensus of opinion was that balanced forces were essential. During peacetime, however, with the emphasis on balanced budgets, these would be nearly irreconcilable. The previous reliance on Massive Retaliation and the serious diplomatic setbacks of the mid-fifties, combined to generate a continuing, bitter debate over the direction of national security policy.

British, French, and Russian Reactions to Massive Retaliation

During this period, the British underwent similar throes in the determination of a national strategy. The British were committed to NATO and they were closely tied to the point of being dependent upon the United States strategic umbrella. Their debate pivoted on whether they should develop an independent deterrent or restrict their military contribution to token supplementary forces and capabilities.

In 1954, they had decided that the initial nuclear holocaust would terminate with some of the mobilization base intact. After the initial nuclear exchange both sides would then proceed on a conventional war basis to decide the issue.

(1) Any future major war will consist of an initial and

probably decisive, massive nuclear exchange. The United States is far ahead in the capability of delivering such an attack. (2) Since we have the atomic advantage, we should limit our ready forces to those required to cope with and survive the initial crucial blows, which we can do because of our capacity for instant retaliation. (3) If we are going to carry out this strategy, we shall need a high degree of selectivity in the long-range development of weapons systems. These are so expensive that if we do not want to bankrupt ourselves, we must reshape military forces around weapons systems to further only the most essential national tasks; and the allocation of resources and practices accordingly.²⁶

This was labelled "broken-back warfare," and a concept that was abandoned in 1955 in favor of a complete reliance on deterrent capability. The British had also come to the conclusion that strategic bombardment would be conclusive with respect to any organized resistance by conventional forces barring as yet unforeseen improvements in air defense, civil defense, or hardening. The switch in British policy was completed in 1957, and the requirement for a strong British military position was accurately described by Bevin in a speech in October of that year;

What this conference (Labor Party Conference), ought not to do -- and I beg them not to do it now -- is to decide upon the dismantling of the whole fabric of British international relationships without putting anything in its place. If they carried the resolution (to eliminate nuclear armament), with all its implications they would send a British Foreign Secretary, whoever he was, naked into the conference chamber.²⁷

²⁶Lowe, op. cit., p. 39

²⁷Kissinger, Op. cit., p. 111.

The foremost spokesman of the British Utopian school of thought was Sir John Slessor, who had repeatedly called for a British strategic force as early as 1953. He, like the French later, believed that even a deterrent capability which was less than finite could deter an enemy and could be a force to reckon with.²⁸

However, in reality, the British had to become reconciled to the protection of the American strategic umbrella for a number of reasons; the primary of which was economic.

Henry Kissinger has written a perceptive passage which vividly points out the differences between British and French philosophies of independent strategies based on nuclear deterrence.

If the threat of all-out war is the chief counter to Soviet aggression, none of our allies will be able to pose an effective retaliatory threat should they create strategic forces of their own. The result will be either a sense of impotence or irresponsibility, either resignation, or a futile attempt to achieve an independent deterrent position.²⁹

Whereas the British went through the logic, similar to that of the United States, in determining a national strategy, they reconciled themselves to contributing a supplementary

²⁸Sir John Slessor, The Great Deterrent (New York: Praeger, 1957). In Chapter 8 he discusses the place of bombers in British policy in a lecture delivered in 1953. Chapter 13 is also excellent, as it is a British viewpoint of the philosophy of deterrence. It is strikingly similar in its arguments to that of air power purists in the United States.

²⁹Kissinger, op. cit., p. 50.

The following information is being furnished to you:

1. The name of the person or organization to whom the information is being furnished.

2. The date when the information was furnished.

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role in Western defense -- interdependency. On the other hand the French, having developed their atomic capability some years later, remained frustrated by the insignificance of their relative power position and elected to take an independent course which was remained a source of frustration to Western statesmen and strategists. In order for Western defense efforts to be fully effective individual nation's capabilities must be closely coordinated and complementary, and the determination of strategies and their implementation subject to even more close coordination to the degree that there is a unified command in complete charge of all forces.

However, the French waived the opportunity to participate in high Western strategy in favor of pursuing their version of a finite, or minimum deterrent capability. Their spokesman was Pierre Gallois, a French military figure given free rein by De Gaulle to expound French strategy. Gallois believed that even a token nuclear strategic capability was sufficient to provide a deterrent to the possessor.

Since Hiroshima, the situation has become totally different. Because weapons can now break the back of a great nation, a small fraction of a country's striking power would be enough for a decisive attack.³⁰

³⁰Pierre M. Gallois, "Nuclear Aggression and National Suicide," The Reporter, (September 18, 1958), p. 23. The philosophy supporting the independent French deterrent is skillfully taken to task in Chapter 4, "The Independent French Deterrent," in: Aron, op. cit.

The first part of the report deals with the general situation of the country and the progress of the war. It is followed by a detailed account of the military operations in the various theatres of war. The author then discusses the political and economic conditions of the country and the impact of the war on the population. The report concludes with a summary of the main findings and a few suggestions for the future.

The author's observations are based on a long and varied experience in the field. His account is both accurate and interesting. The report is a valuable contribution to the knowledge of the country and the war. It is highly recommended to all those who are interested in the subject.

The report is a well-written and informative work. It provides a clear and concise account of the situation in the country and the progress of the war. The author's analysis is sound and his conclusions are well-founded. The report is a must-read for anyone who wants to understand the current situation in the country.

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Regardless of allied cooperation or divergence in pursuit of an independent strategy, the outstanding strategic fact of life in the mid-fifties was the bi-polarity of state-mated nuclear power of the United States and the Soviet Union.

The paramount objective of any state is survival. No gain is meaningfully possible without self-preservation, and to carry this axiom one step further: No gain by attack is possible unless it exceeds the losses incurred in consequence of the attack. The primary Soviet objective, like our own, is survival.³¹

This is a fair appraisal of the attitude prevalent not only within Russian political and military circles, but within the United States as well. The Soviet Union was at a considerable disadvantage during the first decade following World War II. Though the United States had recklessly dismantled its armed forces, the Damoclean sword of the atomic bomb hung over Russia's head. During that time there was no feasible military way of neutralizing that threat posed by the United States. Russia's only hope was that by political maneuvering, the United States would be deterred from utilizing its ultimate weapon. That policy was effective, and the Russians made significant post-war gains despite United States nuclear bombardment capability coupled with the doctrine of Massive Retaliation.

However, during the same period, and even after the

³¹Raymond L. Garthoff, Soviet Strategy in the Nuclear Age (revised edition; New York: Praeger, 1962), p. 5.

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doctrine of Massive Retaliation was modified to graduated deterrence, the Russians suffered from their strategic impotency.

The dominant Soviet image of American military strategy is a massive, surprise air blow with weapons of mass destruction (nuclear, thermonuclear, and bacteriological) derived primarily against Soviet urban-industrial centers.³²

"In March, 1954, some persons (Mikoyan and Malenkov) in the Soviet Union stated quite unmistakably that the Soviet Union possessed a deterrent capability."³³ The development of Soviet military strategy subsequent to their acquisition of a strategic nuclear capability was similar to their previous conventional strategy. Russian early strategy was to concentrate on the armed forces of the enemy rather than to resort to attacks on urban-industrial complexes. Their first strategy was that of counter-force.

A strategic concept underlies and welds together into a coherent and inter-related pattern all aspects of doctrine, organization of the military establishment, weapons systems and other components of any military structure. The Soviet strategic concept, in the thermonuclear era as before, is founded on the belief that the primary objective of military operations is the destruction of hostile military forces, and not the annihilation of the economic and population resources of the enemy.³⁴

As American air power purists maintained later, an effective counter-force strategy may require recourse to pre-

³²Ibid., p. 129.

³³Herbert S. Dinerstein, War and the Soviet Union; Nuclear Weapons and the Revolution in Soviet Military and Political Thinking (New York: Praeger, 1959), p. 15.

³⁴Garthoff, op. cit., p. 71.

ventive or pre-emptive attacks in order for it to be effective and credible. Since the Soviet Union had lived with the fear of such an attack for a decade they readily incorporated the concept into their strategy.

The Soviet Union has to be prepared to deal a fore-stalling blow so as to deprive the enemy of the advantage of surprise. The image called up is that of a quick decisive blow against the enemy, who is poised to strike, before he can launch his own attack.³⁵

But as the stalemate matured in the later fifties, their strategy gradually evolved into one similar to that of the United States. Realizing the infeasibility of an effective counter-force strategy, Russian strategy evolved into one of deterrence based on some counter-force capability, but it was composed largely of counter-city targeting. This, in turn, was mixed with a large conventional force capability in the Russian tradition. Russian strategy is epitomized by the commentary that: "Khrushchev's bent seems to lie in the direction of concentrating on weapons with maximum political effect and a high probability of discouraging war from starting in the first place."³⁶

By 1955 the two great powers faced each other a hemi-

³⁵Ibid., p. 11.

³⁶V.D. Sokolovskii (ed.), Soviet Military Strategy, translated with an analytical introduction, annotations and supplementary material by Herbert S. Dinerstein, Leon Gore, and Thomas W. Wolf (Englewood Cliffs: Prentice-Hall, 1963), p. 31.

sphere apart with roughly equivalent deterrent forces and similar strategies. Their respective deterrents were credible and their forces stalemated. The Russians had aspired, at a minimum, to neutralization of the American strategic nuclear monopoly, but the Americans were unprepared for the speed with which the Soviet Union brought this to fruition. As a result, previous reliance on the nuclear monopoly was now cancelled out. A new or revised strategy, on the part of the United States, was required to regain American supremacy. Stalemate was intolerable.

The Great Debate

The interval from 1955 to 1959 is considered the period of the Great Debate. It extended from the time that the doctrine of Massive Retaliation was repudiated as the sole method of United States military response, to the pre-election year of the presidential election of 1960, highlighted by the "missile gap."

The debate was three-cornered in its composition. On the one hand was the administration which was espousing balanced forces and which was attempting to project an image of responsibility in national defense strategy. The image reflected a strategy in part consisting of massive retaliatory power, which, though not perhaps overwhelming, was sufficient to deter the Russian nuclear force. It was credible. Added to this were conventional ground and naval forces which were

both based within the continental United States and deployed abroad. The components of national defense were welded to the free world defense strategy by the treaties which implemented the containment principle, and mutual defense agreements. Both the President and the Secretary of State reiterated the strength and competence of United States forces which both ensured deterrence of the Russian strategic threat and contributed to maintenance of world peace by the ability to respond in kind to lesser aggressions.

It is also agreed that the principal deterrent to aggressive war is mobile retaliatory power. This retaliatory power must be vast in terms of its potential. But the extent to which it would be used would, of course, depend on circumstances.

It is also agreed that it would be imprudent to risk everything on one single aspect of military power. There must be land, sea, and air forces for local action and for a defense which will give mobile striking power the chance to do its work.³⁷

We have a broadly based and efficient defensive strength, including a great deterrent power, which is, for the present, our main guaranty against war.

Now as to the period ahead: Every part of our military establishment must be equipped and will be equipped to do its defensive job with the most modern weapons and methods.

We must maintain all necessary types of mobile forces to deal with local conflicts, should there be need. This means further improvements in equipment, mobility, tactics, and fire power.³⁸

³⁷Address made before the annual luncheon of the Associated Press at New York, N.Y., April 22, 1957, quoted in: John Foster Dulles, "Dynamic Peace," Department of State Bulletin, May 6, 1957), p. 38.

³⁸Dwight D. Eisenhower, "State of the Union," Department of State Bulletin, (January 27, 1958), p. 65.

Dulles, especially, continuing in his role as the foremost spokesman of United States foreign policy, returned repeatedly to this theme.

It is our policy to check the Communists' use or threat of force by having retaliatory power and the will to use it, so that the Communists' use of force would obviously be unprofitable to them.

It is, however, not enough merely to have great retaliatory striking power. It is necessary to have forces in being at endangered points. Nations which are in close proximity to powerful aggressive forces need the reassurance of some visible force within their own territory. They are not content to be wholly dependent upon forces and decisions elsewhere. Furthermore, vast retaliatory power should not be, and will not be, invoked lightly. There must be an ability to oppose what may be limited probings in ways less drastic than general nuclear war.³⁹

On the other hand were the two other sides to the argument. They were proponents of a traditional mixed force capability, and the supporters of pure air power. The former largely supported the administration but their main criticism was that there was an imbalance in the defense appropriations structure. In their opinion the Air Force, and particularly the component of strategic bombardment, was receiving a disproportionate share of the defense dollar. They believed that only a minimum, or finite, deterrent was required, and that resources in excess of these should be allocated to

³⁹Address made before the California Chamber of Commerce at San Francisco, Calif., December 4, 1958, quoted in: John Foster Dulles, "Policy for the Far East," Department of State Bulletin, (December 22, 1958), p. 601.

conventional, mobile forces. "Minimum deterrence as defined by the specialists is the capability in any circumstances of inflicting upon an enemy engaged in open aggression such retaliation as he would consider unacceptable."⁴⁰

In making our retaliatory force secure from enemy attack, we do not need the great numbers of missiles and bombers. Whether the U.S.S.R. has one-half as many or several times as many missiles as the United States, is really academic as long as we have the assured capability of destroying Russia and as long as the Soviets know it and are really convinced of it.⁴¹

The Traditionalists were convinced that the perfect deterrent weapon for the time was the Polaris missile system. It could move in close, was far less vulnerable, was continually moving, dispersed, and did not need refueling for years, was difficult to locate and destroy, could not be eliminated by one massive attack like land power, would draw missiles away from our homeland, and reduced the possibility or likelihood of surprise attack.⁴²

The third corner of the strategic debate consisted of the air power purists, or Utopians. They believed that reliance on air power and the missile forces would ensure not only the maintenance of United States security but victory in the Cold War. They were the supporters of a doctrine of

⁴⁰Aron, op. cit., p. 74.

⁴¹Address given by Admiral Arleigh Burke to the Chamber of Commerce, Charleston, S.C., February 20, 1959, quoted in: Lowe, op. cit., p. 197.

⁴²Ibid., p. 155.

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classical Massive Retaliation at a time when it had outlived its usefulness. The advent of mutual deterrence and the failure of a counter-force strategy, because of its infeasibility, prevented them from formulating a realistic alternative to a national defense strategy based on balanced forces.

LeMay could say:

Our forces, therefore, must be sufficient, prepared and able to destroy any aggressor's military power to the extent that he no longer has the will or ability to wage war. This is the type of military force we must maintain-- a counterforce--a force that can win--the kind of military force that is essential to true deterrence.⁴³

However, such a counter-force strategy could result in an unending arms race, based on single purpose weapons implementing a single purpose strategy, with its inherent dangers of instability. Critics of the Air Force point of view have maintained that they supported a counter-force strategy in order to enlarge their forces, aside from the strategy it supported.

Proponents of a counterforce strategy argue that deterrence requires not only the prospect of damage to industry and civilian population but also of military defeat. Consequently, the primary target must be the opponent's striking forces. Once this is crushed, victory is assured. A counterforce strategy therefore requires a retaliatory force so large and so well protected that it can guarantee the destruction of the opponents offensive power. As the opposing missile force grows, ours has to multiply correspondingly and at a ratio which maintains the possibility

⁴³Address by General Curtis LeMay given to the Air Power Council, Fort Worth, Texas, August 26, 1960, quoted in Lowe, op. cit., p. 220.

The first part of the report is devoted to a general
 description of the project and its objectives. It
 also includes a brief history of the organization
 and a list of the members of the committee.
 The second part of the report is devoted to a
 detailed description of the project and its
 progress. It includes a list of the work
 done and a list of the results obtained.

The third part of the report is devoted to a
 discussion of the results obtained and a
 comparison of the results with those obtained
 in other similar projects. It also includes
 a list of the conclusions drawn from the
 results.

The fourth part of the report is devoted to a
 list of the references used in the report.
 The fifth part of the report is devoted to a
 list of the names of the members of the
 committee and the names of the members of
 the staff who assisted in the work.

The sixth part of the report is devoted to a
 list of the names of the members of the
 committee and the names of the members of
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The seventh part of the report is devoted to a
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of victory. In the age of nuclear plenty and of mobile missiles, the force requirements of a counterforce strategy are likely to become astronomical.⁴⁴

The Utopian proponents of preventive war reasoned that if one attacked first he would gain the advantage, understandably and probably decisively. They believed one might as well strike first in view of the fact that war is inevitable. It would be best to strike now before the Russians reached parity or worse. Countering these arguments were the advocates of the hope that war is not necessarily inevitable, or at least the nuclear form of war. Furthermore, they reasoned that your intelligence might not be entirely reliable, so you could still end up getting the worst of it. Added to this, of course, was the moral issue of initiating hostilities. The crux of the criticisms was that the United States should never commit itself to an inflexible strategy.

A real problem for the planner was that of the preemptive attack. Utilizing this strategy, the United States would launch its attack after the Soviet Union had already set in motion its strategic attack, but before it had been consummated. Preferably the United States would launch its attack well before his got underway. This would absolve the United

⁴⁴Kissinger, The Necessity for Choice, p. 27. See also Chapter II, "The Dilemmas of Deterrence," for an excellent discussion of the types and options of deterrence, with a very helpful graph on page 30.

The first part of the report is devoted to a general survey of the situation in the country. It is followed by a detailed account of the work done during the year.

The second part of the report is devoted to a detailed account of the work done during the year.

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The twenty-fourth part of the report is devoted to a detailed account of the work done during the year.

States morally, but the intelligence problem of what constitutes unambiguous warning is very delicate. Reliance on this form of defense would obviate the need for either hardening or dispersal. But, by the same token, to be effective, this strategy relied heavily on a counter-force capability.

Pre-emptive war, on the other hand, can come about even when the two sides are fairly evenly balanced. It is a result of two interacting factors: fear of an imminent attack and the vulnerability of the retaliatory force. If a nation's retaliatory force is highly exposed, it must live with the nightmare that a successful attack would place it at the aggressor's mercy. Hence, the less vulnerable a country's retaliatory force the less incentive that country will have for a pre-emptive blow. The motive for a pre-emptive blow is reduced to a minimum if the retaliatory force is so well protected that it can afford to ride out an attack and still retain the capacity to inflict unacceptable damage. By the same token, such a degree of readiness will eliminate the aggressor's incentive to launch a surprise attack in the first place.⁴⁵

Critics of these arguments pursued the following logic: The alternatives to preventive war, pre-emptive attack, and Massive Retaliation are deterrence and the ability to wage limited war.

The objective of "graduated deterrence" or selective force must be, therefore (as in Gilbert and Sullivan where "the punishment fits the crime"), an entire spectrum of military capabilities. We must be capable of fighting all-out nuclear war, small scale brush wars, a limited nuclear war, and a major non-nuclear war. But, if we want to survive, we shall avoid, like death, confining our capabilities to any one weapon, one system. We must be able to win without involving atomic weapons; if we cannot, our fate is sealed.⁴⁶

⁴⁵Ibid., p. 17.

⁴⁶Hanson W. Baldwin, "The New Face of War," Bulletin of

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The rejection of the three modes of warfare mentioned above, committed the United States to deterrence and, therefore, the integrity, that is the credibility, of its retaliatory forces. This is not really too far removed from Massive Retaliation so far in its argument. However, it was more flexible. Deterrence does not depend upon superiority, it was further argued, it is relative and this is particularly so with nuclear weapons. The deterrent component of the strategy need be only a minimum, or finite, deterrent though somewhat modified.

The size of the deterrent force must be shaped by three factors. First, it must be large enough to deter, that is, the United States must be ensured a retaliatory capability regardless of the severity of any attack. Secondly, if it is deemed necessary to strike first, the attack must be overwhelming. Third, the psychological factor must be taken into account. That is that states do not always act rationally and, therefore, a deterrent force must be large enough to be impressive.

The corollary to the above is that large peacetime budgets are necessary to maintain these forces in being. Specifically, fighting will be done with what is on hand; the defense of a credible retaliatory capability may become

limitlessly expensive; the threat of war will always be a continuing one for the foreseeable future; and, the capability to wage limited war requires a capability independent of the nuclear deterrent force.

Senator Knowland has stated that the United States would be subjected to what he called "Operation Nibbling" by relying on only a massive retaliatory capability. That is, the Russians would absorb neighboring countries bite by bite. The question was, would the United States actually use the form of retaliation that the administration was committed to in its early policy? Would the deterrent force be energized to retaliate against a lesser aggression or provocation?

In 1954 the United States had a clear preponderance in air nuclear strength and warned that it was prepared to employ that strength, not only in the event of a direct attack upon the United States, but also in the event of Soviet aggression anywhere in the free world. Since that time the Soviet Union has increased its nuclear air strength, thereby increasing the damage the United States might suffer in responding to Russian aggression by an attack upon the Soviet Union. Thus, Khrushchev and his colleagues may reason, American retaliation against Soviet aggression becomes less certain and perhaps uncertain. Consequently new opportunities open up for Soviet expansion.⁴⁷

Humanists saw (this policy) as the death knell of the individual, the fact that this terrible force could be unleashed on mankind. Obviously, they reasoned, the individual

⁴⁷Herbert S. Dinerstein, "The Revolution in Soviet Strategic Thinking," Foreign Affairs, 36-2 (January, 1958), p. 250.

The first part of the report is devoted to a general
description of the work done during the year.
It is followed by a detailed account of the
various experiments carried out, and the
results obtained.

The first experiment was carried out in order to
determine the effect of temperature on the
rate of reaction. It was found that the
rate of reaction increased with increasing
temperature, and that the increase was
more rapid at higher temperatures than at
lower temperatures. This is in accordance
with the theory of the rate of reaction,
which states that the rate of reaction
increases with increasing temperature.

The second experiment was carried out in order to
determine the effect of concentration on the
rate of reaction. It was found that the
rate of reaction increased with increasing
concentration, and that the increase was
more rapid at higher concentrations than at
lower concentrations. This is in accordance
with the theory of the rate of reaction,
which states that the rate of reaction
increases with increasing concentration.

The third experiment was carried out in order to
determine the effect of surface area on the
rate of reaction. It was found that the
rate of reaction increased with increasing
surface area, and that the increase was
more rapid at higher surface areas than at
lower surface areas. This is in accordance
with the theory of the rate of reaction,
which states that the rate of reaction
increases with increasing surface area.

The results of the three experiments are
summarized in the following table:

has been completely subverted to the national interest. The concept of nuclear war was morally repugnant. War could no longer be a rational extension of policy. Since such a war is inconceivable the administration must be bluffing and therefore Massive Retaliation is not an effective guarantor of security.

Other critics debated the fact that the United States was being overly aggressive; it was playing into the hands of the Communist propaganda machine with Mr. Dulles' version of Russian roulette. It could only be bluffing; it was obviously madness.

The fallacy of the majority of these highly partisan criticisms was that their proponents failed to acknowledge the shift to graduated deterrence by the administration. On the contrary, they predicated their arguments on the earlier unaltered doctrine of Massive Retaliation. Therefore, though their criticisms were vociferous, they were not too germane to the strategic debate. They were literally kicking a dead horse.

However, partisan politics during the 1950's struck wherever it could in anticipation of the election of 1960. In 1954-55 when the administration backed off somewhat from strict reliance on Massive Retaliation, with the graduated deterrence thesis and its increased reliance on conventional weapons, the critics bemoaned the huge defense expenditures.

The administration countered with the argument by saying that the taxpayers were getting a bigger bang for a buck. They averred each man or vehicle had vastly increased firepower; that there had actually been a reduction of support personnel, and that weapons were vastly increased in price. The President outlined his program of defense for the second Republican administration in his Budget Message to the Congress in 1956:

1. Gearing our defense preparations to a long period of uncertainty instead of to a succession of arbitrarily assumed dates of maximum danger.
2. Maintaining the capability to deter a potential aggressor from attack and to blunt that attack if it comes--by a combination of immediate retaliatory power and a continental defense system of steadily increasing effectiveness.
3. Developing military forces which maximize numbers of men by making maximum use of science and technology.⁴⁸

When these arguments ground to a stop due to the impasse, a really fruitful area for debate was discovered. This was the question of parity versus sufficiency. Essentially, it was the beginnings of the controversy of what is now termed overkill. The controversy began with manned bombers and culminated in the famous "missile gap" of 1959-60. Since no one outside the administration knew for certain exactly how many weapons the United States had and how many the Soviet Union

⁴⁸Dwight D. Eisenhower, "Strengthening the Defense of the United States and Its Allies," Department of State Bulletin, (January 30, 1956), p. 340.

The following information was obtained from the records of the
Department of the Interior, Bureau of Land Management, and
the records of the United States Geological Survey, and is
being furnished to you for your information. It is to be
understood that this information is being furnished to you
under the provisions of the Freedom of Information Act, and
that it is being furnished to you in confidence.

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The following information was obtained from the records of the
Department of the Interior, Bureau of Land Management, and
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had, not to speak of the targeting problem, parity was a nebulous equation.

The case for parity may be psychologically reassuring to its proponents and it is a logical argument when applied to conventional forces and conventional armaments. However, it is relatively meaningless when applied to strategic nuclear forces. Determination of the force size of a minimum deterrent is a more realistic approach. Theoretically, the number of weapons required simply equals the number of targets regardless of the size of his forces. This realistic view of forces required defines parity not in relation to the size of his force but in relation to the number of targets he presents. It differs from a counter-force strategy in that rather than attempting to destroy his forces or annihilate him, all that is intended is the inflicting upon him an unacceptable level of damage.

Sufficiency was a sophisticated estimation of requirements of forces necessary, taking into account the number of targets he presents and his counter-force capability. sufficiency is the heart of the overkill controversy and it will be discussed in more detail in Chapter V. Essentially, it revolves around the number of targets, weapons reliability, and weapons attrition.

The world judgement of Massive Retaliation also was intense and it was varied in its criticism. To a certain degree

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this opinion agreed with the United States partisan position. The basic reaction abroad was that Dulles viewed the world as being bi-polar; that it was one of good and evil. According to him, each nation was either pro-American and anti-Communist, or anti-American and therefore of doubtful political affiliation. They saw United States policy as being sterile and reactive. They believed that the United States had lost hope and was therefore reduced to voicing threats and had resorted to militarism.

The British reaction to the debate was reflected in their defense White Paper of 1957. In essence it reiterated United States 1953 strategic policy but with a characteristic British twist. British defense planners came to the conclusion that: (1) there would be a reduction of conventional forces; (This meant the United States would have to assume more Middle Eastern commitments and it was also a reaction to the Suez Crisis) (2) there would be more reliance on new weapons; (3) they would take a long-haul view of defense, with emphasis on the maintenance of a stable economy in the face of flexible military procurement; and (4) there is no effective defense in all-out war and therefore retaliatory capability is the only real safeguard against aggression. In this respect the British decided to place less reliance on United States deterrence by developing an independent capability which was labelled the principle of interdependence.

During the late 1950's American deterrent capability was enhanced by the deployment to selected NATO countries of Intermediate Range Ballistic Missiles (IRBM), and construction of a complex of overseas SAC bases. The B-52 had come into the inventory during 1955-56, and the Intercontinental Ballistic Missile (ICBM) was in the final stage of development as was the Fleet Ballistic Missile System (POLARIS).

It was at this point that the election of 1960 returned the Democratic Party to power, and Robert S. McNamara was appointed the eighth Secretary of Defense.

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CHAPTER IV

FLEXIBLE RESPONSE 1961-1964

The Democratic victory of 1960, returned the Democratic party to power and sent John F. Kennedy to the White House. The basic controversy over national defense policy during the presidential election campaign was that of an alleged missile gap. The new administration came quickly to grips with the problem of formulating their national defense strategy. What they found as a legacy was an entirely workable strategy, sound Defense Department organization, and the forces in being to implement existing national defense policy. They did accelerate development and procurement within existing missile programs and increased support to conventional forces. In all fairness to the previous administration, it must be noted that these measures were done with supplemental appropriations of about six billion dollars. New and accelerated programs were not absorbed within existing budget ceilings as had those during the New Looks of 1953 and 1956. Defense strategy was relabelled Flexible Response and it differed only in detail and the size of forces from graduated response.

The Missile Gap Controversy

The highly controversial missile gap which had dominated the presidential campaign faded from public view as the

new administration came to grips with the necessity to deal with real problems. What had happened to it?

The missile gap had been an issue in the 1960 elections, and an important faction in the Congress demanded a crash program to increase the number of American ICBM's in operational readiness. But by the end of the first six months of the new administration, the relative strength of Russia and the United States had undergone a miraculous transformation.¹

As a matter of fact, the deterrent picture revealed by the new administration was so bright that purists such as LeMay could openly advocate a counter-force strategy, which indicates that not only was a large stock of weapons available, the prospects of their successful delivery must enjoy a high degree of success, and the intelligence upon which their targeting is based must be of a high degree of reliability. However, this bid by the Air Force to gain further pre-eminence in the defense posture, by advocating a counter-force strategy to the new administration, failed.

Perhaps the conclusion to the controversial missile gap is best illustrated by Secretary of Defense McNamara's response to a question posed during a press conference in June, 1961.

Question: The (House Appropriations) Committee suggested that there might be, if you will pardon the expression, a gap in the Polaris program if you did not have long lead time items.

Secretary McNamara: Yes. We did not request funds for

¹Aron, op. cit., p. 79.

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Polaris submarines beyond Boat 29. I will pass by without commenting on the gap. (Laughter).²

Persons who debated whether a gap existed to a large extent missed the point. It was the classical argument of the advocacy of parity versus sufficiency. Those arguing that a gap existed were doing so on the basis of parity. They were air power purists, to a large extent, and supported a position of parity at a minimum. On the other hand, those who argued that there was no gap, which included the administration, did so from a belief in sufficiency. To them parity was meaningless. To them it was a matter of whether the deterrent was credible. Other elements of the debate concerning force size were academic. The debate, therefore, was essentially unproductive because both sides were talking past each other.

This suggests that the debate about whether there is a deterrent gap is inherently misleading. There can be no gap in deterrence. Deterrence is either effective or it is not. There is no margin for error. Mistakes are likely to be irremediable. If the gains of aggression appear to outweigh the penalties even once, deterrence will fail.³

The Defense Strategy of 1961

For President Kennedy, like most democrates, had spoken on both sides of the strategy issue. The safe course was to come out for more of everything, which most liberal Democrates did, and the result was a mixture of both strategies.⁴

²Kaufmann, op. cit., p. 50.

³Kissinger, op. cit., p. 13.

⁴Lowe, op. cit., p. 212.

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The administration was confronted with the following options in developing the deterrent side of its defense policies: (1) Massive Retaliation, as modified by making it a component of graduated deterrence, existed and has been previously defined; (even if it had been adopted it would have had to have been renamed for political reasons) (2) minimum deterrence was the maintenance of a small missile force aimed at the most lucrative targets which are the urban/industrial bases, plus some counter-force targeting; (3) optimum mix was the other extreme. It consisted of the maintenance of a large enough retaliatory force to cope with all target systems. It would be capable of annihilating all military, industrial, and civilian targets in one great spasm; and (4) the final option was that of Flexible Response. This was also known as war-fighting or counter-force strategy. Used here the term counter-force is somewhat misleading. In this context it means that within the deterrent will be the elements of some counter-force targeting. "Our retaliatory force must retain some counter-force capability--at least sufficient to deter a campaign of attrition against our retaliatory force."⁵ It does not mean that the complete enemy force will be targeted. The emphasis was more on sufficiency rather than on parity.

By adopting the strategy of Flexible Response, the

⁵Kissinger, op. cit., p. 39.

The following are the results of the investigation:

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retaliatory capability would be selective in time, targets, and to a selected degree.⁶ This is understandably the most desirable and also the most complicated and expensive deterrent system. A highly diversified and integrated, absolutely reliable, command and control system is essential to its success. Further, the retaliatory capability must be absolutely assured by mobility, dispersal, and hardening of the strategic attack systems, in order to retain its credibility.

Coupled with the nuclear deterrent in Flexible Response were conventional forces of increased capability and size. The new President outlined the following defense strategy in his Special Message to the Congress on the Defense Budget, March 28, 1961:

Our strategic arms and defenses must be adequate to deter any deliberate nuclear attack on the United States or our allies by making clear to any potential aggressor that sufficient retaliatory forces will be able to survive a first strike and penetrate his defenses in order to inflict unacceptable losses upon him.

Those units of our forces which are stationed overseas, or are designed to fight overseas, can be most usefully oriented towards deterring or confining those conflicts which do not justify and must not lead to general nuclear attack.

Our defense posture must be both flexible and determined. Any potential aggressor contemplating an attack on any part of the free world with any kind of weapons conventional or nuclear must know that our response will be suitable, selective, swift, and effective. While he may be uncertain of its exact nature and location there must be no uncertainty about our determination.⁷

⁶Kaufmann, op. cit., p. 51.

⁷John F. Kennedy, To Turn the Tide, ed. John W. Gardner

The administration chose the concept of nuclear strategy based on a minimum deterrent coupled with sizable conventional forces, and in the light of the subsequent years' experiences with it, the Flexible Response concept remains the most logical choice.⁸

Flexible Response confirmed, as graduated deterrence had suggested, that the role of the nuclear strategic force was confined to being that of the ultimate, or last, resort.

(New York: Harper and Brothers, 1962), pp. 58-60. The phrases in the last paragraph referring to retaliation are strikingly similar to some of the earlier pronouncements of Dulles.

⁸Lerche and Said, op. cit., pp. 202-3. For a comprehensive administration oriented discussion of the development of Flexible Response, see: Kaufmann, op. cit.

The following information was obtained from the records of the
 Bureau of the Census, Washington, D. C., on the subject of
 the Federal Reserve Bank of New York, New York, and the
 Federal Reserve Bank of Boston, Boston, Massachusetts.
 The Federal Reserve Bank of New York, New York, and the
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CHAPTER V

THE OVERKILL CONTROVERSY

The role of overkill in deterrent strategy, briefly mentioned in Chapter III, deserves separate consideration. The popular conception of overkill is to "outdo the opposition by sheer quantity of procurement."¹ This is the senseless ability to annihilate an enemy a number of times over, and it is this aspect of the nuclear arms race that has been a major subject of political controversy.

However, on the other hand, if overkill is looked at from the point of view of contributing to the credibility of the deterrent due to its capability of redundant targeting, a certain amount of it is necessary. Defined in these terms, overkill has been grossly misunderstood. A certain amount of overkill is as essential to the credibility of the nuclear deterrent force as are reserve units held to the rear in conventional warfare.

Is Overkill Necessary--Its Critics

When an imposing weapon such as the atomic bomb is developed there is an understandable desire on the part of the strategist to ensure that it will not only be effective but

¹Brown, op. cit., p. 223.

absolutely reliable. Reliability of nuclear weapons is enhanced by improving their efficiency, the means of delivery, and by increasing their numbers to ensure second-strike and re-strike ability. In the case of American defense strategy, this effect was compounded by early reliance on Massive Retaliation. Reliance on a single purpose weapons system set few limits on the size of the force. What limits there were, were a result of budgetary limitations.

At the heart of the overkill controversy are found the proponents of a counter-force strategy. It has been shown that such a strategy precipitates an arms race with virtually unlimited force sizes.² This is the objectionable feature of overkill, and it can hardly be condoned in light of an acknowledged balanced force strategy with a minimum nuclear deterrent component.

But with the advocacy of Flexible Response, the Democratic administration ended the overkill controversy, and counter-force strategists were subdued due to lack of administration support. Though some writers still refer to the objectionable features of overkill, present United States

²Fred J. Cook, "The Warfare State," The Annals of the American Academy of Political and Social Science, (January, 1964), pp. 102-9. See also Ralph E. Lapp, Kill and Overkill; the Strategy of Annihilation (New York: Basic Books, Inc., 1962), for a discussion of overkill defined as nuclear might above and beyond what is sufficient for a credible deterrent.

strategy hardly reflects unnecessary overkill.

Overkill is Necessary--Strategic Requirements

Few people would disagree with the proposition that there are finite limits to the amount of overkilling that a power need be able to carry out. The closer one approaches these limits the less important marginal increments in capacity become. The 501st ICBM is less important than the 51st. Some of the explanation for this diminishing margin of utility lies in the fact that the ability of a missile force to ride out a surprise attack increases progressively faster than the size of that force. Suppose, to take a hypothetical example, that nation A needs just over 100 missiles to destroy nation B and that one of B's missiles would, if fired first, have a 50 per cent chance of eliminating one of A's. Then, if A has 200 missiles B has to launch only 200 missiles against it to deprive A of its total kill capacity. But if A has 800 missiles B has to send 1400 to guarantee doing so.³

These statements and the illustration accurately portray the difficulties encountered in the determination of what constitutes a credible deterrent. Particularly, in the extreme example, if it is based on a significant counter-force strategy, the force may have to be extremely large. However, United States strategy is based more on a credible second-strike capability than on a counter-force strategy, so that estimations of redundancy are more modest.

The first step in determining an overkill requirement is the political choice of deterrent strategy. If a strategy of preventive war is chosen the problem is the simplest.

³Brown, op. cit., p. 223.

The number of weapons required would only be the sum of the targets times error factor, times attrition losses due to launch and flight, times losses due to enemy defenses. Therefore at least two missiles must be launched to hit any specific target, and the missile force is at least twice as large as one would expect.

If, for instance, flexible response was chosen, the number of weapons required would roughly be equal to all the targets chosen, which also means combinations of weapons and targets using alternative weapons systems times their inherent attrition rates during an exchange, all times the error factor or target factor, times normal launch and flight attrition. More simply stated, the number of targets times the reliability (attrition of launch and flight), times impact error, times primary and secondary weapons systems (credible second-strike capability), times attrition of systems due to enemy neutralization (includes command and control systems as well as weapons). This then equals the number of weapons required to neutralize the target system.

Without bothering to put down the mathematics, it can be shown that even using very conservative figures for losses, as much as a six-to-one ratio of missiles to targets is required. With any increases in losses, for instance by a significant defense, a very low weapon reliability, or a high error factor, the ratio can double and even triple over the

The following is a list of the names of the persons who have been appointed to the various positions in the office of the Secretary of the State of New York, for the term ending on the 31st day of December, 1900.

By the Governor, Charles D. Clark, Secretary of the State, for the term ending on the 31st day of December, 1900.

By the Governor, Charles D. Clark, Secretary of the State, for the term ending on the 31st day of December, 1900.

factor of six.

Understandably, the most difficult estimations of the number of weapons required center on intelligence estimates, and the maintenance of a credible retaliatory capability. The intelligence estimate must predict, in an exchange, what our weapon losses would be not only by weapon destruction but by disruption of the command and control system which assigns alternate targets and provides the firing signals. Determinations of this type are tremendously complicated and their resolution though susceptible to war gaming and machine analysis, come down to what amounts to a personal opinion. Not only are all the above listed factors considered, a "safety factor" is also added.

Totalling all these factors produces what seemingly is an unnecessarily large force. However, as was shown, when analyzed in the light of the mathematics involved and the fact that the size of the force is determined by responsible military strategists, the size of the force is based on the principle of sufficiency. The determination of the strategy should be a political decision and the size and composition (mix) of the force necessary to successfully implement it is properly a military one.

1900-1901

The first part of the report deals with the general situation of the country in 1900. It is found that the country is in a state of general depression, and that the principal causes of this state of affairs are the low price of cotton, the low price of sugar, and the low price of rice. The report also mentions that the government has taken certain measures to relieve the distress of the people, but that these measures are not sufficient to meet the needs of the country.

The second part of the report deals with the financial situation of the country. It is found that the government has a large deficit, and that the principal causes of this deficit are the high cost of the army and navy, and the high cost of the public works. The report also mentions that the government has taken certain measures to reduce its expenditure, but that these measures are not sufficient to meet the needs of the country.

The third part of the report deals with the social situation of the country. It is found that the country is in a state of general poverty, and that the principal causes of this poverty are the low price of cotton, the low price of sugar, and the low price of rice. The report also mentions that the government has taken certain measures to relieve the distress of the people, but that these measures are not sufficient to meet the needs of the country.

1900-1901

The fourth part of the report deals with the political situation of the country. It is found that the country is in a state of general political instability, and that the principal causes of this instability are the low price of cotton, the low price of sugar, and the low price of rice. The report also mentions that the government has taken certain measures to stabilize the political situation, but that these measures are not sufficient to meet the needs of the country.

CHAPTER VI

CONCLUSION

Strategic nuclear bombardment by manned aircraft and then by missiles became a possibility after World War II, and the United States enjoyed a nuclear monopoly for the first five post-war years. The strategy of nuclear bombardment was adopted by the United States as having been a logical evolution in warfare.

However, through the early 1950's, nuclear bombardment was given primacy at the expense of conventional forces. After the apparent failure of conventional forces in limited war, the Republican administration elected, in 1952, and particularly the new Secretary of State Dulles, placed sole reliance upon it. Massive Retaliation was the name given to the adopted form of deterrence. Its function was to deter all aggressions. The United States would massively retaliate at times and at places of its own choosing. Each aggression would not necessarily be countered, but if the level of tolerability was reached, the United States would retaliate at the time, with the weapons, and at the place it deemed the most effective. This would be with nuclear weapons and could be directed at the Soviet Union rather than at the location of the aggression.

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As the doctrine of Massive Retaliation evolved during the 1950's, national defense strategy was modified to include an increased capability to counter aggressions of the conventional or limited war type as well as being able to prosecute nuclear war. The newer strategy was termed graduated deterrence. Lone reliance on Massive Retaliation politically, militarily, and morally had become infeasible. Return to a balanced, flexible strategy was the logical course of action.

This shift to more balanced forces was principally due to the facts that Russia had developed a similar nuclear strategic capability which brought about a nuclear stalemate; and because the credibility of Massive Retaliation as a deterrent had been tested and found wanting in the lesser provocations subsequent to the Korean War.

Strong voice was given to continuing and bolstering the development of a balanced strategic national policy during the election of 1960. It evolved, this new strategy, as Flexible Response. In reality it differed only in degree from graduated deterrence. The nuclear deterrent force continued to be relegated to the role of the ultimate response. The United States increased the size and flexibility of its conventional forces to counter lesser aggressions. However, as previously, the administration reserved the right to retaliate with nuclear arms even to a sub-nuclear aggression. This aspect of the strategy had not altered.

The doctrine of Flexible Response was not a panacea, nor was it gained at the expense of a modest or balanced budget. The United States was maintaining two and one-half million men under arms with a defense budget approximating fifty billion dollars, approximately 10 per cent of the gross national product. The doctrine of Flexible Response was a logical step in the evolution of a strategy which could cope with the vicissitudes of the Cold War.

Finally, in order to maintain a credible deterrent a certain amount of overkill is required. At face value, and in the popular image, overkill appears unnecessary. However, when overkill is divorced from the partisan supporters of a counter-force strategy, its redundancy does lend credibility to the deterrent.

In summary, the altered role of the nuclear deterrent in United States defense policy is best explained by the current Secretary of Defense:

We deter the Soviets from using their growing nuclear force by maintaining a nuclear force strong enough and survivable enough to ride out any conceivable nuclear attack, and to survive with sufficient power to cause unacceptable damage to the attacker.¹

¹Address by Robert S. McNamara delivered to the Army Association, Washington, D.C., October 10, 1962, quoted in: Lowe, op. cit., p. 252.

The following is a list of the names of the persons who

have been appointed to the various positions in the

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