RICE UNIVERSITY

U. S. AND SOVIET SECURITY POLICY AND THE "MISSILE GAP:" CONTROVERSY, ORIGINS, AND IMPACT

by

BERNARD E. HOBSON

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

THESIS DIRECTOR'S SIGNATURE: 

Charles F. Dow

HOUSTON, TEXAS

MAY 1976
ABSTRACT

U.S. and Soviet Security Policy and the "Missile Gap:"
Controversy, Origins, and Impact
by
Bernard E. Hobson

A theme central to this thesis is that the missile gap controversy resulted from varied and repeated misperceptions by the Soviet and American participants. Reciprocal misinterpretations of actor's intentions and capabilities during the 1957-1961 period led to an essentially reactive pattern of Soviet-American relations. This pattern had substantial consequences for later phases of the strategic arms race.

In examining the missile gap issue, a number of questions are asked of Soviet and American defense policies, true (as compared to estimated or projected) capabilities for each side, and domestic political catalysts and constraints. In short, the thesis explores developments associated with the evolution and demise of the missile gap as a major strategic issue, weighing the significance of the controversy for the larger realm of Soviet-American security policy.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I \ INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II \ THE SOVIET PERSPECTIVE</td>
<td>5</td>
</tr>
<tr>
<td>III \ THE AMERICAN PERSPECTIVE</td>
<td>19</td>
</tr>
<tr>
<td>IV \ SOVIET-AMERICAN CAPABILITIES: 1957-1961: THE MISSILE GAP FACTS</td>
<td>39</td>
</tr>
<tr>
<td>V \ THE MISSILE GAP OVERVIEW</td>
<td>64</td>
</tr>
</tbody>
</table>

BIBLIOGRAPHY | 89 |
CHAPTER I

INTRODUCTION

Little has been written on the subject of the missile gap controversy since the event occurred late in the second Eisenhower administration. While there was certainly no shortage of coverage on this issue during the missile gap era itself (1957-1961), surprisingly few works in subsequent years examined the matter. Many authors, however, refer to the missile gap scare, suggesting the importance of the event, but without access to the benefits of extensive research and analysis. Hence the purpose and value of the proposed study.

This essay is devoted solely to the exploration of the missile gap affair and its associated developments. I feel that the study possesses analytic and policy importance for two reasons. First, the inspection of the factors contributing to the development of the missile gap theory may be useful in future situations where fears of inadequate deterrent capability are again sounded. In other words, perhaps the identification of the pitfalls and defects in logic that prevailed in many of the conceptions of the 1957-1961 period can be avoided in the future.

Secondly, I feel the interdependence of foreign policy and defense policy, specifically the strategic policy that determines the composition and posture of the respective armed forces, is demonstrated in the course of events and later repercussions of the missile gap. Both Soviet and American policy makers apparently realized this, and their actions during the era and afterwards confirms the
presence of this interlocking relationship. It is significant that a
defense policy largely determined by domestic constraints, e.g. the
desire for economization under Eisenhower, can vitally affect the
conduct and course of a nation's foreign policy. In any event, the
indivisibility of defense and foreign policy is well depicted in the
missile gap period.

The major themes to be explored are revealed in the chapter
titles. First, we want to examine the Soviet perspective on the con-
troversy. How did the Russian leaders view the debate in the United
States? Did they anticipate the amount of consternation the launching
of Sputnik could cause? Were they concerned about American count-
ermeasures? Had they foreseen the eventual effect on respective
capabilities?

Related to these questions are others pertaining more to the
internal effects on the Soviet Union. What was the initial reaction,
once the perceptions were recorded, i.e. what effect did the missile
gap have on Soviet policy, both foreign and strategic? Was there
significant opposition or dissent to the Soviet policies? Did the USSR
actively engage in a deliberate deception with regard to its strategic
posture during the period?

The next chapter asks similar questions of the Americans.
What exactly were the perceptions of the American people, military
leaders, and government officials? Why did they differ? What factors
shaped the course and content of the debate? Why did the turmoil con-
cerning the missile gap occur and what aspects of this issue influenced
American opinion most directly? What significance did the two differ-
ent men in the White House during this time attach to the controversy,
in particular why was the Eisenhower administration relatively indifferent and the Kennedy administration so perturbed about a possible missile gap?

In the following chapter the reality of the missile gap is assessed. Involved in this are considerations of research and development progress, specific force levels of the various components in the strategic arsenals, and the overall comparative strategic power configuration. Among the questions to be answered are: Was the Soviet Union ever ahead in ICBMs, and what impact would such a lead have? What were the differences in the actual number of ICBMs produced and deployed and the estimates? What effect did this have? What was the overall deterrent situation, i.e. which nation was the strongest in total strategic power?

Finally, the last chapter will deal with the overview of the period. This section will assess the ultimate effect and importance of the missile gap. Included will be an examination of the evolution and resolution of the issue in the United States, and the consequences of this for American policy. The effect of the controversy on the 1960 presidential election is discussed, as well as further examination of the differences between Kennedy and Eisenhower. In addition to this, the mutually provocative nature of the missile gap with regard to Soviet-American interaction and policy is analyzed. The implications for strategic arms competition and the Soviet misadventure in Cuba in 1962 are included in this assessment.

An attempt is made to provide a fresh perspective on the many complex and subordinate issues involved in these four broad categories. Several implications for the dynamics of arms race analysis,
regarding perceptions and misperceptions, domestic and internal political pressures, and rivalry and reciprocal constraints provide a final contribution of the present study.
CHAPTER II

THE SOVIET PERSPECTIVE

Contrary to the theory advanced by Horelick and Rush in *Strategic Power and Soviet Foreign Policy*, it would appear to this writer that the tremendous controversy generated within the United States by talk of a missile gap came as something of a surprise to the Russians. True, they recovered fairly quickly, as evidenced by Khrushchev's 1958-1960 speeches which claimed progressively greater Soviet missile strength. However, the almost two year lag between the first announcements of the Soviet ICBM capability in the late summer of 1957, coupled with the successful orbiting of the Sputniks later that fall, and the "official" proclamation of a missile gap beginning in 1959 in various periodicals and editorials seem to indicate that the Soviets were not prepared for (or perhaps did not fully comprehend) the degree of concern generated in American military as well as civilian circles.

As a result, they were somewhat slow initially in exploiting the political advantages which accrued to their technological accomplishments. Khrushchev then attempted to make up for lost time, and in so doing contributed to the erosion of Soviet credibility by 1961. This is rather ahead of the immediate topic, however, and will be discussed in greater depth later.

In trying to gauge Khrushchev's reactions to both the missile controversy as reported in the American press, as well as the Eisenhower (and later the Kennedy) administration's statements, reactions, and policies pertaining to it, one must remember the
amount of confusion and uncertainty which accompanied the issue at the time. Even if the thesis, found in Horelick and Rush's work and others, that much of this confusion, uncertainty, and irresolution was deliberately and carefully cultivated by the Soviet leader is accepted, the fact remains that the resulting diversity and multiplicity of opinions in the United States would also serve to confuse the Soviets, thereby creating uncertainty about true American perceptions and consequent strategies and policies. A tautology would apparently result.

Allowing for these factors, it nonetheless appears that Khrushchev did indeed attach at least some importance to the simmering controversy in the 1957-1959 period. As one source categorizes it, the period from August 1957 to October 1959 involved primarily claims and boasts of Soviet ICBM development and production. The stress was not on capability at this point.

The susceptibility of the United States to inflated claims regarding Soviet strategic power, as evidenced in the aborted "bomber gap" of the mid-1950's, coupled with the tendency of American intelligence organizations to compare projected Soviet strength (deduced partially from the exaggerated production figures) against current or "real" American figures was apparent to the Soviets. They surmised, quite accurately, that the predisposition of the United States to exaggerate the scope and pace of the Soviet ICBM program would enable them to distort American perceptions of the strategic balance, and thereby both raise unwarranted Western fears of Soviet actions in pursuit of certain objectives (e.g., Berlin) and also perhaps more importantly undermine America's self-image and confidence regarding
its ability to exert sufficient coercion on the Soviet Union in time of crisis.  

Even if such paralysis or uncertainty of will and capability did not afflict the American decision makers, the Soviets could be content with instilling a certain measure of self-doubt among the populace, since in most democracies their political anxieties and fears are conveyed to the leaders and may in turn affect policy formulation.

Khrushchev understood this, especially since by all accounts he was a frequent if not always skillful or subtle practitioner of propaganda. In fact, propaganda was inseparable from his deepest convictions, which further complicates interpreting Khrushchev's true perceptions and beliefs. In any event, it is also important to note that, while Khrushchev was by no means bound by ideology, the world outside the borders of the USSR was terra incognita to him, to be comprehended basically in Marxist-Leninist categories. Although there were elements in Khrushchev's character which responded to fresh experience, his first direct view of the West occurred after his sixtieth birthday. Accordingly, one should refrain from granting the First Secretary too great a degree of sophistication and depth of knowledge (or even concern) regarding his view and interpretation of the significance of the missile gap debate to American politics and policy.

President Eisenhower's sentiments regarding the outcome of a nuclear exchange between the two superpowers were on the record as early as late 1953, when he predicted that civilization would very likely be destroyed in such a war. Conceivably, this obvious
aborrence may have induced Khrushchev to attempt to convince the United States through a series of bluffs that the USSR had first achieved deterrence, then parity, and finally strategic superiority by 1960, in the hope of employing these strategic forces, or the illusion of them, for political ends. Inducing uncertainty about Soviet military capabilities in an opponent known to be extremely wary of and reluctant to risk conflict could produce incremental if not substantial and immediate concessions in favor of the USSR.

Statements by Secretary of Defense Neil McElroy to the effect that the United States did not intend to match the Russians missile for missile, along with the differing sets of estimates and projections of Soviet capabilities within the several components of the intelligence community, as well as the criticism in some military, political, and journalistic circles that the administration's estimates were too conservative (i.e. too low) undoubtedly contributed to Khrushchev's impression by 1959 that the United States was at least unsure of its estimates of Soviet ICBM capability.

Despite the fact (or perhaps especially because of) that the Eisenhower administration in 1959 rated the operational force of the Soviet Union as quite small, the concern regarding the possibility of the USSR achieving a first strike capability through rapid deployment of a large ICBM force "...may have encouraged Khrushchev to imply that the USSR already possessed a missile capability to wipe the United States from the face of the earth." Kennedy used the issue of the alleged missile gap to a certain extent in the course of his successful campaign for the Presidency. While at first glance this would seem to bolster Khrushchev's
objectives, this must have also worried Khrushchev to some extent, for he knew the state of the Soviet economy and how it could ill afford an arms race in the early 1960's. Significantly, Khrushchev at various times stated his desire to avoid a costly and mutually debilitating arms race with the United States, most notably in an article in *Foreign Affairs* in October of 1959. The significance of this concern will be examined in a later section of this paper.

Kennedy was not only concerned with the missile gap; he also expressed concern with the state of American conventional forces. A more thorough analysis of his strategic concepts and theory is contained in the final chapter. What is pertinent to this discussion in particular is Kennedy's request to Congress in March of 1961 for an additional $650 million for the defense budget, primarily to augment the conventional forces and accelerate the deployment of the Minuteman and Polaris systems. In response to this, Khrushchev stated that considering the new President's defense messages of March and May, perhaps the Soviet Union in consequence should increase its land forces and artillery. The significance of these attitudes in relation to the possible creation of an arms race between the Soviet Union and the United States will be discussed in the final chapter.

Khrushchev's perceptions and interpretations of the new American President's statements, policies, and actions are diminished in importance somewhat (in relation to the importance and exploitation of the missile gap issue) in light of the fact that, as many sources agree and in line with the prevailing sentiment as reflected in periodicals of the era, by late 1961, the missile gap was determined to no longer exist, if it ever had. Needless to say,
once this happened, the Soviets could not very well be concerned with an issue which had ceased to be relevant to American politics and had faded away.

Prior to this, though, there had been the debacle at the Bay of Pigs, which even such sympathetic biographers as Schlesinger and Sorensen admitted probably resulted in depicting to the Soviets an image of Kennedy as being unsure and indecisive. The attempted bullying in Vienna in June of 1961 indicates that Khrushchev indeed assumed he was dealing with an irresolute young man.

As stated earlier, however, the focal point of Soviet interest in, concern with, and reaction to the new administration remained the American's discovery of and resolute determination to disseminate the information that a gap did not exist. This necessitated a broad shift in subsequent Soviet claims and strategy once the deception was unveiled, and that is thoroughly examined in the Horelick and Rush book. In short, the Kennedy administration eliminated the missile gap as a viable issue or concern almost immediately after assuming office, and in so doing simultaneously eliminated Soviet utilization of the same.

Examination of the statements regarding the two Presidents contained in Khrushchev Remembers was held in abeyance up to this point, largely because of the questionable authenticity, as well as relevancy. Nonetheless, they are of some pertinence.

On a comparative basis, Khrushchev's views are surprisingly not in favor of Eisenhower. Soviet analysts allegedly considered him a mediocre military leader and a weak President. According to Khrushchev, "he was a good man, but he wasn't very tough." Also,
he was too dependent on his advisors, especially Dulles.

Regarding Kennedy at Vienna, Khrushchev felt he was a better statesman than Eisenhower; Kennedy, unlike Ike, had a precisely formulated opinion on every subject. He categorizes Kennedy as a "reasonable man," but who nevertheless decided to demonstrate his strength.*

The foundation for Khrushchev's impressions of Kennedy most likely arose from the Cuban missile crisis, and in this sense differ markedly from his experiences with Eisenhower. Khrushchev had the deepest respect for Kennedy because "...in the final analysis, he showed himself to be sober-minded and determined to avoid war." Precisely to what extent this assessment is self-serving and face-saving for Khrushchev is hard to say; certainly the desire for self-justification may well have tempered or colored the former Soviet leader's statements and/or sentiments.

The problems regarding the difficulty in obtaining and assessing reliable data, interpreting possible motives, and attaching appropriate amounts of significance to certain indications are magnified when attempting to detect opinions or perceptions other than those uttered by the top leadership. The proclivity toward presenting a "united front," as well as the lack of tolerance for major dissent following the 1957 leadership crisis, combined to severely inhibit the discovery of other power groups' (especially in the military) and Politburo member's views on the missile gap issue. What dissensions could be deduced and determined relevant, mainly through inferential

*Khrushchev presumably is referring to Cuba and Indochina, although he is unclear on this.
analysis, is presented in another section of the chapter. Only the views and perceptions themselves, not their effect or importance, are presented here.

There is a substantial section of literature devoted to the study of "interest" or power or bureaucratic groups in the Soviet political system. It is not necessary to examine these or their role in the system in any detail. Suffice it to enumerate four of the major components; the military, the industrial managers, the creative intellectuals, and the scientists. Some authors list several other groups as well, but for our purposes we are concerned only with the first and second groups. Although the scientist's work certainly helped spawn the missile gap facade, they had little to do with the evolution of the controversy itself.

Aside from the fact that many military leaders were not totally committed to the concept of nuclear deterrence, the surprise announcement in January 1960 of cutbacks in defense expenditures and a one-third troop reduction, which Khrushchev implied was made possible by the deterrent of Soviet missiles, appeared to dramatically illustrate the effect that the missile gap charade had on Soviet forces. It would seem illogical for Khrushchev to reduce his forces, barring compelling economic reasons and in light of his intelligence information and decisions on Soviet ICBM force levels, unless he was convinced of the credibility of the deception and pretense of a missile gap. The disintegration of the charade in 1961 may well have been an important causal factor in the suspension of troop cuts and the increase in defense expenditures late that year.
To return to the immediate topic, the primacy of the Strategic Rocket Forces in this period engendered the expected amount of opposition and concern within the military. It was essentially only in this rather tangential manner that the military was involved in the gap issue, in addition to the previously mentioned similarly remote link. The decision to concentrate on missile forces, however, had been made by the First Secretary years before anyone had even heard of a missile gap.

In conclusion, the only specific reference to the effect of the missile gap controversy within the United States on Soviet policy was made by V. V. Kuznetsov of the Soviet Foreign Office in a disarmament meeting in Moscow in December of 1960. He stated that if the campaign furor over the missile gap caused the new administration to opt for massive rearmament, the Russians could not be expected to stand still.

Misperceptions played a much larger role in the American perspective of the controversy--yet this does not preclude a brief discourse on the Soviet errors. Given that Khrushchev was the primary actor of any real import to the missile gap issue for the Soviet side, only the relevant major misperceptions of his will be examined.

Khrushchev's major misjudgement was in assuming he could maintain the impression of Soviet missile superiority and prowess indefinitely. He apparently seriously underestimated the eventual ability of the American intelligence community to finally produce reliable, consistent, and consensual figures regarding Soviet capability, and overestimated the amount of time it would take for the public and government officials to become aware of the truth. It is
doubtful that he would have risked his credibility had he anticipated the prospect of the rapid collapse of the missile gap myth in late 1961.

The other obvious error would be the unforeseen reaction of the United States in its defense policy, resulting in a substantial and very real "missile gap" in favor of the Americans by 1964! Considering the domestic priorities of the Soviet leader and his avowed desire to avoid the costly arms race spiral, this would have to have been a major blow to his overall strategy. More on this in Chapter Five.

The effect of the missile gap issue itself on Soviet strategic policy and decision making was fairly minimal. As stated earlier, the major bone of contention and dissension within the government, i.e. between Khrushchev and the military (supported by the heavy industry interests) was over the matter of strategic doctrine as it applied to the armed forces in being. Basically, many military men (mostly Army, naturally) felt that Khrushchev was relying far too heavily on strategic weapons (missiles) at the expense of the rest of the armed forces.

Further discussion of this is superfluous at this juncture; the point is that this debate would have gone on whether or not the missile gap issue ever existed. Since Khrushchev did not choose to invest heavily in producing and deploying a superior ICBM force, the creation and/or maintenance of a missile gap remained an illusory consideration, not requiring any additional allocations from a limited defense budget. Therefore, the missile gap existed in name only and as such caused no one within the Soviet hierarchy to question why the
USSR had to establish a superior and expensive missile capability--because it never did.

A question that is often asked of the missile gap issue is that if the Soviets did possess a head-start in missile technology and had the potential capability to create a real missile gap over the United States, why did they then fail to exploit this apparent initial lead? The answers are surprisingly simple, and derive from both objective, material factors as well as philosophical and strategic considerations.

Most analysts would probably cite the usual technical and operational problems associated with all first generation weapons systems, and with ICBMs in particular. Another major drawback to the early ICBMs was their vulnerability, due to the length of time required to prepare the missile for launching and the fact that they were emplaced above ground and not in "hardened" sites.

In addition, and probably more important, there was the matter of cost. Limited resources had historically plagued all facets of Soviet military policy, and this period was no exception. Given Khrushchev's plans for the domestic economy, there simply was not enough money available for a crash or extensive production and deployment program. Such were the economic and material exigencies.

The Soviet strategic concept of minimal deterrence served to reinforce (or justify) the policy dictated by the above factors. The capacity to create sufficient uncertainty and doubt regarding the ability of the United States to withstand a Soviet attack or counterattack created an adequate deterrent against an American nuclear attack. Thus, the Soviets could settle for a second-best or "sufficient" force level; their
seemingly complacency with this until the Cuban missile crisis is understandable in light of the Soviet conviction that the United States would probably never attack the USSR, regardless of force levels, missile gaps, or whatever.

The effect of real capability on Soviet policy and diplomacy did not become apparent until the elaborately constructed missile gap hoax began to unravel in 1961. As the year drew to a close, most observers agreed that Khrushchev "...had been overambitious in trying to gain more political mileage from Soviet missiles than the actual strategic balance warranted." This had the unfortunate effect of ultimately revealing Soviet weakness in strategic power, and thereby accomplished the very inverse of what Khrushchev was trying to achieve.

In other words, Khrushchev committed a tactical error in the course of his strategic bluffing and "rocket-rattling." Indeed, it was undeniably bluffing--there is sufficient evidence to establish that beyond question (see Chapter Four). The error resulted in reinforcing American fears of and beliefs in a missile gap, and caused a massive American ICBM production effort which in turn may well have markedly accelerated the arms race. This escalation proved to be the antithesis of the Soviet regime's desires in the early 1960's, and cost the USSR dearly in the years ahead.
FOOTNOTES CHAPTER II

1 Horelick & Rush, Strategic Power and Soviet Foreign Policy (Chicago, University of Chicago Press, 1966)


Harland B. Moulton, From Superiority to Parity (Westport, Conn., Greenwood Press, 1973), pp. 18, 98

Raymond L. Garthoff, Soviet Military Policy (N. Y., Praeger, 1966), p. 120

3 Edgar M. Bottome, The Missile Gap (Rutherford, Fairleigh Dickinson University Press, 1971)

4 Halperin & Stone, Foreign Policy, Fall 1974, no. 16, p. 79

5 Horelick & Rush, op. cit., p. 110


Carl A. Linden, Khrushchev and the Soviet Leadership (Baltimore, Johns Hopkins Press, 1966)

8 New York Times, December 9, 1953, p. 11


10 see Chapter III

11 see Chapter III

12 Horelick & Rush, op. cit., p. 62

13 Joseph Alsop, Foreign Policy, Fall 1974, no. 16, p. 84


16 see Bibliography and Chapter III
17 Schlesinger, op. cit., pp. 298, 344
19 Nikita S. Khrushchev, Khrushchev Remembers (Boston, Little Brown, 1970), p. 397
20 Ibid., p. 500
21 Linden, op. cit.

Schapiro, op. cit.


Brzezinski & Huntington, Political Power: USA/USSR (N. Y., Viking Press, 1964)


23 Hammer, op. cit., p. 225
25 Garthoff, op. cit., p. 121
26 Kolkowicz, op. cit., pp. 117-158
27 Schlesinger, op. cit., p. 301
28 Khrushchev, op. cit.
29 see Introduction
30 Wolfe, op. cit., p. 10
31 see Chapter V
32 Bottome, op. cit., p. 175
CHAPTER III

THE AMERICAN PERSPECTIVE

After all available evidence is analyzed and the incalculable benefit of hindsight is applied to the scrutiny of the missile gap issue in the 1957-1961 period, one may well be tempted to dismiss the tremendous amount of apparent concern and controversy which surrounded the matter, both in public and private circles, as an excellent example of mass paranoia.

While much, if not most, of the debate, arguments, and fears articulated in the American polity that accompanied the immediate post-Sputnik years was undoubtedly genuine and reflected sincere if erroneous beliefs and trepidations, an observer examining the period from an ostensibly more objective two decade-hence perspective may be inclined to doubt or at least ponder the validity of the issue. In other words, why was the missile gap such an issue up until late 1961, i.e. why all the fuss?

A more detailed presentation and assessment of the importance and impact of the missile gap issue upon the two American administrations presiding over it, as well as on the Soviets and the rest of the world is presented in the concluding chapter. It is our task in this section to simply and briefly outline the major causes for the missile gap's becoming such a crucial matter in the minds of so many Americans after the fall of 1957. This precedes a more thorough presentation of the American scene during the missile gap era.

The proliferation of successive American misperceptions regarding Soviet policy, intent, capability, and actions, coupled with
the supercharged atmosphere of general suspicion and fear prevalent at the height of the cold war, blended into a volatile mixture which was fueled and ignited by the various newspaper articles and editorials, Congressional charges and hearings, Pentagon press releases, and administration statements on the "space race" and related missile developments.

It is noteworthy that the two were so intertwined in the minds of the Eisenhower administration critics, for on more than one occasion administration spokesmen, as well as other analysts, would question the linkage and strength of the bond of inference and implied reciprocity of capability between space and ICBM achievements. ¹

The elements of uncertainty over Soviet policy, intent, capability, and actions were mentioned above. Briefly, it appears that American fears were essentially those of a Soviet preemptive or "first-strike" strategic policy,² reinforced by the perceived dual intent to deliver these weapons at the earliest opportune moment in order to ensure the attainment of world domination, coupled with the newly discovered apparent Soviet technological prowess and force levels in missiles giving them for the first time the capability to deliver a crippling nuclear blow to the continental United States, finally compounded by the increasingly belligerent demands, boasts, and "missile rattling" (i.e. actions) of the Russians following the successful Sputnik launchings. It would be the tensions created and amplified by the unavailability of any final or definitive data or theories on these four components of the Soviet missile position, especially in the murky area of capability, that nurtured and intensified the controversy within the United States.
The fact that the above perspective was at least partially incorrect in all four of its perceptions is a fact which is examined more closely in Chapters Four and Five. What is significant to emphasize is that "this fear of a possible surprise attack on the United States by Russian missile forces was the basic premise of those who accepted the missile gap thesis." Given this, it is a contention of this essay that in the early years of the missile gap flap the press, public, and parts of Congress erred in focusing too narrowly on erroneous and hysterical (or unobjective) perceptions of Soviet intent, and that his in turn affected the assessment of Soviet capability and projected future force levels.

One writer refers to the "Pearl Harbor" syndrome in American strategic thinking and planning as providing the psychological foundation for the belief in Soviet strategic superiority. This fear of a surprise Soviet nuclear attack in which United States retaliatory power was destroyed impelled those enamored of this particular view of Soviet military philosophy to embrace missile production and projection figures substantiating their position. In the 1957-61 period, with the cold war continuing unabated between the two nations, this view was by no means unpopular and had many adherents; it was also at least tacitly accepted by many other Americans. A more comprehensive survey of the attitudes of the various factions and actors is now in order.

At first glance, the impression of the initial phase of the missile gap crisis is one of the American people, military, Congress, and virtually every other influential segment of the American polity in a common crusade against the Eisenhower administration position on
the alleged missile gap and the course and pace of the American missile program. In fact, upon closer examination of the literature of the era, although indeed the majority of printed matter gave a certain amount of credence to the possibility of a gap (usually predicted for years ahead), there was certainly no approximation of unanimity on the subject.

Had such a consensus existed in the country, the Eisenhower administration presumably could or would not have weathered the criticism nor behaved in the manner in which it did, despite Eisenhower's substantial reservoir of good will among the voters; but this is getting ahead of ourselves. The point is, there were other calmer and less troubled perspectives on the subject, and some of these are also included in the overview.

The effects in the United States and world at large of the October 4, 1957 launch of Sputnik I (which had been preceded six weeks earlier by Soviet announcement and American confirmation of a successful ICBM test), followed one month later by the launch and return of the 1300 pound Sputnik II were numerous and far-reaching. At the time it even had repercussions on the educational system of the United States, specifically regarding the emphasis (or lack of) on the sciences in American secondary schools and universities.

While a brief analysis on the international impact is reserved for the final chapter, some of the effects in the United States included: the destruction of the illusion of American technological superiority, which underlay confidence in military security; creation of a new and surprised awareness (as well as illusion) of Soviet scientific powers; and the diminution of public confidence in the Eisenhower administration
as public perception of an overseas threat increased. In addition to this, the flights conceivably "...were more or less directly responsible for legislation stimulating scientific research, aiding higher education, reorganizing the Pentagon, and increasing military expenditures." 6

The prevailing view was enunciated rather tersely in the pages of a leading financial magazine in mid-October of 1957: "It seems clear that the Soviet Union has gained a lead in developing long-range weapons." 7 Various articles in leading publications either confirmed (implicitly or explicitly) or modified the conclusion that "in the ballistic missile race the Russians are ahead." 8 Journals such as Time, Newsweek, U.S. News & World Report, and others all carried stories devoted to assessing the American position; only a comparative few are listed. 9 There was undeniably much public concern regarding the adequacy of American deterrent power; 10 the abundance of pessimistic articles in the nation's press and Congressional testimony may well explain this.

At the same time, throughout the period there were other pieces in the very same publications which contested the gloomy predictions and projections of the missile gap advocates. For example, Newsweek in October of 1957 reported that a survey conducted by its reporters indicated a deep concern, but no real panic among Americans over Sputnik. 11 U.S. News & World Report published an interview with the senior missile advisor to NATO, Dr. Theodore von Karman, the next month that concluded the United States was not far behind and could definitely catch the Soviets. 12 Even Time admitted in January of 1958 that "neither the U.S. nor the USSR has an operational
intercontinental ballistic missile (ICBM), nor will either have one for two or three years."¹³ Many other articles argued along similar lines, especially in the later years of the gap era.¹⁴ The reasons for this later turnabout are examined in Chapters Four and Five.

With so many apparently conflicting views, it is no surprise that the issue was never satisfactorily resolved at the time. "The true state of America's missile capability in relation to that of the Soviet Union has not been much clarified by the recent expert testimony and opinion,"¹⁵ as one source noted. Considering the subjective and sensitive nature of the topic and its implications for national security, the impassioned, ongoing debates arising from public and private commentary becomes more intelligible.

As alluded to earlier, a key element in the discussion of a missile gap was in the prognostication of a future disparity in Soviet and American deterrence power. Since most informed sources conceded along along that there was "...no missile gap because neither the U.S. nor the USSR (as far as the U.S. knows) has any significant intercontinental ballistic missile capability...,"¹⁶ the majority of the critics concentrated on the projected imbalance of strategic power in favor of the Soviets which they felt would occur within a few years.¹⁷

Again, there were those who disputed this argument as well.

The importance of and controversy surrounding the various intelligence estimates and projections of capabilities is discussed in a later section of this chapter; what is important to note at this juncture is the absence of agreement on the inaccuracy of Eisenhower administration claims and outlooks. Even a periodical which was in the main critical of government policy and blamed the "missile lag" on the
administration cautioned that current predictions of "...Soviet capability and intentions may of course turn out to be as greatly exaggerated as those estimates of Russian bomber production given Congress three years ago." Ironically, this warning proved prophetic in the sense that the missile gap scare of the late 1950's and early 1960's was about as substantial as the "bomber gap" of the mid-1950's.

Hanson Baldwin devoted several New York Times articles in the 1957-61 period to dispelling the missile gap myth, or at least the fears associated with it. In fact, Baldwin appeared more concerned with the state of American conventional forces, although he did stress the need for a greater effort and expenditures in the area of strategic weapons. John Kennedy would run for President in 1960 on a similar platform.

In another remarkably astute piece, written in mid-1958, the tendency to jump to the conclusion that the United States was now strategically inferior to the USSR was roundly criticized. While differentiating between vulnerability and strategic inferiority (which many analysts conveniently failed to do), Kissinger discerningly noted that future Soviet capabilities should not be compared with present American strength. Although he conceded the existence of a gap in quantitative terms, Kissinger made the familiar point, often cited by the Eisenhower administration and others, that the United States deterrent (i.e. the Strategic Air Command) was still more than sufficient.

A chronology of the reactions and perspective of President Eisenhower and his administration on the missile gap can be obtained
through examination of various biographies and other works, it will serve our purposes to mainly highlight those views and policies which this author feels are most germane.

In his memoirs, Eisenhower identifies two main problems and priorities created by the Sputniks and talk of a missile gap: (1) to afford perspective to the American people and relieve the near-hysteria, and (2) to accelerate the missile and satellite programs. The President attempted to accomplish the former via numerous press conferences, televised addresses, speeches and statements by other Cabinet members, and by a studied, conspicuous policy of holding down defense expenditures while accelerating the American missile program relatively slowly.

Essentially, the Eisenhower administration position was that there was no deterrent gap, that there probably would not be one in the future, and that although some concern was justified, corrective measures (like speeding up missile development) were being undertaken and there was no danger. Complications arose out of this basic stand when Secretary of Defense McElroy confirmed in January of 1959 that the United States did not intend to match the Soviets missile for missile. To many people, this implicitly conceded the existence of a missile gap. However, this did not conflict with the administration conviction and affirmation of the sufficiency and superiority of overall United States strategic/deterrent capability as embodied in the Strategic Air Command (SAC).

Significantly, Eisenhower indicated that although he was indeed surprised by the Sputnik launchings, he was more surprised at the intensity of public concern. He thought one of the major effects of
the satellites was in having "...revealed the psychological vulner-ability of our people." He felt that the genuine Soviet technological triumph was exceeded by the propaganda value of the satellites and accompanying speculation on ICBM development and production. Essentially, according to Ike, it was a psychological crisis. The Eisenhower administration consistently asserted, in varying forms and with numerous qualifications, that the missile gap (in the sense of deterrent power) did and would not exist, and was largely the product of inaccurate and irresponsible assessments and conjecture in the press, Congress, and among Democratic aspirants to the Presidency.

Ironically, the Kennedy administration shortly after it assumed office came to the same basic conclusions as its predecessor on the status of American strategic power. Prior to the fall of 1961, though there is no consensus, a good deal of available evidence indicates that the Kennedy people sincerely believed in the existence or imminent danger of a missile gap. It also appears that Kennedy, unlike Eisenhower, did not draw what some analysts might term a false dichotomy between the "space race" and the missile gap; this may have provided additional impetus to his inclination to accept the missile gap supposition.

Evidence of this may be found in Kennedy's espousal of the theory that other nations were coming to the conclusion that the Soviet tide was rising and America's was ebbing, and that it was up to the United States to reverse that trend. He continually pounded at this theme, "...connecting it by juxtaposition with the race for superiority in delivery systems for nuclear weapons."
Like Eisenhower, though, the new President perceived the utility of the space race in political, psychological, and symbolic terms—and believed them to be of greater import than the practical utilities derived from the program. This had not, however, prevented the Massachusetts Senator from being among the first to speak out on the missile gap issue, calling for crash programs and additional appropriations to protect American security. An examination of his foreign policy speeches of the 1950's, compiled under the title *The Strategy of Peace*, confirms the view of Kennedy as an orthodox cold warrior. It should be noted that these speeches did not depict the man as he was to evolve—they offered no hint of the conciliatory capacity of the Senator as President, no intimation of the man who would in the latter half of his term slowly steer the United States away from nuclear confrontation and a mutually debilitating arms race and on to the road toward détente with the USSR.

Unlike many of the missile gap theory proponents, Kennedy did not appear to harbor hopelessly foreboding and paranoid suspicions of Soviet intentions and policy, and in this sense differed markedly from the conceptions of Eisenhower's Secretary of State John Foster Dulles. While he assumed the Soviets were ambitious enough to want to seize power and assume world dominance, Kennedy also assumed they were sufficiently rational not to want to blow it up in a nuclear exchange. The Senator's fear apparently was of what might happen should the Soviets perceive, correctly or not, that the USSR was capable, at some unspecified future date, of nuclear blackmail against the United States and could demand concessions world-wide.
It often seemed, though, that despite the afore-mentioned concern, the Kennedy position on the missile gap was somewhat ambiguous, for if Kennedy was not all that worried about Soviet intentions, then why was the matter of American security so urgent, given the conceded superiority of American military might? The ambiguity was also reflected in his straddling of the two positions found in the Democratic party itself, namely between the hard-nosed Acheson school and the more "liberal" Stevensonians. Perhaps it is not so surprising, though, when one recalls the mood of the era and the fact that the cold war was still a major part of American life.35

Any doubts about where the new administration stood on the issue were removed by late 1961. "The Administration (which) came in committed to greater defense spending (and) to ending the missile gap..."36 declared the missile gap to be dead by the end of its first year in office. Amid bitter charges of blatant partisanship and of having cynically distorted the facts in the 1960 campaign,37 the gap controversy was effectively buried as a viable issue by 1962.

There are conflicting interpretations of the significance of the missile gap issue in the 1960 Presidential elections, and this is analyzed more thoroughly in the last chapter. What concerns us in this section is a presentation of some of the assessments of the era and of later analysts.

Several sources cite Senator Stuart Symington as one of the major personalities involved in the creation of the missile gap "myth."38 Like many Democrats, he was convinced that 1960 was their year, provided as they were with the ready-made issues of the widening missile gap, declining American world prestige, recurring recessions of the
'50's, and the erosion of public confidence after Sputnik. Symington's appetite was further whetted in anticipation of attaining personal goals as well, for he "...hoped to win the nomination as a dark horse on the single issue of the missile gap." The fact that his bid did not succeed is significant in that it possibly undercuts the importance attached to the missile gap as an issue in the 1960 election.

The Democratic Party platform, while claiming that the Republicans had surrendered the military superiority inherited from Truman in 1952 (in response to Republican charges that any gap had originated because of that administration) and containing the phrases missile gap, space gap, and limited-war gap in its evaluation of the U.S. military position, surprisingly "...offered little in the way of alternatives to the policies of the Eisenhower administration abroad." In fact, several editorials and articles at the time noted the singular lack of major differences between the two candidates Nixon and Kennedy on foreign and other policy and strategy. More on this in the conclusion.

Admittedly, by 1960, the missile gap was a staple of Democratic oratory. However, it was not only the Democrats who were articulating such a theory. In addition to the public sentiment and press coverage described earlier, as well as the statements of Republican nominee hopeful Nelson Rockefeller, the military and intelligence sectors contributed to the confusion and uproar, even though their revised estimates and figures were released beginning in 1959. In light of this, it is quite conceivable that many of the Democratic charges were made in good faith and with ostensible good reason and lack of ulterior political motive. To attribute the
errors in estimation to honest mistakes by both military and civilian leaders is at least a plausible hypothesis, albeit only one of several possible others.

This brings us to the subject of how these errors differed from the facts at the time, and a look at the sources of government and public misinformation, i.e. the influence of the intelligence community on policy-making and perceptions.

The fourth chapter rather exhaustively details the respective capabilities of the United States and the Soviet Union, and a recapitulation of these is unnecessary. Suffice it to say that the overwhelming majority of American perceptions and estimates regarding future (and in some cases current) Soviet ICBM capability in the early years of the missile gap were remarkably inaccurate and exaggerated. It would not be until late 1959 and early 1960 that even the Eisenhower administration, which maintained its conviction that the gap was not terribly serious, would downgrade its official projections of Soviet strength. Even at that, according to testimony by Secretary of Defense McNamara before the Armed Services Committee in early 1962, the reduced intelligence estimates of the Soviet ICBM program still projected a far larger force for 1961 than that which was actually credited to the USSR for that year.

Criticism of the American intelligence community should be tempered by the consideration that, as one writer stated in reference to American foreign policy, the period of the late 1950's was probably the most difficult time for an outsider to perceive Soviet desires, and by implication, policy and capability. When one adds to this the distinct possibility that the Russians engaged in an elaborate deception...
to conceal the truly modest scope of their program for ICBM's, the wonder is that the missile gap myth was exposed so relatively quickly.

Inter-service rivalry undoubtedly played a role in shaping the various intelligence figures passed on to the White House and leaked to the press and others. The simultaneous separate research and development programs on ICBM's and IRBM's undertaken by the Army, Navy and Air Force (e.g. Thor, Jupiter, Atlas, Titan, Vanguard, Polaris), in the mid and late fifties prompted bitter scraps for all-too-scarce project funding and led to inflated claims regarding the importance or necessity for a given weapons system, i.e. missile. An obvious and common method of increasing project funding is to increase the perception of danger from an enemy alleged to already possess a similar system or capability; no one wants to risk fighting tomorrow's war with yesterday's weapons.

As a result of his military experience, Eisenhower knew perhaps better than anyone else the tendency of intelligence reports of individual military services to supply information and analysis justifying their respective positions under consideration. Accordingly, it is probable that even had Kennedy and Eisenhower possessed identical intelligence reports on Soviet capability (present and future), the two men would have come to very different conclusions and policy decisions. The younger, less experienced (in military affairs) man would be more inclined to accept at face value the intelligence reports handed to him. This was demonstrated rather tragically in the Bay of Pigs fiasco. Only after that episode did Kennedy realize the effect that "bad" intelligence could have.
Eisenhower would not have this problem. Although intelligence estimates of the Chairman of the Joint Chiefs of Staff Radford would influence and shape Dulles' perceptions to a large extent, the General seemingly knew better, despite Dulles' influence, in turn, upon him. It is a contention of this thesis that this rather healthy skepticism aids in explaining why the Eisenhower administration refused to acknowledge the existence of any deterrent gap.

Another major factor that may shed some light on the differing views of the two administrations on the controversy is the possibility that Kennedy's predecessor was in possession of sensitive intelligence information that was unavailable to the Democratic candidate prior to his election. 49

This information allegedly consisted of the CIA's reports, including the intelligence gathered by the U-2 overflights beginning in 1956 and continuing until May of 1960. The pictures obtained from those missions undoubtedly persuaded Eisenhower (or confirmed his tentative belief) that the Soviets were not engaged in a "crash" development and production ICBM program, and thus were not creating (and would not foreseeably) a missile gap over the United States.

Thus, not only did the two men's information differ, but their predispositions regarding the accuracy of that information (to say nothing of their beliefs about Soviet intentions) was also in marked contrast. After Kennedy assumed office and the same information became available to his administration as well, a congruity finally emerged from the two outlooks, and a month later Secretary McNamara himself first disowned the missile gap thesis.
It would be several more months before contradictory and contesting Air Force intelligence projections and figures could be sufficiently discredited, but by Thanksgiving Day 1961, most Americans were thankful that the missile gap, as adjudged by practically all the experts, was a dead issue.
FOOTNOTES CHAPTER III


3 Ibid, p. 68

4 Ibid, p. 171

5 Paul Y. Hammond, Cold War and Detente (N. Y., Harcourt, Brace, Jovanovich, 1975), p. 111


7 Business Week, October 12, 1957, no. 1467, p. 41


9 "Arguing the case for being panicky," Life, November 18, 1957, Vol. XLIII, no. 21


Stewart Alsop, "How can we catch up?" Saturday Evening Post, December 14, 1957

"Coming Missile Gap," Time February 8, 1960, Vol. LXXV, no. 6

"Missile gap; how perilous?" Newsweek, February 9, 1959, Vol. LIII, no. 6

10 Townsend Hoopes, The Devil and John Foster Dulles (Boston, Little Brown, 1973), p. 427


"Retreat from pessimism," Time, December 2, 1957, Vol. LXX, no. 23

"Both sides win in war of missiles," Business Week, December 7, 1957, p. 1475

15."Debate over missiles," Commonweal, February 20, 1959, Vol. LXIX, no. 21, p. 532

16."The Coming Missile Gap," Time, February 8, 1960, Vol. LXXV, no. 6, p. 18

17."In Missiles a three-year gap ahead," Business Week, December 5, 1959, no. 1579, pp. 24-25

Time, March 7, 1960, Vol. LXXV, no. 10

Divine, op. cit., pp. 185-187


22.Eisenhower, op. cit.

Branyan & Larson, The Eisenhower Administration, I & II (N. Y., Random House, 1971)

John Emmet Hughes, The Ordeal of Power (N. Y., Atheneum, 1963)


Herbert S. Parmet, Eisenhower and the American Crusades (N. Y., Macmillan, 1972)

23.Eisenhower, op. cit., p. 211
24 Vital Speeches, November 15, 1957, vol. XXIV, no. 3
Aviation Week, February 9, 1959, Vol. LXX, no. 7
U.S. News, October 18, 1957, Vol. XLIII, no. 16
Dulles interview, U.S. News, September 6, 1957, Vol. XLIII, no. 10
Dulles interview, U.S. News, November 15, 1957, Vol. XLIII, no. 20
Gates testimony, Aviation Week, January 25, 1960, Vol. LXXII, no. 4
Newsweek, February 16, 1959, Vol. LIII, no. 7
26 Hammond, op. cit., p. 112
28 Eisenhower, op. cit., p. 226
29 Ibid, p. 226
30 Harland B. Moulton, From Superiority to Parity (Westport, Conn., Greenwood Press, 1973), pp. 40-41, 44
Stewart Alsop, Foreign Policy, Fall 1974, no. 16, p. 84
32 Ibid, p. 326
36 Ibid, p. 65
37 e.g. Stuart Symington, "Where the Missile Gap Went," Reporter, February 15, 1962
"Whatever happened to the missile gap?" U.S. News, April 16, 1962, Vol. LII, no. 16

38 Bottome, op. cit., p. 192
39 Divine, op. cit., p. 188
40 Ibid, p. 216
41 Schlesinger, op. cit., p. 317
42 Albert Wohlstetter, "Is there a strategic arms race?" Foreign Policy, Summer 1974, no. 15

43 Aviation Week, January 25, 1960, Vol. LXXII, no. 4, p. 31
44 Horelick & Rush, Strategic Power and Soviet Foreign Policy (Chicago, University of Chicago Press, 1966), p. 36
46 Horelick & Rush, op. cit., pp. 37, 207
47 Patrick J. McGarvey, "The DIA: Intelligence to Please," in Readings in American Foreign Policy, Halperin & Kanter, eds. (Boston, Little, Brown, 1973), p. 318
48 Schlesinger, Sorensen, op. cit.
49 Moulton, op. cit., pp. ix, 264
50 Sorensen, op. cit., pp. 611-612
CHAPTER IV

SOVIET-AMERICAN CAPABILITIES: 1957-1961:
THE MISSILE GAP FACTS

Today the quantitative capabilities of the United States and the Soviet Union are virtually a matter of public record, and the two states (presumably) possess authoritative data on each others force levels. In fact, it is reasonable to posit that if they did not possess (or believe themselves to possess) such information, there would be little point in pursuing the ongoing SALT negotiations, for then neither the Americans nor the Soviets could ever ascertain with any acceptable degree of certainty whether or not the other side actually possessed as little or as much capability as it maintained. The obvious inducement and benefit of mutual knowledge of strategic capabilities becomes even more evident when one recalls the consternation associated with the uncertainty surrounding the missile gap issue.

The problem remains for the earlier years: exactly how reliable are the figures for 1957 to 1961? At best they remain merely hunches of reputable defense analysts, or simply reprints of "official" U.S. government assessments or statements regarding American as well as Soviet force levels. Accordingly, the stress of this chapter is not simply on the raw data, in light of the lack of any conclusive or ultimate means of establishing its validity or accuracy. Rather, after examining their respective ICBM capabilities in the missile gap era, a more general exposition of the status of Soviet-American strategic forces-in-being, as well as attention to the respective rates of growth of strategic forces and related factors impinging upon the general
strategic posture will be presented.

The analysis of the role of Soviet-American misperceptions, perspectives, reactions, and policies was presented in the preceding chapters; this section hopefully serves to illuminate the major sets of objective factors and conditions that prevailed in the 1957-1961 period. The ultimate significance and interpretation of these factors is assessed at a later juncture.

The ensuing presentation of tables, charts, and figures represents the most comprehensive data on the actual and projected strategic capabilities of the United States and Soviet Union insofar as they are available to this writer. The dilemma is that, even years after the saliency of the missile gap controversy has been relegated to mythological and "false issue" status, there are no uncontested, universally accepted estimates of precisely how many intercontinental ballistic missiles the Americans and Soviets possessed between 1957 and 1961.

After the fall of 1961 the missile gap issue was consigned to the dust-bin of rhetoric and statistics on missile forces became more readily accessible and consistent, and presumably more accurate as well. The tremendous degree of variance and fluctuation in the estimates of the late fifties and early sixties, so common among government and armed forces intelligence agencies, and even of respected journalists and academicians, diminished and was largely eliminated.

There is, however, fairly reliable information on the American forces for that period. Unfortunately, international political factors being what they were and to a certain extent still are, the data on Soviet forces is much less dependable. By this we refer to the
consistent Soviet practice of obscuring their military preparations and capabilities with a veil of secrecy.

While it is true that every nation's military establishment and government does this to a certain extent, it seems that the early years of the Revolution and the struggle to survive sufficiently aggravated the naturally paranoid tendencies of the Bolshevik regime as to produce an even more secretive policy in the area of divulging military research and development progress and associated capability. The USSR would be better off, the leadership felt, by keeping the West in the dark and guessing, uncertain of precisely how strong (or weak) the Soviet Union was. This strategem was conceivably illustrated even in the missile gap era, as described in Chapter Two.

Accordingly, the analysis of the Soviet's capabilities for the early years of the controversy is less precise than would otherwise be the case, specifically in regard to absolute quantitative sums. Although it is possible with the information at hand to impose an upper limit on the absolute possible number of Soviet ICBMs in the period in question, it is far more difficult to specify with any assurance the exact number of missiles in the Soviet arsenal.

Despite these drawbacks, it is nonetheless insightful to examine the comparative figures, for in so doing one arrives at two conclusions startling in their apparent initial refutation of each other. These findings are derived from the resolution of some of the central questions of the chapter: (1) What were the facts of the two superpower's capabilities, i.e. was the missile gap ever a reality? (2) If not, to what degree were the American estimates incorrect and why? (3) What was the state of Soviet-American overall strategic power during the
1957-1961 period?

The figures on the following page represent an amalgam of many sources. Only some of the sources consulted while researching the area of capabilities are cited. The reasons why the acknowledgements are condensed in this manner are three-fold. First, there is the overriding consideration that a presentation of all these figures, apart from being of rather copious and tedious quantity and quality, would serve primarily only to demonstrate the variation in them and thus possibly obfuscate the point at hand (i.e. real capability) in this stage of the analysis. Also, as the comparison and contrast of estimated data is accomplished in the latter part of this chapter, it would be needlessly repetitive to do so at this point.

Secondly, after comprehensive examination of a multitude of sources, both primary and secondary, and of comparing official U.S. government releases with the various other published estimates, the two more consistently reliable sources appear to be the data from the Institute for Strategic Studies and the New York Times. Edgar Bottome, in his authoritative treatments on the missile gap, came to a basically similar conclusion. Accordingly, heavy emphasis was placed on that material in the final survey and construction of the table.

Finally, related to this is the fact that much of the material in the media was accredited to sources within government circles, either from a "high government official" or an "official source," or from an official government agency's intelligence estimates. Since most of the media's sources overlapped, this in turn often resulted in identical stories and figures regarding estimated capability, and
thus the problem of redundancy is again encountered. Such redundancy is substantially avoided in the accreditations listed.

It should be stressed that the data are a composite drawn from those sources and my own preconceptions and conclusions derived from research in this area, and as such I alone am accountable for any errors due to those same subjective suppositions. Having thus qualified the reliability of the sources, let us proceed to examine the data.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0-10</td>
<td>10-50</td>
<td>45-100</td>
<td>200</td>
<td>450</td>
<td>750</td>
</tr>
<tr>
<td>Soviet ICBMs</td>
<td>0</td>
<td>0</td>
<td>0-10</td>
<td>10-50</td>
<td>35-100</td>
<td>50-100</td>
<td>130</td>
<td>under</td>
<td>200</td>
</tr>
</tbody>
</table>

What may be concluded from this is that within the latitude allowed for by the above figures, several possible interpretations emerge. One is that, until 1962, the United States and Soviet Union were practically even in total ICBM strength. This theory is arrived at by simply averaging the disparate capabilities for each country and comparing them.

A second hypothesis is that, if one assumes the highest Soviet and lowest American figures to be consistently correct, through 1961 the Soviet Union was indeed ahead (albeit not by much) in ICBMs. Hence, the "missile gap" appears to favor the USSR.

Conversely, given the opposite assumptions of relying on the highest American and lowest Soviet sums as the more accurate, a
gap in numbers is detected in favor of the United States.

A final alternative interpretation is that the extent of variance and the lack of reliability makes any theory or assessment primarily based on this material dubious at best, and possibly suspect. At the very least it then becomes possible to challenge if not refute any of the above theoretical constructs.

For a variety of reasons, not the least of which is the demise of the missile gap itself by late 1961, the author is tempted to endorse the view that the United States was never really behind in the missile race, and may well have been slightly ahead. In support of this thesis one can cite the "real" figures themselves for the period (see preceding page), selective statements of the Eisenhower and later even the Kennedy administration throughout the era, the collapse and subsequent apparent reversal of the missile gap by late 1961 or early 1962, and the strategic posture which had emerged by the mid-1960s, namely one of American preeminence and superiority in nuclear delivery systems. If the United States was so far ahead by 1964, how could it ever have been behind or lagging? Surely even an accelerated program could not have propelled the U.S. to assume such a seemingly commanding if not insurmountable lead in the missile race had the nation faced the type of missile gap envisaged by some in the late fifties and early sixties.

The fundamental sagacity or plausibility of this view, however impressive and compelling, does not satisfactorily explain either why this type of "reverse gap" was not obvious at the time or why there was such a terrific public outcry and concern in that period. While it is true that the American political process has often been guilty of
much unnecessary disputation, in this case it would seem that there may well have been an ample strategic-security conflagration producing the heavy amount of rhetorical smoke often obscuring the discussion of the missile gap issue.

Despite the balance of power being undeniably tilted in the direction of the United States by 1962 or 1963, it remains equally tenable to argue that for a brief time prior to that, the Soviet Union was ahead in total operational ICBMs. Accordingly, an authentic disparity in missile forces did exist. Of course, this would not be a truly serious "gap," implying a terribly deep, wide, and dangerous chasm separating the two states' capabilities, except in the strictest sense of the term. The lead was more incremental than substantial, especially considering the relatively small amount of ICBMs involved in the years before 1962.

The basis for this theory dates back to the initial Soviet launches in August and October of 1957. At that point, the Soviet ICBM capability and lead was something of a fait accompli, since the USSR definitely had proven (via two Sputniks and the August ICBM test) its ability to successfully launch at least three ballistic missiles of intercontinental range. The United States did not or could not demonstrate this capability, and subsequently appeared to prove this in the numerous failures in 1957, 1958, and 1959 of the Vanguard, Atlas, and other missile test firings.

Following these initial spectacular and well-publicized failures, the American missile program swung into high gear in bringing an ICBM force into operational status, production, and deployment. However this was not until after 1959 or 1960. American production
capacity, closely associated as it was with the comparatively stronger economic system and ability to sustain and mass-produce in volume virtually any given article, could (and would) far outstrip its Soviet counterpart unless an all-out program was initiated in the USSR. Even at that, the outcome would remain unpredictable. In any event, this was not to be the case, although many experts assumed and predicted otherwise.

Adopting the perspective of an early Soviet lead, one may discover that the origins of the theory of a missile gap was embedded in some substance. Although indications are that the United States could have tested a prototype ICBM as early as mid-1956, the point is that the Soviets did achieve and announce on August 26, 1957 the first successful flight of a ballistic missile of intercontinental range. Preliminary indications, followed by, to some extent, unwarranted conclusions and assumptions, were that the USSR had indeed jumped out to an early and impressive lead in both space technology and military missilery. The missile gap controversy was born out of the subsequent explosion and proliferation of projections and predictions of Soviet missile development and deployment. It was mainly the debate and uncertainty over who would have what, as opposed to who currently did have what, that spawned the furor aroused by and surrounding the missile gap issue. With the benefit of hindsight, it somehow seems curiously appropriate to the surrealistic atmosphere surrounding the debate over the issue that the major concern was primarily with the future (which would reveal American dominance in missile strength) and not the present (in which the USSR led in ICBMs). At this point, though, the misestimates and incorrect
prognostications alluded to earlier shall be examined.

Beginning in the fall of 1957, the various segments of the American intelligence community began promulgating both their respective assessments of Soviet ICBM forces then in being as well as estimates or projections of future Soviet strength. These figures were constantly being reevaluated and revised, in consideration of innumerable other factors including not only those of Soviet physical (or factory) ability to manufacture such weapons, but also in light of probable Soviet diplomatic intent, military strategy, the international situation, the state of the Soviet economy, ad infinitum.

In the early stages, though, it seems that the major consideration determining and influencing most of the projections was that of the estimated maximum possible output of Soviet ICBM production facilities, i.e. the most missiles the USSR could possibly produce under a full-tilt, crash missile program. According to most later day observers, it was this fundamental error that provided the foundation for the elaborate construction and four year perpetuation of the allegedly mythical missile gap.

Later projections, reflecting the downward revision in the Soviet force, would account for the previously mentioned additional and impinging factors in the intelligence analysis, notably the successive changes in 1959 and 1960, finally culminating in the admission by Secretary of Defense McNamara in 1961 that there was no missile gap.

A discussion of the tremendous fluctuation in estimated capabilities for and during the 1957-1961 period is in order before presenting the actual data. Basically this will consist of a brief
analysis of how and why the estimates were both incorrect and changed over time, which sources were involved, and the importance of all these. Some of the points have already been presented in the American chapter, but warrant partial reiteration in this specific context.

It is important at the outset to state that the American intelligence network was actually not incorrect nor inept in its assessments and projections of the Soviet ability to produce ICBMs. All indications are that, to the contrary, the Soviet Union did indeed possess sufficient technological expertise and facilities (or were capable of constructing adequate facilities) for the creation of an ICBM force along the lines envisaged by the American experts in 1957 and 1958.\textsuperscript{11}

Where the analysis went awry was in the area of interpreting and predicting Soviet policy, a by-product of Soviet intent or strategy. As mentioned earlier, the lynch-pin upon which the defective analysis hinged was the assumption of a crash Soviet missile production program.

A "crash" Soviet program would have entailed the devotion and diversion of enormous amounts of resources, i.e. primarily money, to missile development and deployment. This inflow of capital and personnel would have been obtained at the expense of other sectors of the Soviet economy and military. Consumer goods production and envisioned programs, as well as the other components and service branches (mainly conventional) of the armed forces would have had additional cutbacks imposed upon them by such a policy.

An "orderly" Soviet program would essentially be analogous to that of the Americans. The production and deployment of ICBMs
would be much smaller and slower than that of the crash program, where missiles would be turned out as fast and as many as possible. The curtailment of the development of the other sectors of the economy and armed forces associated with the more rapid model would not be necessary or even contemplated under the slower-paced orderly policy. There would be no siphoning off of allocations intended for other projects involved in this restrained, more leisurely program. Although emphasis, if not primacy, might be placed on the ICBM program, it would not be a policy of achieving a substantial number of rockets as quickly as possible "at all costs."

The policy described in the preceding paragraph was the one chosen by the Soviets. The crash program detailed before that was the one most American intelligence analysts thought the Russians were pursuing at first. Quite simply, their figures were therefore influenced and largely determined by that misperception. The lower estimates of later years were in part the result of the detection and revision of the original errors in the interpretations of Soviet intentions and policy.

The point is that although it may be arguable whether or not Soviet-American relations had begun to thaw by 1959 and 1960, the American view of present and future Soviet policy and capability in the field of strategic weapons became increasingly less paranoid and gloomy. Accordingly, factors that had previously been overlooked or minimized, such as the state of the Soviet economy, the progress in the American programs and deployment, and the overall strategic posture, among others, were given additional weight and contributed to a more accurate assessment of Soviet capabilities.
The decline in the estimated capabilities published in the press accurately portrayed the change, with varying degrees of sophistication and rapidity, in the calculations of the esteemed defense experts. The unforeseen Soviet course of paralleling American policy, i.e. of limited initial production while awaiting a second generation ICBM, resulted in the original faulty data. The discovery of those errors after 1958, 1959, and 1960 and the subsequent adjustments produced the successively amended figures presented in the ensuing pages.

Almost all the major periodicals were victimized by those incorrect numbers. It often seemed, though, that some were more responsive than others to changes in the figures. The N.Y. Times appeared to be quicker in printing downward revisions in estimated Soviet strength than did Time or Newsweek, for example. U.S. News & World Report often appeared confused, publishing both optimistic and pessimistic reports, virtually simultaneously. It is conceivable, however, that all of those articles simply mirrored the confusion and uncertainty rampant at the time, and may not have possessed ulterior or preconceived notions on the nature of the gap. In any event, by late 1961, the consensus among the overwhelming majority of the members of the nation's media was that the missile gap had been eliminated--and perhaps had been fictitious to begin with.

The following data represent some of the various projected estimates of a "missile gap" during the 1957-1961 period.¹³
### July 1958 -- The Reporter

<table>
<thead>
<tr>
<th>Year</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>1960</td>
<td>30</td>
<td>500</td>
</tr>
<tr>
<td>1961</td>
<td>70</td>
<td>1000</td>
</tr>
<tr>
<td>1962</td>
<td>130</td>
<td>1500</td>
</tr>
<tr>
<td>1963</td>
<td>130</td>
<td>2000</td>
</tr>
</tbody>
</table>

### January 12, 1959 -- The N.Y. Times

<table>
<thead>
<tr>
<th>Year</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>1961</td>
<td>70</td>
<td>500</td>
</tr>
<tr>
<td>1962</td>
<td>130</td>
<td>1000</td>
</tr>
<tr>
<td>1963</td>
<td>130</td>
<td>1500</td>
</tr>
<tr>
<td>1964</td>
<td>130</td>
<td>2000</td>
</tr>
</tbody>
</table>

### February 9, 1959 -- Newsweek

<table>
<thead>
<tr>
<th>Year</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>300</td>
<td>1000 to 1500</td>
</tr>
</tbody>
</table>

### March 9, 1959 -- Aviation Week

<table>
<thead>
<tr>
<th>Year</th>
<th>USSR ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>100</td>
</tr>
<tr>
<td>1962</td>
<td>600</td>
</tr>
</tbody>
</table>

### March 9, 1959 -- Life

<table>
<thead>
<tr>
<th>Period</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1960</td>
<td>10</td>
<td>March 1959</td>
</tr>
<tr>
<td>December 1961</td>
<td>80</td>
<td>March 1960</td>
</tr>
<tr>
<td>Mid-1963</td>
<td>460</td>
<td>1962</td>
</tr>
</tbody>
</table>

### March 25, 1959 -- The N.Y. Times

<table>
<thead>
<tr>
<th>Year</th>
<th>USSR ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>100</td>
</tr>
<tr>
<td>1962</td>
<td>500</td>
</tr>
</tbody>
</table>
April 1959—*Fortune* 20

**Early estimates of Soviet ICBMs**

<table>
<thead>
<tr>
<th>Year</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>10</td>
</tr>
<tr>
<td>1960</td>
<td>100</td>
</tr>
<tr>
<td>1961</td>
<td>500</td>
</tr>
</tbody>
</table>

Revised and lower estimates (of 1959) of Soviet ICBMs

<table>
<thead>
<tr>
<th>Year</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>60 to 100</td>
</tr>
<tr>
<td>mid-1962</td>
<td>500</td>
</tr>
</tbody>
</table>

May 16, 1959—*Saturday Evening Post* 21

<table>
<thead>
<tr>
<th>Year</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>1960</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>1961</td>
<td>30</td>
<td>300 (possibly 1000)</td>
</tr>
<tr>
<td>1962</td>
<td>-</td>
<td>500 (possibly 1000)</td>
</tr>
</tbody>
</table>

September 28, 1959—*U.S. News & World Report* 22

<table>
<thead>
<tr>
<th>Year</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959 (now)</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

October 7, 1959—*Washington Post & Times Herald* 23

<table>
<thead>
<tr>
<th>Year</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>1961</td>
<td>70</td>
<td>500</td>
</tr>
<tr>
<td>1962</td>
<td>130</td>
<td>1000</td>
</tr>
<tr>
<td>1963</td>
<td>130</td>
<td>1500</td>
</tr>
</tbody>
</table>

February 2, 1960—*N.Y. Times* 24

<table>
<thead>
<tr>
<th>Year</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>50</td>
<td>150</td>
</tr>
</tbody>
</table>
When compared to the assessments of actual Soviet capabilities in the respective years, with few exceptions, the discrepancy between the estimates and reality is nothing short of remarkable. It is plain that the predicted Soviet superiority, ranging in magnitude from 3:1 to as high as 14:1 never materialized.

The table below illustrates the "gap" in early projections and later revisions of Soviet capability. Although it was originally produced by Senator Symington and may be considered somewhat self-

<table>
<thead>
<tr>
<th>Date</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 1960</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>June 1960</td>
<td>18</td>
<td>38</td>
</tr>
<tr>
<td>June 1961</td>
<td>40-50</td>
<td>140-200</td>
</tr>
<tr>
<td>1963</td>
<td>200</td>
<td>500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td>1962</td>
<td>200</td>
<td>600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>American ICBMs</th>
<th>Soviet ICBMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>mid-1961</td>
<td>50</td>
<td>150-200</td>
</tr>
<tr>
<td>mid-1962</td>
<td>100</td>
<td>500</td>
</tr>
<tr>
<td>mid-1963</td>
<td>300</td>
<td>1000</td>
</tr>
<tr>
<td>mid-1964</td>
<td>870</td>
<td>1500</td>
</tr>
</tbody>
</table>
serving in view of his expected desire to vindicate his earlier judgment and position on the missile gap issue, it nonetheless accurately portraits in quantitative terms the differences in the various figures.

Table I

<table>
<thead>
<tr>
<th>Total High Estimated Soviet Missile Production For 1961-1962*</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% 100%</td>
</tr>
<tr>
<td>(1,500 ICBMs)</td>
</tr>
<tr>
<td>80%</td>
</tr>
<tr>
<td>60%</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td>(512 ICBMs)</td>
</tr>
<tr>
<td>20%</td>
</tr>
<tr>
<td>(450 ICBMs)</td>
</tr>
<tr>
<td>15%</td>
</tr>
<tr>
<td>(225 ICBMs)</td>
</tr>
<tr>
<td>0%</td>
</tr>
<tr>
<td>3.5%</td>
</tr>
<tr>
<td>(52 ICBMs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>December</th>
<th>February</th>
<th>August</th>
<th>June</th>
<th>September</th>
</tr>
</thead>
</table>

*The figures in parentheses represent the number of Soviet ICBMs projected by public sources for late 1961 to early 1962. The 1959 prediction is used as the base year. The December 1959 figure of a projected 1,500 ICBMs was used here to present the most pessimistic public estimate used at the time.29

The evaluation of IRBM and MRBM (intermediate and medium range ballistic missile) strengths evolved along a similar course as that of the Soviets ICBMs. It is not necessary to analyze or depict as exhaustively the situation in this area, however, because the strategic importance of these missiles, whose relatively limited range precluded their use against the continental United States, was not nearly
as great as that of their more powerful cousins. Suffice it to point out that the original reports in the 1957-1961 period of the actual and projected estimates of Soviet superiority in medium and intermediate range ballistic missiles were probably also incorrect, though to a lesser degree. It should be noted, however, that at least one prominent author asserts that the U.S. actually underestimated Soviet IRBMs; but because the bulk of the other sources contradicts this view, it has been discounted.

While the lead in IRBMs was exaggerated, it apparently was real. The importance of a lead in such forces, though, was mitigated substantially by the very nature of the weapon, i.e. its comparatively moderate range. Soviet IRBMs in the 1957-1961 period affected American strategic and defense posture only insofar as they posed a threat to American nuclear delivery systems in Europe and elsewhere, i.e. the missile and Strategic Air Command (SAC) bases in foreign countries.

Thus, the chief threat posed by those Soviet missiles was their possible use in a first or preemptive strike strategy designed to knock out American deterrent or retaliatory power overseas. The commanding officer of the Strategic Air Command, General Thomas S. Power, attempted to play up the potential danger to and vulnerability of existing American bases to a surprise Soviet missile attack in testimony before Congress in 1960. The General's concern, it should be noted, was obviously primarily for his exposed bomber force and not the missiles also deployed on several SAC bases.

In spite of their exposed position, American IRBMs emplaced on the Soviet Union's borders (e.g. in Turkey) or within sufficient
proximity (e.g. 60 in Great Britain) posed much more of a strategic problem to the Russians than did their medium range missiles situated in Europe. Their missiles could only be used against American military targets, specifically those IRBMs and SAC bases, while the American missiles were zeroed in on military, industrial, and the more psychologically valuable and vulnerable urban civilian targets. In this sense, as Eisenhower astutely observed, the American forward bases ringing the Soviet Union made an IRBM (for some purposes) as good as an ICBM. The actions precipitating the Cuban missile crisis in October of 1962 would seem to indicate that the Soviet Union also attached considerable credence to this theory (see Chapter Five).

In essence then, something of a stalemate in IRBMs resulted, with the Soviets possessing superior numbers, thereby endangering the American force, while the Americans possessed superior position in the number of accessible important targets, especially cities. Of course, those Soviet missiles simultaneously jeopardized the aircraft of the Strategic Air Command, and this leads directly into consideration of the final major component of strategic posture, namely long-range bombers.

Considering the Eisenhower administration's decision to rely heavily on the deterrence power of SAC during the period of "greatest danger"--the time required before the second generation American ICBMs could be phased in--it comes as no surprise to learn of the substantial American superiority in manned bombers capable of delivering nuclear weapons. By 1961, the margin was over 3:1 in heavy bombers alone (over 600 B-52s vs. less than 200 Bisons).
When one considers the large number of medium-range B-47s (1100) capable, via in-flight refueling or deployment on foreign bases, of sustaining missions against the Soviet Union between 1957 and 1961, the enormity of the American margin in nuclear striking power becomes apparent. Even this does not account for the substantial number of tactical aircraft (fighter, fighter-bomber, and reconnaissance planes) based in Europe, Asia, and elsewhere also capable via in-flight refueling of round-trip delivery of nuclear weapons on Soviet targets. Additionally, there were 14 aircraft carriers on station in various parts of the world equipped with nuclear strike forces of similar capability.

Ironically, in the mid 1950's there had been talk of a potential "bomber gap" along much the same lines as the later missile gap. The bomber gap, though much less intense, proved to be even more of a still-born or false issue than did its successor.

Doubly ironic was the twist of fate that made the same force (SAC), which until the mid 1960's served as the main-stay of the American concept of deterrence and power, serve as a hostage for Soviet IRBMs and ICBMs. It was the fear of Soviet missiles destroying the second strike-retaliatory capability of the United States, via obliteration or heavy damage to SAC bases and aircraft, that helped fan the flames of the missile gap controversy and caused so much consternation within American borders.

A lesser, though increasingly significant component of American strategic power were the Polaris submarines. Armed with 16 IRBMs and cruising within range of Soviet targets, they represented by 1961 a viable force, one that contributed to tipping
the balance of strategic power scales decisively in favor of the United States. Approximately six of these were operational in 1961, adding 96 ballistic missiles to the American margin of safety. The Soviets did not possess anything of equal capability at that time.

A summary measurement of overall comparative strategic power would conclude that in the 1957-1961 period, it was the striking power of the Strategic Air Command, supplemented by the aforementioned tactical and naval air forces, coupled with the limited ICBM, IRBM, and SLBM (sea launched ballistic missile) forces which retained for the United States its military superiority in nuclear weapons delivery systems. The overwhelming capability of this service branch (SAC) enabled American policy-makers to proceed in establishing priority for production of second generation ICBMs, without fear of missile blackmail from the Soviets. 39

Perhaps the most important impression conveyed by research is that there apparently never really was a missile gap in the sense of the term used at that time. 40 The assorted variables contributing to the propagation of such a theory of a strategic imbalance in favor of the Soviets were numerous, and were dealt with in the preceding chapters. As noted earlier, though, an actual gap or lag may have existed briefly in absolute quantitative terms, although, again, there are by no means indisputable figures on this.

What emerges then, is the possibility of a bona-fide missile lag between American and Soviet research and development and production. 41 Oddly enough, there were several pieces in national magazines in the late fifties that used the term "missile lag" in analyzing Soviet-American strategic relations. Increasingly, though,
the media and various segments of the public and top civilian and military leadership seized on the key concept of a more potentially serious and worrisome "gap," and the "missile gap" became firmly established in everyday usage and quickly superseded its "missile lag" predecessor.

What is crucial here is that had the issue really been defined, viewed, or publicly accepted in such a context (i.e. that of a lag and not a gap), it is very likely that the controversy and concern elicited by and surrounding the missile gap could have been obviated; a simple lag would probably not have warranted such attention. In this sense, the predilection of the American people and some members of the governing elite served to distort and magnify the already alarmist material conveyed by the nation's media.

The picture of mutual capabilities which finally emerges is this: The United States retained a very real margin of superiority in the strategic weapons area, both in delivery vehicles and total number of nuclear warheads capable of delivery. This was balanced by the newly-achieved Soviet ability to deliver similar weapons in "sufficient" quantities so as to preclude either a first or preemptive strike by the United States.

The point is, though, that American deterrent or destructive power throughout the 1957-1961 period remained vastly superior to that of the USSR, due basically to the "mixed-forces" concept of a combined missile-bomber strategic delivery system.

Significantly, the rate of growth of Soviet military forces (all types) and the research and development associated with it was markedly greater than that for the United States—-but this would change
with the transfer of power to the Kennedy administration, and the rate for the United States would increase accordingly.

The more sober assessments of respective capabilities were reflected in the two states' official strategic doctrines and policies, which had in turn determined the status of forces. American policy by 1959 was to rely on the efficacy of superiority in manned bombers, plus a limited number of first generation ICBMs (Atlas and Titan) and overseas IRBMs (Thor and Jupiter) to deter any Soviet attack, while waiting for the second generation of American missiles (Minuteman and Polaris) to become operational.

The Soviets pursued essentially a parallel policy regarding investment in and production of first generation missiles. They consistently pursued a minimum deterrent strategy, a sort of second best policy. This was obscured, however, by a propensity for rocket-rattling (or so-called missile diplomacy) and boasts of missile superiority. As Soviet credibility in the immediate aftermath of the Sputnik launchings was quite high, estimates of capabilities and projections of the same were tenuous at best, and susceptible to overestimation. Thus, in part, was the missile gap created.
FOOTNOTES CHAPTER IV

1 see Bibliography

2 Edgar M. Bottome, The Balance of Terror (Boston, Beacon Press, 1971), pp. 120, 153


5 see data in Chapter IV

6 Eisenhower, op. cit., p. 209

7 Raymond L. Garthoff, Soviet Military Policy (N.Y. Praeger, 1966), p. 120

8 Horelick & Rush, Strategic Power and Soviet Foreign Policy (Chicago, University of Chicago Press, 1966), pp. 52, 83, 95

9 "Was there ever a missile gap or just an intelligence gap?" Newsweek, November 13, 1961, Vol. LVIII, no. 20, p. 23

10 Edgar M. Bottome, The Missile Gap (Rutherford, Fairleigh Dickinson University Press, 1971)


12 Bottome, The Balance of Terror, pp. 54-57


14 Garthoff, op. cit., p. 119

15 most of the material is presented in Appendix A of The Missile Gap

16 "The Growing Missile Gap," The Reporter, January 8, 1959, p. 11

17 The New York Times, January 12, 1959, p. 3

18 Newsweek, February 9, 1959, Vol. LIII, p. 23

19 Aviation Week, March 9, 1959, Vol. LXX, p. 314
20. Fortune, April 1959, Vol. LIX, p. 242
24. N.Y. Times, February 2, 1960, p. 23
25. N.Y. Times, February 7, 1960, p. 26
29. from Edgar M. Bottome, The Balance of Terror, p. 55
31. Albert Wohlstetter, "Is there a strategic arms race?" Foreign Policy, Summer 1974, Fall 1974, nos. 15 & 16
33. Moulton, op. cit., pp. 262-263
34. The Military Balance, various editions (The International Institute for Strategic Studies, London)
35. Jane's All the World's Aircraft (N.Y., McGraw-Hill)
36. Ibid
37. Horelick & Rush, op. cit., pp. 18, 28, 29, 212
39. Moulton, op. cit., p. 18
40. Garthoff, op. cit.


40 "Whatever happened to the missile gap?" *U.S. News*, April 16, 1962, Vol. LII, no. 16, pp. 82-83

41 Bottome, *The Missile Gap*, pp. 10, 34, 35, 59

42 Bottome, *The Balance of Terror*, p. 48
CHAPTER V

THE MISSILE GAP OVERVIEW

It is important to examine in greater depth the Eisenhower and Kennedy administration's general policies, philosophies, and strategies for a variety of reasons. One of the most obvious corresponds to the evolution and resolution of the missile gap itself, i.e. the fact that the issue arose during Eisenhower's last term in office and was eventually resolved in Kennedy's first year in power. This necessitates analyzing what differences, if any, there were in the two administration's approach to, conceptions of and policies toward the missile gap that resulted in the Kennedy administration's apparently successful negotiation and conclusion of that delicate political matter.

On the other hand, if there were no substantive differences, how and why was the impression fostered at the time, and still prevalent today, that the new administration truly represented a significant departure in policy and philosophy from the previous one? More importantly, if the difference was minimal, how did this affect the duration of the missile gap as a factor in Western security policy calculations?

Another reason compelling the analytical dichotimization is the Soviet's perception of the two administrations, both with respect to their treatment of the missile gap and more general policies. Did the Soviets perceive a distinction or change in American policy, and if so, what effect did this have on their own policy regarding the utility of their exploitation of the gap and of their views of the immediate and
future strategic situation? Before dealing with this, however, we shall first turn to the question of whether the "New Frontier" was really what it claimed to be, or whether it was simply the Democratic equivalent of the tired, steady Republican diet of Cold War policy and cliches, complete with essentially identical political and strategic concepts.

In the twelve and one-half years since his death, the prevailing overall classification on the political spectrum of John F. Kennedy's administration was and has been that of basically "liberal" in both foreign and domestic affairs. In support of this contention, adherents cite the efforts (not accomplishments) made in the fields of civil rights and social welfare legislation, as well as the pursuit of a policy of rapprochement with the Soviet Union and general easing of world tensions through the winding-down of the Cold War. Putting aside the domestic issues that do not concern us here, let us examine both the theoretical and active components underlying the Kennedy brand of foreign and defense policy, comparing and contrasting them with those of the allegedly more "conservative" Eisenhower administration.

One of the more celebrated and noticeable changes wrought in the early stages of the Kennedy era was in the area of conventional military forces. In numerous speeches throughout his campaign, the new President had played upon the theme of declining American prestige and vitality, and how the state of American conventional capability epitomized this negative concept. The rapid buildup of those forces in subsequent years was one of the major legacies of the Kennedy presidency, and was directly related to his doctrine of "flexible response." More on this, though, in the section assessing
the differences in the two administrations.

Despite the admitted expansion and diversification of the American military establishment, the basic strategic conceptions and policies remained the same. Disavowals of a reliance upon a strategy of "massive retaliation" to the contrary, Kennedy "...was still willing to face the ultimate risk of nuclear war to prevent defeat by nuclear blackmail." Since the major system for delivery of nuclear weapons prior to 1964 remained the Strategic Air Command bomber fleet, even the means of the strategy was the same.

Unquestionably, Kennedy himself probably viewed his beliefs as representing a distinct alternative to those of his predecessors. In fact, his distaste for the better portion of those policies and theories is legendary and is chronicled in several works, as well as in his critical speeches during the 1960 campaign. In addition to the fact that "...the Kennedy group regarded the Eisenhower people as having shrunk from the (communist) challenge set before them," Kennedy himself strongly disapproved of the tactics of Eisenhower's Secretary of State John Foster Dulles. While a more comprehensive study of Dulles' beliefs and record in office may be obtained elsewhere, suffice it to say that Kennedy did not adhere to the strident, aggressive rhetoric, bordering on "brinkmanship," that was inherent in the Dullesian conception of American foreign policy with regard to the Soviet Union.

At the same time as rejecting the particularly inelegant, if not undiplomatic prose of a Dulles, the new President remained, as noted in earlier chapters, as ardent a Cold Warrior as John Foster himself. In a discussion with French President De Gaulle in May of 1961,
Kennedy made it quite clear that in conjunction with the NATO alliance he was fully committed to using nuclear weapons if Soviet aggression occurred in Europe.  

It seems that the Republican and Democratic administration's basic views of the Soviets were so similar as to preclude the consideration of any significant alternative strategic policy vis a vis the USSR. The new hardware and increased number of troops procured by the Democrats were simply means of better "fighting" the Cold War, and did not represent real changes in American foreign and defense policy. Even the majority of the American electorate seemed to realize this in 1960; but more on this shortly.

The writings of some of the key Kennedy personnel, e.g. Maxwell Taylor, McGeorge Bundy, Dean Rusk (respectively Kennedy's primary military advisor, foreign policy advisor, and Secretary of State), all reveal attitudes closely aligned to those of the Eisenhower cabinet, especially Dulles. In fact, in General Taylor's article, specific reference was made to waging the Cold War in sufficient earnestness as to enable the United States to "win" it.

The major aims of American policy toward the Soviet Union were unchanged in the 1957-1961 period. While it may be true that the last year of the Kennedy administration witnessed the beginnings of a transformation in relations beyond the confines of the parameters of Cold War politics, for the time span under consideration, i.e. prior to the Cuban missile crisis, American policy was essentially continuous. It remained a policy of containment, of attempting to halt or at least slow what was commonly perceived as Soviet attempts at encroachment and aggrandizement in the international arena.
This cornerstone of Cold War policy, forged largely by Truman's Secretary of State Dean Acheson in the years after 1947, would prevail well into the 1960's, and some might even argue is influential even in this decade. The point is, "for all the apparent change and for all the innovations in the way Kennedy governed foreign affairs, the output from Kennedy's Administration remained remarkably unaltered from the Truman and Eisenhower eras," and that "in sum, the Kennedy Administration was unable to transcend the internal political constraints that kept America trapped in Cold War rhetoric and behavior."^9

An aspect underpinning the mutual pursuit of an essentially containment-oriented policy was the two men's similar beliefs regarding Soviet policy and intent. Both Presidents were rather wary of Soviet ambitions, but neither appeared particularly worried about the USSR deliberately (or preemptively) initiating a disastrous nuclear exchange. According to one of his biographers, Kennedy thought the Soviet regime was ambitious enough to want to seize control of the globe, but was also sober enough to not want to risk blowing it up in the process. Even Dulles would probably have concurred with this analysis. "Indeed, although their accents and rhythms were different, the fervent anti-Communist absolutes of John Foster Dulles were embedded in the very bone structure of John Fitzgerald Kennedy's inaugural address."^11

There were, however, numerous areas where the two administrations diverged in emphasis, rhetoric, style, perceptions, budgetary ceilings, conceptions of the Presidency, and adequacy in military posture. In this sense, there indeed was a genuine difference in the
appearance (as opposed to substance) of the resulting policies. What is important to emphasize is that these were by and large cosmetic disimilarities, and like any cosmetic, truly were only skin-deep and not substantial. One should not then conclude, however, that these exterior distinctions are superfluous to our analysis, for we would be overlooking an extremely salient factor in assessing the conceptions of the era and of recent years. Specifically, it is through the examination of these seemingly extraneous factors and variances that their relevancy becomes apparent by explaining how and why the impression of a bona fide difference and new perspective in the White House after 1960 was created.

In referring to differing conceptions of the Presidency, we are dealing with the manner in which the two men perceived their executive role, i.e. what they thought to be an appropriate method of exercising leadership and making decisions. It is apparent in Eisenhower's memoirs, as well as various biographies and other works, 12 that he conceptualized his role in rather narrow and limited terms. This was exemplified in his administrative system, the essence of which was his belief in the delegation of authority. 13

The division of labor inherent in Eisenhower's conception of the presidency resulted in the broad delegation of powers of initiative to other Cabinet members, perhaps best typified by Dulles' orchestration and conduct of day to day American foreign policy. This was perfectly confluent with the restrained and restricted type of executive management Eisenhower deemed proper.

Kennedy, on the other hand, opted for a much more activist role and was committed to exercising extensive executive initiative.
"Unlike Eisenhower, he was prepared to use to the fullest the power and status of the Presidency to accomplish his goals." Evidence of Kennedy's conviction in this area may be found in the record number of legislative proposals submitted before Congress, especially in the first year alone. The sheer volume alone represented a quantum leap in executive output, if not accomplishment.

Kennedy did not tend to delegate authority or responsibility, especially after the costly lesson of the Bay of Pigs debacle. An indication of this was in his practice of normally acting as his own Secretary of State, at the expense of the nominal Secretary Dean Rusk. Significantly, Rusk himself articulated the more limited (compared to Dulles') role of the Secretary of State in an article written even before Kennedy had secured the Democratic nomination. The fact that this piece constituted what amounted to a typically understated, Ruskian-type advertisement of his availability for that post is duly noted, however.

In line with their respective Constitutional conceptions and resulting differing styles, the decision-making process of the two men contrasted rather sharply. Associated with the military type delegation of authority and chain of command among Eisenhower's personnel was the routinized, regular procedure for making decisions, whereas this procedure was dismantled under Kennedy, substituting in its place a kind of nervous energy and great intellectual activity.

The example of the respective uses of the National Security Council provides an illuminating study of the contrasting processes. Eisenhower operated almost exclusively within the NSC's machinery, dividing responsibility among staff members conducting current
business, planning policy, and those implementing the planning decisions of the NSC. Kennedy avoided this formalistic approach, and instead used the NSC primarily as a sounding board, reserving the important decisions for himself and not the Council. 16

Another area of antithetical policy was in the field of budget constraints. Quite simply, Kennedy thought the American economy could tolerate additional federal spending, especially in the defense area, and remain healthy and solvent. Eisenhower felt quite differently, stating his conviction that excessive spending created deficits, which caused inflation, which in turn cut the amount of equipment and manpower the defense dollar could buy, resulting in a circular and self-defeating process. 17

It is plausible to argue that throughout his entire tenure in the White House, economic considerations (translated as self-imposed defense budget ceilings) largely dictated Eisenhower's decisions on the composition of the American armed forces and may well have been of prime importance in the promulgation of the less expensive "New Look" strategy of the mid-1950s. The reliance upon massive nuclear retaliation via SAC bombers meant the United States no longer had to maintain a large conventional standing force, and thus purchased a "cheaper" deterrent to possible aggression.

Kennedy (and his successor) certainly did not hold any such reservations, and federal spending would increase by over $20 billion in the next four years. The decision to create a more flexible strategy through increased mobile conventional capability was indeed a departure from the Eisenhower days. The readiness to allocate additional appropriations in this area and others may be explained at least in
part by the traditional historical proclivity of Democratic administrations to spend more and with less trepidation than their more fiscally conservative Republican counterparts. Correlated to this general tendency was the initial disparity in the beliefs of Kennedy and Eisenhower on the adequacy of American defenses in the 1957-1961 period. This leads us directly into a brief consideration of their respective views on the missile gap itself.

As with so many of the elements involved in this analysis, it is extremely difficult to ascertain the true motives and beliefs of the various actors involved in the missile gap issue. Even the few primary sources, such as speeches, position papers, or memoirs are somewhat suspect since they are or were generally tailored to fit certain subjective criteria at the time or with the benefit of hindsight, and hence are usually of a self-serving nature. Consequently, any interpretation of policy and behavior is fraught with the danger of imputing possibly erroneous motives, beliefs, and constraints to those same actors or theories.

At the same time, though, it is possible to construct an hypothesis of what the views of Kennedy and Eisenhower were with regard to the reality or danger of a missile gap. This has already been partially assessed in the American perspective chapter and is completed at this juncture.

Eisenhower, as detailed in the above mentioned chapter, did not become particularly alarmed by reports of a forthcoming missile gap. His belief in the superior overall nuclear striking power of the United States, his natural skepticism of military intelligence projections, and his CIA intelligence data all combined to convince him that
there probably was not a gap in numbers of ICBMs, and that even if there was a small disparity, there certainly was none in total strategic deterrent or destructive power. This belief was maintained throughout his administration.

Even allowing for the natural political inclination to seize upon the gap as an issue, Kennedy appears to have been convinced, like so many of his countrymen, of the imminence of a gap in strategic weaponry, specifically with regard to ICBM development and production. It does not appear that the Massachusetts Senator ever believed that the United States was actually inferior in strategic power, but rather was simply becoming vulnerable to the possibility that the Soviets could and would soon overtake the United States in this area.

Again, as described in previous analysis, this perception would soon undergo a radical alteration, resulting in an assessment of the American strategic military position analogous to that of the Eisenhower administration's.

This essay contends that for Kennedy to have cynically and deliberately professed a belief in an upcoming missile gap that he knew very well did not exist and would not occur would have been extremely dangerous if not suicidal politically. As it was, there was a very substantial negative reaction registered in the press after the gap danger was declared over. If Kennedy had actually known the issue to be of such ultimate unreality, it seems doubtful he would have risked the potential backlash among the American electorate and Congress destined to follow the exposure of such apparent duplicity.

Throughout his career, like any careful politician, Jack Kennedy did not take excessive and unnecessary chances and also
generally refrained from espousing political sentiments at odds from those fundamentally conservative precepts of the vast majority of the American voters. Although undoubtedly not above resorting to deception occasionally, Kennedy would not make the potentially fatal political error of attempting to fool his constituency on this issue if for no other reason than the fact that he anticipated running for a second term: if he was "caught," his credibility went out the window along with his chances for retaining 1600 Pennsylvania Ave. as his address after 1964.

I feel it is significant that the missile gap as a separate, distinct issue does not seem to have been that important in the 1960 election. An assay of the periodical's coverage of the era is interesting for what it does not contain, namely the repeated proclamation of the missile gap theory one might have expected from the Democrats. Admittedly, the missile gap issue was a steady component of Democratic oratory by 1960, but it was tied in with the broader theme of military weakness and the overall decline of American prestige, vitality, and sense of national purpose.

As was noted in the American chapter, the Democratic platform offered little in the way of changes from Republican policies. Accordingly, as stated by many commentators in 1960, it was difficult to differentiate in policies between the candidates Nixon and Kennedy. The fact that party differences on foreign policy issues was so small may explain why foreign policy issues had so little impact on the election outcome. 18

For our purposes, defense or military policy issues, such as the missile gap, are considered an adjunct of foreign policy issues,
since they directly relate to the "softness" or "hardness" of U.S. policy. The same study cited above notes that the 1960 campaign was not devoid of foreign policy issues, but that "they just never became decisive, though at times it looked as though they might." 19

Another work on foreign policy and the Presidential election in 1960 concluded that the press reports of the time were correct and that Kennedy and Nixon were equally ardent Cold Warriors, committed to outdoing each other in taking a hard line on foreign policy and achieving essentially the same objective, so that "...the election would ultimately turn on the question of credibility--which man the voters believed could better provide the leadership necessary to win the Cold War." 20 The missile gap issue became submerged in the broader questions pertaining to the matter of American pursuit of victory in the perceived ongoing struggle with the Soviet Union. Naturally the tone and substance of this debate was not lost on the Soviets, and this leads into the section on the interaction of Soviet-American perspectives and policies of and during the missile gap era.

The interplay of Soviet-American perceptions and behavior normally is not easy to assess, the number of economic, political, military, and other variables being immense. In the case of the missile gap, however, there was one outstanding long-term result and a second and related short-term consequence of the two states' analysis and resolution of the issue, and it is upon that outcome that we focus our attention. Specifically we refer first to the intensification and acceleration of the acquisition of strategic arms, resulting in a Soviet-American "arms race," and second to the Cuban missile crisis of 1962.
Quite simply, the scenario was this: Starting in late 1957, the Americans began to perceive themselves as either behind or about to be in the total number of operational ICBMs. With varying degrees of concern through 1961, this belief persisted among many if not most citizens and political and military leaders. The result of this perception was the gradual, then rapid acceleration (under Eisenhower and Kennedy respectively) of the American missile research, development, and production program.

This acceleration in turn produced a substantial missile gap in favor of the United States by late 1963, and possibly even earlier. As early as mid-1961, however, the missile gap was adjudged a dead issue, and the vast American superiority in deliverable nuclear weapons (via SAC, other service air forces, and missiles) was once again proclaimed and recognized.

The Soviets, knowing full well their limited number of ICBMs and future plans for the same,\(^1\) watched the reaction in the United States with growing alarm. The matter of ascertaining deliberate Soviet intent or fortuitous coincidence aside, the effect of the missile gap myth on U.S. policy and capability could neither have been what the Soviets intended nor desired. Already inferior in total nuclear strike forces, the Soviets could only helplessly observe the accelerated American missile program outstrip their own and further widen the strategic gap in Soviet-American nuclear destruction power.

Essentially, what it boiled down to was the rekindling and intensification of the arms race, with the United States pulling far ahead, necessitating a reciprocal Soviet build-up in later years. What is ironic is that neither side desired such a debilitating race;
it was the (American) misperceptions of one side's (Soviet) capabilities, compounded by that other side's (Soviet) failure to correctly anticipate the resulting (American) reaction and policy, that created and fueled the contest.

The incorrect changes in assumptions of both sides about the state of military posture that existed between them were a result of the nature of cold war politics that dictates that major political gains or losses may result from those changes. By this, it is as if the two opponents occasionally fought a pretend war with their available weapons, the winner being awarded a scoring point. In this case, the Soviets would receive the point for their perceived or assumed lead in ICBMs.

The point is, the peculiar logic of an arms race produces this type of phony or shadow war, with the result that "...increments in the military capabilities of one side which result in a changed balance of military potentialities sometimes seem to be automatically translated into new political advantages or disadvantages." It appears that until 1961, the Americans translated the military potentialities of Soviet advances in ICBM technology into American disadvantages and Soviet advantages. The fact that after 1961 this interpretation reversed itself and backfired on the Soviets in no way lessens or changes the previously-stated impact prior to that time.

The problem with characterizing a Soviet-American arms race as a major consequence of the missile gap, aside from the usual unavailability of official government confirmation of anything pertaining to classified information, is that the lack of consensual theories regarding exactly what actions, factors, and elements constitute an
"arms race" results in the extreme vulnerability of any hypothesis that is advanced for a given situation or set of relationships. In other words, the apparent disagreements among arms race analysts in defining the relevant basic components of an arms race could result in an analytical inability to successfully confirm or repudiate the presence or condition or an arms race between two or more states.

Accordingly, the foregoing analysis may be subject to attack on certain grounds. The profusion of literature on arms races and arms control indicates the depth of research and interest in the area, and this writer makes no claim to any sort of comprehensive knowledge of that branch of political science. However, I do feel that it has been possible to distill the essence of the dynamic of what is interpreted in these pages as a Soviet-American arms competition, if not "race."

Perhaps it seems too simplistic to reduce so complex a subject in such a manner, but I would argue that Soviet-American relations in all areas, including defense as well as foreign policy, were essentially based on the action-reaction syndrome, and that both powers realized the zero-sum nature of the situation. This action-reaction model is the basis for most arms race theories, and as such apparently holds true for the course of events in the 1957-1961 period.

Briefly, the scenario outlined earlier, involving Soviet deception, American misperception and missile acceleration, culminating in the mid-1960s decision to accelerate Soviet ICBM deployment would seem to fit into this basic type of reactive mold.

To substantiate this view, an entire volume could probably be completed without satisfying all critics, but only an exceedingly brief
discourse is permitted herein. The point is that "...in effect an arms race may be viewed as an interacting sequence of decisions by two sides, in which each side in making any single decision makes the choice of employing given resources for the acquisition of arms..."  

Admittedly, there are those who disavow this conventional stimulus-response (or interactive) syndrome. It would seem, though, that in rejecting the "mechanical inevitability" of an action-reaction model, Wohlstetter ignores the period to which it seems to suit most appropriately, namely the missile gap era. In fact, at numerous points Wohlstetter implicitly concedes that this period represents an exception to his conclusions regarding the absence of a state of a strategic arms race between the Soviet Union and the United States.

Basically Wohlstetter is attempting to demonstrate that, contrary to the prevailing notions of many analysts, U.S. policy since 1962 has not been conducive to typical arms race behavior, namely in expenditures (which he claims have actually declined since the missile gap scare) and in low rather than high estimates of predicted Soviet ICBM capability. While Wohlstetter is in turn evaluated and criticized by several other writers, what is important to this analysis is that the American perceptions and overestimates of Soviet ICBM capability and intent produced the high level of production and appropriations accompanying the American strategic program and outlook in the 1957-1961 period.

The possibility that American policy in subsequent years may not have operated under such constraints nor produced such results is irrelevant: the point is that the Soviet Union by that time, following
the missile gap myth revelation and the Cuban fiasco, was engaged in a build-up of her strategic forces because of the vast American superiority, which in turn was the direct result of the misperceptions of the missile gap era. Thus, the accelerated Soviet missile program was a corollary of the missile gap controversy. The misjudgments about Soviet military policy that have plagued American policy-maker's actions in the arms race and that created the mid-1960's disparity is examined elsewhere in this thesis and in other works in more general terms.  

In conclusion, the importance here is that the dynamic of the arms race is not found alone in the quantitative factors, but rather in the perceptions involved in the possible changes in quantitative capability.  

The secondary consequence of the missile gap alluded to earlier was a direct corollary of the arms race syndrome, or rather the heightened strategic consciousness initiated by propagation of the missile gap, and had nearly disastrous consequences. Khrushchev, in attempting to gain unwarranted political mileage from the Soviet advances in missilery, was in the distinctly uncomfortable position by 1962 of knowing what his adversaries had only lately begun to suspect, namely that the United States still enjoyed an ample margin of strategic superiority.

The collapse of the missile gap belief in the West, coupled with the reversals in Berlin, contributed to the popularity and
momentum of the Soviet theory that the installation of intermediate nuclear missiles covertly in Cuba, followed by an appropriately timed announcement of this fact (possible coinciding with a new round of negotiations on Berlin or arms control), would dramatically strengthen the Soviet Union's position. 31

The crucial point is that by October of 1962, the USSR apparently perceived itself being rapidly outdistanced by the United States in strategic forces and the commensurate diplomatic and political leverage associated with such forces. The emplacement of cheaper and more plentiful (than ICBMs) MRBMs and IRBMs on Cuban soil, according to Soviet logic, would accomplish the dual purpose of effectively deterring American interference in the Caribbean and of restoring some semblance of parity to the strategic power configuration. 32

There are other works that examine, usually rather pre-emptorily, the links between the collapse of the missile gap, the situation in Berlin, and the Cuban adventure. Some of them attribute the incentives for Khrushchev's Cuban gambit not only to his desire to reduce the strategic disparity between the U.S. and USSR, but also to his desire to silence his opposition in the Soviet hierarchy, i.e. of those who were dissatisfied with his military and/or foreign policy vis à vis the United States. 33 There are others, though, that take a more traditional approach and for a variety of reasons assume that "...Khrushchev tried in Cuba the last of his schemes for turning the world balance in favor of the Soviet Union." 34

To return to the more specific missile gap-Cuba link, it is likely that both the Cuban venture and the earlier politico-military
confrontation in Berlin from June to October of 1961 (mentioned above) were causally related to the missile gap collapse/reversal. As one author phrased it, "underlying both was the so-called missile gap shift in the over-all strategic military balance." Garthoff's analysis bears closer examination concerning these points.

Garthoff begins by stating that the USSR by the spring of 1962 "...decided to offset the American missile gap by a daring 'end-run' emplacement of intermediate-range missiles in Cuba." He includes several other incentives, such as the harvesting of domestic and international prestige for Khrushchev and the Soviet Union, the reduction of the confidence and cohesion of the West, the potentially increased leverage in future Berlin negotiations, as well as the highly speculative theory that Khrushchev might have visualized the possibility of trading the Soviet missile base in Cuba for the American missile base in Turkey.

However, as Garthoff and others point out, the fact that the 24 MRBM launchers (1100 mile-range) and the 12-16 IRBM launchers (2200 mile range) would have doubled the number of Soviet missiles capable of reaching the United States, inexorably leads to the conclusion that the Soviets were primarily interested in redressing the strategic balance of forces.

Examining the estimated capabilities of the two powers for 1962 (see Chapter IV), it is apparent that the Soviet strategy was indeed sound in principle. The forty IRBMs in Cuba would have quickly narrowed the actual margin of American superiority in strategic forces, from roughly 200 ICBMs for the United States vs. 50-100 ICBMs for the USSR to 200 American vs. 90-140 Soviet.
In other words, the effect would have been to create, as Garthoff points out, forty additional ICBMs. This would have been between a 40-80% increase of the Soviet Union's existing first strike capability against U.S. targets. However, militarily the Cuban missile gambit failed, not only as a shortcut means of altering the strategic balance, but also because it served to demonstrate and reconfirm American superiority.

The impact of the missile gap issue was greatest in the areas of Soviet policy in Cuba and on the Soviet-American arms race spiral. I feel the ultimate significance of the gap is measured not in terms of the domestic political situation that evolved in the United States between 1957 and 1961, nor in terms of Soviet-American international prestige, nor in terms of the actual capabilities resulting from the policies of the era, but rather in the direct causal link between the collapse of the missile gap in 1961 and the Soviet actions precipitating the October 1962 Cuban missile crisis, and also by the arms race vortex into which the two superpowers fell as a result of the multitude of interacting misperceptions and uncertainties surrounding the missile gap issue.

Again, the significance of the conclusion regarding the interdependence of the missile gap controversy and the missile crisis is evidenced in the strategic balance at present, i.e. that of approximate strategic parity. The current status of forces obviously necessitated a Soviet program of greater magnitude than the American, in order to catch up. It is the contention of this thesis that the Americans, albeit somewhat understandably, overreacted to imagined ICBMs in the missile gap era, and that "...the scale of the reaction has probably been the major factor in stimulating the current Soviet
build-up.\textsuperscript{42}

The Cuban missile crisis was essentially an ancillary development of the constraints imposed on Soviet-American policy in the initial stages of a renewed strategic arms competition.
FOOTNOTES CHAPTER V


Vital Speeches, July 15, 1960, Vol. XXVI, no. 19

Vital Speeches, August 1, 1960, Vol. XXVI, no. 21

Vital Speeches, July 1, 1961, Vol. XXVII, no. 18


4 see Schlesinger and Sorensen, op. cit.


6 e. g. Townsend Hoopes, The Devil and John Foster Dulles (Boston, Little, Brown, 1973)

7 Schlesinger, op. cit., p. 347

8 McGeorge Bundy, "Friends and Allies," Foreign Affairs, October 1962, Vol. XLI, no. 1

Dean Rusk, "The President," Foreign Affairs, April 1960, Vol. XXXVIII, no. 3


9 Paul Y. Hammond, Cold War and Detente (N. Y., Harcourt, Brace, Jovanovich, 1975), p. 207

10 Schlesinger, op. cit., pp. 299, 304

11 Hoopes, op. cit., p. 505


Branyan & Larson, The Eisenhower Administration, I & II (N. Y., Random House, 1971)
John Emmet Hughes, *The Ordeal of Power* (N.Y., Atheneum, 1963)


Herbert S. Parmet, *Eisenhower and the American Crusades* (N.Y., Macmillan, 1972)


Hammond, op. cit., p. 203

Dean Rusk, op. cit.


Eisenhower, op. cit., p. 217


Ibid, p. 83


Albert Wohlstetter, "Is there a strategic arms race?" *Foreign Policy*, Summer 1974, Fall 1974, nos. 15 & 16

Wohlstetter, *Foreign Policy*, Summer 1974, pp. 5, 17

Ibid, pp. 12-13

Stewart Alsop, *Foreign Policy*, Fall 1974, no. 16, pp. 84-87
Halperin & Stone, *Foreign Policy*, Fall 1974, no. 16, pp. 88-92

Paul H. Nitze, *Foreign Policy*, Winter 1974, no. 17, pp. 136-156

Johan Jorgen Holst, "What is really going on?" *Foreign Policy*, Summer 1975, no. 19, pp. 155-162


29 McGuire, op. cit., p. 6


31 Ibid, p. 97


33 Kolkowicz, op. cit., p. 165


35 Garthoff, op. cit., p. 115

Wolfe, op. cit., p. 97

36 Garthoff, p. 120

37 Ibid, pp. 120-121


Roger Hilsman, *To Move A Nation* (N.Y., Dell, 1968), p. 201


39 Wolfe, op. cit., p. 98

40 Garthoff, op. cit.
41 David Aaron, "A new concept," *Foreign Policy*, Winter 1974, no. 17, p. 163

42 Carl Kaysen, "Keeping the strategic balance," *Foreign Affairs*, July 1968, Vol. XLVI, no. 4, p. 674
BIBLIOGRAPHY

Aaron, David. "A New Concept." Foreign Policy, XVII (Winter 1974-75)


Alsop, Joseph, "Comment." Foreign Policy, XVI (Fall 1974)

Alsop, Stewart, "How Can We Catch Up?" Saturday Evening Post, December 14, 1957


Aviation Week, February 9, 1959, March 9, 1959, November 30, 1959, September 25, 1961


The Missile Gap. Rutherford, Fairleigh Dickinson University Press. 1971


Bundy, McGeorge, "Friends and Allies." Foreign Affairs, XLI (October 1962)

Business Week, "Missiles in our Military Arsenal," October 12, 1957
Business Week, "How the U.S. stands on Guided Missiles," October 19, 1957

"Both sides win in War of Missile," December 7, 1957

"In missiles a three-year Gap ahead," December 5, 1959


Commonweal, "Debate over Missiles," February 20, 1959


Russia after Khrushchev. New York: Praeger, 1965

Dinerstein, Herbert S. Fifty Years of Soviet Foreign Policy. Baltimore: Johns Hopkins Press, 1968

"The Revolution in Strategic Thinking." Foreign Affairs, XXXVI (January 1958)

War and the Soviet Union. New York: Praeger, 1959


"Roadblocks still Curb Missile Production." Aviation Week, January 20, 1958

Eisenhower, Dwight David. Vital Speeches, XXIV (November 15, 1957)


"Khrushchevism in Retrospect." Problems of Communism, XIV (January-February 1965)

Fortune, LIX (April 1959), p. 242


Halperin, Morton H. and Stone, Jeremy J. "Comment." Foreign Policy, XVI (Fall 1974)


Hilsman, Roger. To Move a Nation. New York: Dell, 1968

Holst, Johan Jorgen. "What is Really Going On?" Foreign Policy, XIX (Summer 1975)

Hoopes, Townsend. The Devil and John Foster Dulles. Boston: Little, Brown, 1973

"Overseas Bases in American Strategy." Foreign Affairs, XXXVII (October 1958)


The Houston Chronicle. Editorial, March 31, 1976


Johnson, Katherine. "Report Urges Accelerated Missile Effort." _Aviation Week,_ December 21, 1959

Kayson, Carl. "Keeping the Strategic Balance." _Foreign Affairs,_ XLVI (July 1968)

Kennan, George. "Peaceful Coexistence: A Western View." _Foreign Affairs,_ XXXVIII (January 1960)


_Kital Speeches,_ XXVI (July 15, 1960)

_Kital Speeches,_ XXVI (August 1, 1960)

_Kital Speeches,_ XXVII (July 1, 1961)

Khrushchev, Nikita S. *Khrushchev Remembers.* Boston, Little, Brown, 1970

"On Peaceful Coexistence." _Foreign Affairs,_ XXXVIII (October 1959)


Kissinger, Henry. "Missiles and the Western Alliance." _Foreign Affairs,_ XXXVI (April 1958)

"Nuclear Testing and the Problems of Peace." _Foreign Affairs,_ XXXVII (October 1958)


*The Cuban Missile Crisis.* Chicago: Quadrangle Books, 1971

*Life.* "Arguing the Case for being Panicky." November 18, 1957

March 9, 1959, p. 119

Linden, Carl A. *Khrushchev and the Soviet Leadership.* Baltimore: Johns Hopkins Press, 1966


McCloy, John J. "Balance Sheet on Disarmament." *Foreign Affairs,* XL (April 1962)


Mosely, Phillip E. "Soviet Myths and Realities." *Foreign Affairs,* XXXIX (April 1961)

Moulton, Harland B. *From Superiority to Parity.* Westport, Conn.: Greenwood Press, 1973

Nacht, Michael L. "The Delicate Balance of Error." *Foreign Policy,* XIX (Summer 1975)


"Who's Got What?" February 2, 1959

"Missile Gap: How Perilous?" February 9, 1959

"Arms, McElroy, and the Menace." February 16, 1959

"Was There ever a Missile Gap or just an Intelligence Gap?" November 13, 1961

*The New York Times.* news article, December 9, 1953, p. 11

news article, January 12, 1959, p. 3

news article, March 25, 1959, p. 26

Editorial, February 7, 1960
Nitze, Paul H. "The Strategic Balance Between Hope and Skepticism." Foreign Policy, XVII (Winter 1974-75)


Rusk, Dean. "The President." Foreign Affairs, XXXVIII April 1960)

Saturday Evening Post. May 16, 1959, pp. 116-117

Schapiro, Leonard. "Has Russia Changed?" Foreign Affairs, XXXVIII (April 1960)


Simpson, Mary M. "The Race for Missiles." Bulletin of Atomic Scientists, XIII (October 1957)


Time. "Retreat from Pessimism," December 2, 1957

"The U.S. Missile Program," January 20, 1958

"The Coming Missile Gap." February 8, 1960

March 7, 1960, p. 43


U.S. News. "Is Russia Ahead in Missile Race?" September 6, 1957

"Official U.S. View on Russian Missile," September 6, 1957

"How U.S. will block Russia's Missile," September 13, 1957

"President's views on Russia's Satellite," October 18, 1957

"Can U.S. Still win Missile Race?" November 15, 1957

"The Missile Race Now," December 6, 1957


"Outlook for '59," January 30, 1959

September 28, 1959, p. 63, December 14, 1959

"Is World Balance in Missiles Shifting to U.S.?" January 23, 1961

"The Truth about a Missile Gap," February 27, 1961

"Whatever Happened to the Missile Gap?" April 16, 1962

The Washington Post. news article, October 7, 1959, p. 13

Wesson, Robert G. **Soviet Foreign Policy in Perspective.** Homewood, Ill.: Dorsey Press, 1969

"Is There a Strategic Arms Race?" *Foreign Policy*, XV and XVI (Summer 1974 and Fall 1974)


*Soviet Strategy at the Crossroads*, Santa Monica: Rand Corporation, 1964