Johnson, McNamara, 
and the Birth of SALT and the ABM Treaty 1963-1969

by

John Murray Clearwater, Ph.D.


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AND THE BIRTH OF SALT
AND THE ABM TREATY

by

Dr. John Murray Clearwater, BA, MA, PhD

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One of the most important sources of information in "unofficial" Washington is the National Security Archive. It was my pleasure to be able to use their materials, and for this I must thank Bill Burr. Bill kindly and freely allowed me to go through his filing cabinets in order to see the material which had been gathered for an upcoming project.

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Lastly, special thanks is due to Lawrence Freedman: my academic advisor.
DEDICATION

This book is dedicated to my uncle, Robert (Bob) Lowry, (1917-1994) who started me on the expensive road to higher education by giving me my first Canada Savings Bond in 1967. This $50.00 bond matured into almost $200.00, and helped pay for my first year of university.
<table>
<thead>
<tr>
<th>ACRONYMS</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABM anti-ballistic missile</td>
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<tr>
<td>ACDA Arms Control and Disarmament Agency</td>
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<tr>
<td>AEC Atomic Energy Commission</td>
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<tr>
<td>BMD ballistic missile defence</td>
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<td>CHICOM Chinese Communist</td>
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<tr>
<td>CIA Central Intelligence Agency</td>
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<td>CJCS Chairman, Joint Chiefs of Staff</td>
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<td>DoD Department of Defense</td>
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<tr>
<td>DPM Draft Presidential Memorandum</td>
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<tr>
<td>EMt equivalent megatonnage</td>
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<tr>
<td>ENDC Eighteen Nation Disarmament Committee</td>
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<tr>
<td>EXDIS exclusive distribution</td>
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<tr>
<td>FBM Fleet Ballistic Missile</td>
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<tr>
<td>FOI Freedom of Information (Act)</td>
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<td>FY fiscal year</td>
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<tr>
<td>ICBM intercontinental ballistic missile</td>
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<td>INF intermediate nuclear forces</td>
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<td>IRBM intermediate range ballistic missile</td>
<td></td>
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<tr>
<td>JCS Joint Chiefs of Staff</td>
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<tr>
<td>JSTPS Joint Strategic Target Planning Staff</td>
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<tr>
<td>kt kilotonne</td>
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<tr>
<td>LBJ Lyndon Baines Johnson</td>
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<td>LBJL LBJ Library</td>
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<tr>
<td>MEMCON memorandum of conversation</td>
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<td>MIRV multiple independently targeted reentry vehicles</td>
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<td>Mk mark</td>
<td></td>
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<tr>
<td>MM Minuteman (ICBM)</td>
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<tr>
<td>MRBM medium range ballistic missile</td>
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<td>MRV multiple re-entry vehicles</td>
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<td>Mt megatonne</td>
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<td>NARA National Archives and Records Administration</td>
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<td>NODIS no (outside/foreign) distribution</td>
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<tr>
<td>NPT Non-Proliferation Talks/Treaty</td>
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<td>NSC National Security Council</td>
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<tr>
<td>NSF National Security Files</td>
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<td>OSD Office of the Secretary of Defense</td>
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<tr>
<td>RV re-entry vehicle</td>
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<td>SAC Strategic Air Command</td>
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<td>SALT Strategic Arms Limitation Talks/Treaty</td>
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<tr>
<td>SCC Standing Consultative Commission</td>
<td></td>
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<tr>
<td>SIOP Single Integrated Operational Plan</td>
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<tr>
<td>SLBM sea-launched ballistic missile</td>
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<td>SMS Strategic Missile Squadron</td>
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<td>SoD Secretary of Defense</td>
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<tr>
<td>Abbreviation</td>
<td>Explanation</td>
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<tr>
<td>SSBN</td>
<td>nuclear-powered ballistic missile submarine</td>
</tr>
<tr>
<td>START</td>
<td>Strategic Arms Reduction Talks/Treaty</td>
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<tr>
<td>USA</td>
<td>United States Army</td>
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<tr>
<td>USAF</td>
<td>United States Air Force</td>
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<tr>
<td>USN</td>
<td>United States Navy</td>
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<tr>
<td>USSR</td>
<td>Union of Soviet Socialist Republics</td>
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<td>WWR</td>
<td>Walt W. Rostow</td>
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INTRODUCTION

The purpose of this book is to examine the birth of bilateral strategic arms control between the United States and the Soviet Union during the Johnson Administration, from 1964 to 1969. It is about the time and the place of the birth of bilateral strategic arms control as it came about in the United States through the efforts of President Lyndon Johnson and Secretary of Defense Robert McNamara in the 1960s. This is the time of the birth of what quickly came to be known as SALT, or the Strategic Arms Limitation Talks.

This inquiry firstly considers whether the move towards bilateral strategic arms control was institutional or personal. It then looks for the motivating factors: both theoretical and substantive. As few things have only a single cause, it is likely that we shall find that the birth of strategic arms control was influenced by both nuclear weapons employment theory, and by a substantive incident or reality such as the ever increasing number and sophistication of nuclear weaponry. Lastly, we must look for an immediate precipitating factor, such as the move towards deployment of a potentially destabilizing ABM system by both the USA and USSR.

Therefore, it must be borne in mind when examining the people and their theories, the institutions, the prevailing realities, and major precipitating factors, that they all come together to form the basis for the birth of bilateral strategic arms control. This book shall therefore strive to reveal the extent of personal input; the objective basis for that personal commitment; and examine the major precipitating factors, namely Anti-Ballistic Missiles (ABM), and to a lesser extent, Multiple Independently Targeted Re-Entry Vehicles (MIRV). Although barely discussed at the time, the MIRV would turn out to be a major arms control problem: far greater than the hotly contested ABM system which spurred so many debates.

The unique aspect of this research is that other writers have concentrated almost totally on the people and events surrounding the Nixon Administration when studying SALT. While it is true that the talks did not get underway during the Johnson years, this study will show that all of the theoretical and preparatory work was done in the Johnson years, and conclude by showing that many of the same people appear in the Nixon years. Without the input of McNamara and his team, there would have been no movement on strategic arms control until possibly the 1970s.

To add to the historical value of the work, I have included in the annexes complete texts of the initial arms control proposal which the US team was to present to the Soviet Union in the autumn of 1968. In addition, presented here for the very first time are the full instructions to the negotiating team and the initial presentation paper to be read by the team leader on the opening day of the talks. When this final material is tied in with the history of the push for the talks, the story is indeed exciting and meaningful. For the first time we are presented with the almost complete picture of the formulation of an arms control proposal. There is of course a fluke of history which brought this all to light. As the Johnson material was never directly used in the formal SALT talks, it was not subject to the same stringent security classifications as those of Nixon, Ford, Carter, Reagan, Bush and Clinton materials. Therefore the documents started to be declassified in the late 1980s, with the bulk coming to light in 1991 through 1994. Here then is the story of the origins of strategic arms control.
Terms

Before going any further it is important to define two terms which are often misused. This book frequently refers to "strategic" weapons, and a short definition of that concept is useful at this point. While technically all weapons can only be tactical as they are used on a single place at a single moment for a single goal, the thermonuclear warhead carried upon a long-range intercontinental ballistic missile has come to be known as a strategic weapon. This is due to the unequalled explosive power, the range of the missile which can carry it far into the home territory of the enemy, and the speed with which ultimate destruction can be rained down upon the most vital parts of a modern nation such as capital cities and industrial areas. In this category falls the range of weapons classed as Intercontinental Ballistic Missiles (ICBM), and most Sea-Launched Ballistic Missiles (SLBM). The term strategic weapon is therefore used in the vernacular sense of the long-range thermonuclear weapon travelling at great speed.

The second term which is debatable is "Arms Control". Many thousands of pages of learned text have been devoted to the philosophy of arms control, and a great deal of time spent on trying to define the limits of the concept. For the purpose of this book, and it seems for the purpose of the Johnson Administration, arms control was a means towards the management of the strategic arms relationship between the USA and the USSR. The process of arms control itself, the negotiations and the treaty making, were to enhance and stabilize the relationship between the superpowers at the level of the ultimate weapons. This should therefore not be confused with disarmament, or even with slight arms reductions. Arms control is to be seen as a process of managing weapons and hopefully the military theory underlying their acquisition, deployment and use.

Strategic arms control in this sense is the management of the relationship between the USA and the USSR when they deal with each other at the level of nuclear arsenals. For Johnson this was a completely acceptable concept. JOHNSON was after all the great negotiator. He had spent years as leader of the Senate, and his way of getting things done was to call people up on the telephone and bring them around to his way of thinking. In person, his great height helped in convincing Senators and Congressmen who might vote against him to think otherwise. He was a master of story telling and body language, and talking out the problem seemed to be his natural calling. When a problem of such magnitude as strategic weapons came upon him, the natural reaction was to accept a suggestion to the effect that this could be negotiated with the Soviets. The fact that nobody had tried bilateral negotiations with the USSR on what many felt was the only type of weapon separating the USA from the communist hordes did not seem to matter. This was something that had to be tried.

All told, the research done for this book spans the basic research of published sources such as John Newhouse's excellent book *Cold Dawn*, to Congressional testimony, to FOI and EO12356 requests, to documentary research in both Washington and Austin, to interviews with the people who made the whole thing happen. By ensuring that this broad range of materials was seen and gathered, I have attempted to bring all possible aspects of the situation to light.
The Prior Record of Literature

Even a basic review of the literature in the area of arms control and disarmament studies will demonstrate that the early years of strategic arms limitation negotiations (1964-1968) are given little space. Many writers have moved directly into the Nixon period without having first examined the events of the Johnson years. This is most likely due to the fact that the actual talks did not begin until Nixon had already established himself in office, and by this time Kissinger had gone through the process of reviewing all the prior preparations in order to put the stamp of the Administration upon them.

The few works which do mention the Johnson years tend to do so only as a consequence of preparation for discussion of the Nixon period. The case with virtually all works in this field is that they spend little more than a few pages on the important work done in Washington prior to January 1968. It was therefore the job of the work to rectify this situation.

The Actions and the Actors

This story can be understood in four basic parts with very few events marking the way. The first stage encompasses the early freeze proposals and proved to be almost completely unimportant to the overall effort. There were no significant events during this early period. The second phase begins in December 1966 when Robert McNamara convinced President Johnson to try to initiate talks with the Soviet Union to limit Anti-Ballistic Missile Systems. This phase runs through all of 1967 and includes the Glassboro/Hollybush Summit of June, and the announcement in September of the US decision to deploy an ABM system. The third phase commences at the start of 1968 and runs through to 20 August of that same year. This is the preliminary phase in which the bulk of the substantive work was done to prepare the US to meet with the Soviet delegation and begin negotiations. During this period the US side wrote their arms control proposals and negotiated the timing of a summit. This period ends with the Soviet invasion of Czechoslovakia and the cancellation of the summit and talks. The last phase of the birth of strategic arms control encompasses the final few months of the Johnson Administration after the Soviet invasion of Czechoslovakia. In this period there were a few final though futile attempts to bring the two sides together to begin negotiations. This period has no significant events, and ends with the inauguration of Richard Nixon as President in January 1969.

The single greatest event in this story is a meeting of the President, McNamara, and the Joint Chiefs of Staff at Johnson’s office in the Federal Building in Austin, Texas on 6 December 1966. At this meeting McNamara convinced Johnson to hold off spending the money appropriated for the ABM system until he, McNamara, could try to get the Soviets to the negotiating table. Johnson agreed over the objections of the Joint Chiefs, and McNamara returned to Washington that day to start the wheels of government in motion. This was the moment of conception, and all other events flowed from this single decision.

The other major events of this story followed closely behind the December meeting.

1 Herken, Counsels.. p. 196.
The following summer Johnson met Premier Kosygin for a hastily prepared summit in Glassboro, between Washington and New York. On this occasion Johnson again pressed the Soviets to agree to set a date and place for the talks. Although unprepared to talk about arms control, Kosygin did state that he favoured ABM deployment. The failure of Johnson and McNamara to bring about a change of heart on the Soviet side lead directly to the third major event of the time: the decision to deploy an ABM system in the United States. This decision was made soon after the summit by Johnson who then allowed McNamara to work out the details and prepare the announcement himself. The announcement in September 1967 seemed to bring the early efforts towards talks to an end, but discrete work continued for many more months until the Soviets finally agreed to hold negotiations. With the timing and the place set, and the work on proposals proceeding at a furious pace, the last major event brought the entire process almost to a halt. On 20 August 1968 the armed forces of the Soviet Union and various other Warsaw Treaty countries invaded Czechoslovakia. Johnson cancelled the talks.

Despite cancelling the talks, Johnson continued to search for possible avenues through which negotiations could take place. This research has uncovered documentary evidence of the attempts made on Johnsons’ behalf to move ahead with the talks on a discrete level during the four months following the invasion. Even the election of Richard Nixon seemed to be something that could be dealt with, and there is evidence that Johnson wished to start the talks so that the next President would be locked into the process.

To understand the actions, we have to understand the players and the offices for which they worked. The single most important place in this story is the office of the Secretary of Defense (OSD). From here Robert McNamara and later Clark Clifford made the command decisions to push ahead with arms control. Assisting them were Paul Warnke and Paul Nitze (the two Pauls), their Deputy Secretaries of Defense. In addition, there were the people of supporting offices of OSD who prepared the analysis and the proposals, such as Morton Halperin and Ivan Selin. The reality was that arms control was a concept borne and raised in OSD. When there was a debate, it was OSD arguing and debating with itself.

Also in the Pentagon were the Joint Chiefs of Staff. Their Chairman, General "Bus" Wheeler, pushed hard for the interests of the Joint Chiefs, but also knew when it was time to fall in behind the President and support the decisions of the civil authority. Wheeler’s aid on arms control was Air Force General Royal Allison. Allison’s job was to be the middleman between the JCS and the rest of the Pentagon on arms control matters. It was he who worked closely with Halperin in formulating the initial proposals and in marshalling them through the offices of the JCS.

Across the Potomac River at Foggy Bottom, Dean Rusk was the Secretary of State serving his second President. With the departure of McNamara, Rusk became the strongest supporter of arms control in the Cabinet. Also, as Secretary of State, he was the head of the Committee of Principals which met to discuss arms control proposals. All matters of that nature had to be cleared by the Executive Committee of the Committee of Principals before going on to the Oval Office. Within the State Department, Ray Garthoff in Politico-Military Affairs worked on arms control. He was in close contact with Morton Halperin in OSD, and in fact wrote an early draft of an ABM treaty. In the far eastern end
of the State Department headquarters were the offices of the Arms Control and Disarmament Agency. Despite its mandate, ACDA was marginalized in the birth of strategic arms control. In the early years they were supporting limits on strategic nuclear delivery vehicles, and only later thinking of ABM limits; while at OSD, where the action was, the initial thoughts were of ABM limits with SNDV limits being an afterthought.

The other place of action in the story is the White House. Within the White House Walt Rostow reviewed all national security material for Johnson and then sent brief messages for the President’s approval or disapproval. Johnson himself probably saw little of the material generated, but was fully briefed on the final proposal and supporting materials. There is very little record of the thoughts of the President in the documentary record; all that remains are his thoughts in the book he wrote after leaving the White House.2

Why did Lyndon Johnson state that he was in favour of something that had never been tried before, and which Generals and Senators warned might be dangerous to the security of the nation? This is a difficult question to answer as the documents do not show the thoughts and feelings of the President: they show only the ideas and workings of the administrators who laboured under him. For the many answers to this question I had to turn to those who knew him and worked with him. It seems that there are four reasons Johnson accepted the possibility of arms control: 1) he wanted to be seen as a man of peace; 2) it might save money which could then go into his cherished “Great Society”; 3) he was not committed to the ABM system and may well have disliked it; and 4) he was a man of action and in favour of doing something about any problem which he felt he could affect.

But this is not really the story of Lyndon Baines Johnson. More importantly this is the story of Robert Strange McNamara, the Secretary of Defense until March 1968. McNamara is identified by both the documentation and the interviewed persons as the father of bilateral strategic arms control, and the Office of the Secretary of Defense (OSD) as the birthplace of strategic arms control. McNamara and his staff brought the concept to fruition.

McNamara hated the ABM and saw it as a danger to stability. His goal therefore was to take all actions possible to ensure that the USA did not build one and that the Soviets could be prevented from pursuing their own deployment. The prime question and problem for McNamara was how to prevent the ABM system from becoming a reality. The useless weapon was about to become a reality, and McNamara was able to convince Johnson to stall until the State Department could explore the possibility of ABM talks with the USSR. This was only a marginally difficult decision for Johnson, as his primary concern seemed to be to prevent the opposition from declaring him soft on defence. If the ABM could be cut by negotiating with the Soviets, it would be cheaper than deployment and provide proof that he was a man of peace.

Here then is the story of the birth of bilateral strategic arms control in the United States during the Johnson Administration from 1964 through 1968.

Chapter 1  

THE ARSENAL

To understand the process of strategic arms control we first have to gain some insight into the world of nuclear weapons, both offensive and defensive. But knowledge of the weapons must be complemented by an explanation of the strategic theories underlying their use. To this end this section presents the reader with materials on the strategic forces of the USA, the USSR, and the debate between the assured destruction and damage limitation camps.

Assured Destruction and Arms Control

In the early years of the Kennedy and Johnson Administrations, after an initial flirtatious affair with minimum deterrence, Secretary of Defense Robert S. McNamara was seemingly wedded to the strategic targeting concept of counterforce, in which US strategic nuclear weapons are targeted against Soviet strategic weapons. In the early 1960s, this may have been a marginally rational strategy, as the USSR had fewer operational ICBMs than Politburo members when Kennedy came to power. In this case, the US military (specifically the US Air Force) had reasoned that they could effectively attack and destroy the vast bulk of the Soviet offensive arsenal, and in return suffer only modest and acceptable casualties. McNamara apparently saw no reason to disagree with this concept, and signed on as a supporter (for little more than a month), in the beginning, as evidenced by his Ann Arbor speech of June 1962 in which he called for counterforce targeting after being briefed by William Kaufmann. At its essence, if McNamara planned on targeting Soviet missiles, then he was talking about a first strike. An anonymous Pentagon staffer commented that this was the period in which McNamara was under the influence of the old thinkers, and had not yet begun to think for himself.

By 1964-65 the Secretary of Defense was proclaiming just the opposite of his earlier beliefs. McNamara had come to the conclusion that as the Soviet arsenal had grown in both numbers and sophistication, there was no way for the USA to effectively prevent the USSR from having a secure second-strike retaliatory force. By this time, McNamara was talking about assured destruction, and this was defined in terms with which he identified. For McNamara nuclear weapons were firmly in the category of

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4 The "Missile Gap" of the 1960 US Presidential election campaign turned out to be real, but in reverse. The ratio was indeed 10:1, but with 40 US ICBMs to the four deployed by the USSR and seen during U-2 flights.

5 Kaufmann was the RAND thinker who devised nuclear weapons counterforce theory. Clarfield, *Nuclear America*. and Herken, *Counsels*. p.150-151.


7 Trewhitt, *McNamara*. p.113-114.
systems to be used only in the most extreme of circumstances. 8

McNamara had not come to this place on his own, but had years of prior thought to contend with. Six years before he became Secretary of Defense, the February 1955 "Killian Report" (written before the advent of the ICBM), noted that the US lacked strategic defences and that the time leading up to the development and deployment of ICBMs was particularly dangerous. At the same time, the report stated that any defence would likely not be enough to ensure the survival of the United States, and that a stalemate was coming into being. 9

Two years later, the 1957 "Gaither Report" (presented only months before the first Soviet ICBM launch) stressed that the ICBM race was crucial and called for expanded resources. But as Freedman points out, the difference by this time was that the writers were predicting that adequate defences might be possible after the 1960s. The crux of the problem was, however, that each move would breed a counter-move, and this would go on indefinitely in a technological offence-defence race. 10 The predictions of the Killian Report, and the warnings of the Gaither Report would not be lost on McNamara, the man who would try to rein in the strategic offensive-defensive cycle, at least where it concerned ABMs.

Robert Strange McNamara was the driving force behind the Johnson Administrations' push for arms limitation until his departure from the Pentagon in early 1968, and the man at the centre of the doctrinal debates of the 1960s. His involvement with the military began in World War II when he helped devise a system for supply and logistical support of the Air Force. 11 Given the vast quantities that the US military required, lack of such an efficient system had resulted in a lack of materials at crucial places, or the provision of inadequate supplies.

Just before the War McNamara graduated from the Harvard Business School with an MBA and then joined the Air Force as a Captain. This made him an expert in logistical thought, not in strategic theory. Upon his discharge he and a group of thinkers, the original Whiz Kids, sold themselves as a group to the Ford Motor Company as innovators and systems analysis men. 12 He quickly rose within the gigantic car company's hierarchy, and at on 9 November 1960 became the first non-Ford family member to be elected company president. 13

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8 The notion of nuclear devices as weapons of last resort and only under extreme circumstances is the second of Halperin's three models of nuclear policy. The first treats them as bigger than conventional weapons, and the third treats them as unusable in any circumstances. Halperin, Nuclear. p.55-60.


12 Kinnard, The Secretary of Defense. p.77-78.

13 McNamara biography provided by his office, 30 March 1994.
Although some thought him a Republican,\textsuperscript{14} he was recruited by the Kennedy Administration to be the Secretary of Defense. His job was to bring the Pentagon into line financially and politically.\textsuperscript{15} McNamara played an important role in the crises of the Kennedy Administration, most notably in the Cuban Missile Crisis.\textsuperscript{16} At this time he became convinced that there was little utility for nuclear weapons if even a small scale use could quickly lead to destruction of the societies they were meant to protect.\textsuperscript{17} When Johnson took over from the dead President, McNamara and most other Cabinet members were kept on as a sign of continuity.\textsuperscript{18}

The problem with analyzing the record of Robert McNamara is that it is perpetually shrouded in the veil of the war in Indo-China. Both he and President Johnson are generally held responsible for the massive escalation that the United States undertook in the mid-1960s. The unfortunate aspect of this tainting is that it has tended to obscure the real and positive impact that McNamara had on the initiation of bilateral strategic arms limitations for both offensive weapons and ABM systems.

During his first years as Secretary of Defense, Robert McNamara leaned towards the use of nuclear weapons against strictly military targets, and made this policy pronouncement in his famous Ann Arbor speech.\textsuperscript{19} But his views were already under refinement. Starting out as one who saw wisdom in the strictly military idea of damage limitation, McNamara began to see limits to the utility of this concept.\textsuperscript{20} During 1963 McNamara and Harold Brown commissioned a USAF General, Glenn Kent, a staunch damage limitation man, to undertake a full damage limitation study. When the results were presented on January 1964, they conclusively showed that for every three dollars the US spent on defence, the Soviets could regain their offensive posture for a little as a dollar.\textsuperscript{21} By the end of 1964 McNamara was completely disenamoured of damage limitation, and declared in his Draft Presidential Memorandum (DPM) on strategic forces, which was written by Alain Enthoven in Systems Analysis, that Assured Destruction was

\textsuperscript{14} McNamara said he would vote for FDR in 1940, and this made him the odd man out in his faculty. Byrne, \textit{Whiz Kids}. p.500.

\textsuperscript{15} Lucas, \textit{Organizational.}, p.90-94.

\textsuperscript{16} Early McNamara thoughts and actions are well chronicled in Kaufmann's \textit{The McNamara Strategy}.

\textsuperscript{17} McNamara interview by Rostow, 8 January 1975.

\textsuperscript{18} Byrne, \textit{Whiz Kids}. p.459.


\textsuperscript{20} Moulton, \textit{From Superiority}. p.196-204.

now the preferred strategic theory of the Administration. Enthoven later wrote that all efforts had to be directed by the strategy of assured destruction. He stated that "this capability to destroy him even after absorbing his surprise attack must be a virtual certainty, and clearly evident to the enemy". However, he also noted that this is not a static situation, as the United States not only reacts to Soviet moves, but also reacts to anticipated Soviet moves, whether they occur or not. In this regard he points out that after the Kennedy and Johnson years, the US military had built up forces capable of a second strike killing of 50% of the Soviet population, and destruction of 80% of Soviet industry.

Robert McNamara had come to his own conclusions about the need for arms control. In a telling statement he said:

We do not want a nuclear arms race with the Soviet Union -- primarily because the action-reaction phenomenon makes it foolish and futile...Since we now each possess a deterrent in excess of our individual needs, both our nations would benefit from a properly safeguarded agreement first to limit and later to reduce both our offensive and our defensive strategic forces. We prefer to come to a realistic and reasonably riskless agreement... which would effectively prevent an arms race.

McNamara was Johnson's trusted man in the Pentagon. It had been McNamara that kept the Chiefs under control, and had managed to limit military spending at a time when Johnson was looking for monies to fund his Great Society programmes. The event which lead to both their downfalls was the growing war in Viet Nam. This increasingly demanded more and more resources, which LBJ was reluctant to give. McNamara in 1964 and 1965 was supporting the requests of the Joint Chiefs for bombing missions and the insertion of combat troops.

Robert McNamara will unfortunately probably always be remembered as the Secretary of Defense who involved the United States in a large, long and deeply divisive

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27 McNamara instituted PPBS, Planning-Programming- Budgeting System to rationalize spending, and CIR, Cost Information Reports, to track programmes.
war in South East Asia. He will also be remembered by the military as the man who enforced more civilian control upon them than they were used to, and the man who thought that it was the job of the Secretary of Defense to seek all means possible to protect the security of the nation. Until then, the job was strictly one of representing the military option in the White House. But McNamara thought that "he (should) explore the advantages to the nation and to the nations’ security, of every potential disarmament move and to support every move that appears to be consistent with and supportive of, the national security."28

This is not to say that McNamara never gave the JCS anything that they wanted in the field of nuclear weapons. In the conventional weapons field, the US Army got 11 new divisions, and the US Air Force was increased by 5 tactical air wings following McNamara decisions.29 In fact, under the McNamara "Greater-Than-Expected Threat" formula, the services got a great deal more than it turned out was reasonable.30 It is instructive to note that the total number of nuclear weapons in the US arsenal, something the JCS seemed to crave, climbed to its height during the Johnson and McNamara years.31

Enthoven and Smith wrote that the "Greater-Than-Expected" threat method of planning was based on the notion that extremely conservative assumptions had to be made to protect the nation for even the remotest possibility. The downside was that this produced reactions to threats which were unlikely to appear.32 The Systems Analysis team countered the GTE Threat theory with the "US Force Plus Option", which stated what the US could do in the face of a maximum Soviet production effort in a GTE Threat situation.

Indeed it is clear when examining the growth of the US nuclear arsenal during the 1960s that there was more than enough nuclear largesse to go around. Yet there was one decision by McNamara that stands out as being a crucial juncture in the history of strategic offensive nuclear weapons: the decision to move ahead with MIRV research and development. For McNamara the MIRV may have served a purpose that was not strictly military. By multiplying the number of warheads a missile could carry, JCS requests for more missiles could be cut, thereby freeing up funds for other items both inside and outside of the Pentagon. for the JCS the advantage was that MIRV was the perfect way of expanding target coverage without adding missiles, and it could be used to counter

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28 McNamara interview by Rostow, 8 January 1975.
30 Enthoven, as one of the developers of the Greater-than-Expected Threat theory, notes that the system produced assured destruction totals far in excess of the stated requirements. *How Much.* p.177-179.
Soviet ABM deployments. McNamara recognized the danger, and identified it by stating that if the Soviet either stopped the ABM system, or did not deploy MIRVs themselves, that the US would have made a "risky and costly decision" by their own deployment.

In this thesis I have centred on the work of McNamara in regards arms limitations. Far from the bloody arena of Viet Nam, the ideals and motivations of this unique administrator were clearly obvious. He sought to protect the United States by managing the nuclear threat in two ways. The first was to avoid if at all possible and at possibly high costs, the deployment of an ABM system by both superpowers, and only the USA if necessary. His other goal was to regularize and manage the strategic nuclear arms race through negotiations and regular contacts which would "bring the benefit to each of a full discussion with the other of deterrence and the views each held with respect to it." He was a manager and a "limiter."

When Robert McNamara left the Office of the Secretary of Defense, he had served for longer than any other person. But the man who had worked for both Presidents Kennedy and Johnson had come to part with Johnson over both the Viet Nam war, and the ABM funding and deployment decision.

Robert McNamara, the former Ford Motor Company president, had brought to the Pentagon a strong business sense, and the notion of rationality and systems analysis. Programmes were analyzed on the basis of the amount of security they could provide for the dollar, and of whether that security was needed at all. It is no surprise then that assured destruction was defined in terms of numbers; one might even be tempted to say in terms of megadeaths. The Secretary explained to Congress that:

In the case of the Soviet Union, I would judge that a capability on our part to destroy, say, one-fifth to one-fourth (20-25%) of her population and one-half (50%) of her industrial capacity would serve as an effective deterrent.

Enthoven and his team had determined the level of destruction sufficient for the strategy at 20-25% of the Soviet population killed, and 50% of Soviet industry promptly destroyed. However, he also noted that this was not a static situation, as the United

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33 McNamara, Blundering. p.61.
34 McNamara interview by Clearwater, 23 November 1992.
35 Levine, Still the Arms Debate. p.127.
36 McNamara interview by Rostow, 8 January 1975.
37 Levine, Still the Arms Race. p.118, 121.
States not only reacts to Soviet moves, but also to anticipated Soviet moves, whether they occurred or not. In this regard he pointed out that after the Kennedy and Johnson years, the US military had built up forces capable of a second strike killing of 50% of the Soviet population, and destruction of 80% of Soviet industry.\footnote{40}

After he had left office, Robert McNamara would write that of the thousands of strategic nuclear weapons in the US arsenal, the detonation of a mere 400 "would be sufficient to destroy over one-third (33%) of her population and one-half (50%) of her industry."\footnote{41} Therefore, US forces were planned on the basis of having enough left over after absorbing a first-strike to effectively carry out an assured destruction attack. But what the planners and McNamara did was to pick a multiple of the magic 400 number. They reasoned that each leg of the mythical triad should have the capability to deliver the 400 after absorbing a Soviet first strike. Four hundred became 1200, and then increased proportionately to withstand the destruction that a Soviet strike would cause.\footnote{42} This continued up until the disintegration of the USSR in 1991.

The systems analysts had won the argument: US nuclear force levels would be decided by working with a combination of target numbers, required damage figures, weapons' survivability calculations, and cost benefit analysis. Two former White House staffers said that as the US already had over 1000 ICBMs, 656 SLBMs, and hundreds of bombers, that "these force levels are sufficiently high to put the United States far out on the 'flat of the curve'\footnote{43} - that is, at a point where even small increases in target destruction capability would require enormous increases in forces, and therefore in cost".\footnote{44}

Before the move to assured destruction, McNamara and his team had come to the conclusion that it was wrong both morally and strategically to target, even by implication, the civilians of the Soviet bloc. The rejection of the Eisenhower and Dulles plan for massive retaliation was made public at Ann Arbor, Michigan in June 1962.\footnote{45} At this time, McNamara, under the influence of William Kaufmann from RAND, took the stand that it was the proper for the USA to follow a strategy of attacking Soviet weapons solely while avoiding cities.\footnote{46} This no cities doctrine led to the development of a limited (though always growing) target set for which the US never had enough deliverable weapons. Therefore, under the counterforce option, there was never room for arms limitation, never mind reduction.

\footnote{40}{Enthoven, \textit{How Much.}. p.177-178.}
\footnote{41}{McNamara, \textit{Essence of Security}. 1968. p.54.}
\footnote{43}{Herken, \textit{Counsels}. p.154-155.}
\footnote{44}{This statement was made by A.C. Enthoven and K.W. Smith in \textit{How Much is Enough.}, and is quoted in Newhouse, \textit{Cold Dawn}. 1973. p.18-19.}
\footnote{45}{Clarfield, \textit{Nuclear America}. p.257.}
For McNamara, the growth of the concept of assured destruction helped to reinforce the notion that arms control was both possible and practical. As there was only a limited amount of the opposing society which one would need to be able to destroy to effect a deterrent, then most of the other weapons above that number were superfluous. As he pointed out in 1968, the US already had over 2200 strategic nuclear explosives, (not yet in a MIRVed mode), and that only 400 would serve the assured destruction strategy. There was obviously a surplus. Speaking about the US nuclear weapons in Europe, although the comments could easily be applied to the long-range weapons, Robert McNamara said that "there was no military requirement" for the thousands of weapons which had been deployed. They simply grew unchecked through administrative inertia. This helps explain why McNamara and Johnson sought to bring about a freeze with the Soviets.

In his first months at the Pentagon he brought in thinkers and analysts to examine military problems from a civilian viewpoint, and to advice him on alternatives not obvious to the military planners. The office of systems analysis was set up, and soon this office of "whiz kids" was working on problems ranging from rifle acquisition to ballistic missile targeting. The Air Force had told Kennedy and McNamara that it wanted 10,000 Minuteman ICBMs for its Strategic Air Command, and this number seemed more than excessive to both the young President and his Secretary of Defense. McNamara set his Whiz Kids to the task of determining exactly what number of strategic nuclear bombs were appropriate for deterring the Soviet Union. The problem with this request was, of course, that an office in the Pentagon cannot know exactly what will deter men in the Kremlin, but they set about with typical scientific zeal to produce the appropriate analysis of the situation.

It was thus discovered that centralization of the Soviet economy, especially in terms of heavy/military industry, meant that the country was particularly susceptible to having its industry destroyed with relatively few weapons. As the chart below demonstrates, the vast bulk (76%) of Soviet industry could be destroyed with as few as 400 one-megaton equivalents delivered to the targets. This translated into 1000-1200 ICBMs, as evidenced by McNamara's feeling that he would be able to tolerate 1200 MM ICBMs, but later settled on 1000. It also meant that any tonnage delivered above the 400/1Mt mark saw ever diminishing returns in that fewer and fewer factories were being destroyed for each additional weapon delivered. As the Whiz Kids determined, and as McNamara announced, "by doubling the number of warheads delivered, Soviet fatalities and industrial

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47 Levine, Still the Arms Debate. p.156.
49 Byrne, Whiz Kids. p.449.
50 As John Kennedy was only narrowly elected after a battle largely based on defence issues, McNamara advised that 1000 ICBMs was the least the young president could buy without hurting himself politically. Herken, Counsels. and Kaplan, Wizards. p.257.
capacity destroyed would be increased by considerably less than one-third (33%)."51
McNamara noted that this held "true for the damage limiting force as a whole; as
additional forces are added, the incremental gain in effectiveness diminishes."52 It was
also noted that by the US building of a damage limiting force, the Soviets would certainly
feel that their assured destruction force was under direct threat. As the historian for the
Office of the Secretary of Defense described it: "OSD increasingly narrowed the rationale
for strategic force to the concept of "mutual assured destruction", which downgraded
counterforce targeting in favour of the capacity to impose assured second-strike retaliation
upon the adversary's society".53

**SOVIET POPULATION AND INDUSTRY DESTROYED**54
(Assumed 1972 pop.: 247 000 000; urban pop.: 116 000 000)

<table>
<thead>
<tr>
<th>1 Megaton equivalent delivered</th>
<th>Total Population fatalities</th>
<th>Industrial capacity destroyed (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>warheads</td>
<td>Million</td>
<td>Percent</td>
</tr>
<tr>
<td>100</td>
<td>37</td>
<td>15</td>
</tr>
<tr>
<td>200</td>
<td>52</td>
<td>21</td>
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<tr>
<td>400</td>
<td>74</td>
<td>30</td>
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<tr>
<td>800</td>
<td>96</td>
<td>39</td>
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<tr>
<td>1200</td>
<td>109</td>
<td>44</td>
</tr>
<tr>
<td>1600</td>
<td>116</td>
<td>47</td>
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In explaining the above chart, McNamara told the Senate that "beyond 400 one-
megaton equivalents optimally delivered, further increments would not meaningfully
change the amount of damage inflicted because we would be bringing smaller and smaller
cities under attacks."55

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51 McNamara Statement regarding Military Authorizations and Defense Appropriations
for FY 1968 before the Senate Appropriations Committee, 25 January 1967. p.49. also in
p.393.

52 McNamara Statement in Hearings on Military Posture by the House Armed Services Committee,

53 *History of the Strategic Arms Competition, 1945-1972*. Office of the Secretary of

54 McNamara Testimony (chart) regarding FY1969 Budget Authorization before the

55 McNamara Testimony regarding FY1969 Budget Authorization before the Senate
Armed Services Committee, 1-2,5 February 1968. p.118.
The concept of a megaton equivalent needs to be briefly discussed in order to avoid confusion later on. In the above case of the optimum 400 one megaton bomb equivalents, this is not to be understood as being 400 weapons of 1 megaton each delivered on the target, but rather as the level of destruction that would be caused by such a delivery of weapons as to equal the destructive potential of the 400/1Mt. To be specific, it is possible to destroy a wide target area with either one large bomb, say 1Mt, or with five 100kt bombs which would add up to only 500kt, or half of the 1Mt (1000kt) large bomb. This is because the damage is inflicted more efficiently by spreading the weapons over the area rather than simply trying to destroy a wide area with a single, super-large bomb. However, this analysis turns out to be a bit of a mixed blessing. While it shows that even very large targets can be completely destroyed with smaller nuclear yield than was at first thought realistic, it also conversely makes the argument for a proliferation of smaller (though just as deadly) strategic nuclear bombs. As the megatonnage went down, the number of re-entry vehicles had to rise to cover effectively the target in full depth. What we have, therefore, in the case of the 400/1Mt equivalent being the optimum number for the destruction of the Soviet Union, is not an argument for only 400 strategic warheads, but rather for any number from 400 on up through thousands.

The proliferation problem raised its head even in this analysis in that one had to add in the possibility of a Soviet first strike destroying a number of the strategic retaliatory weapons on the ground or at sea. This meant that extra had to be provided so that even in the event of a surprise Soviet counterforce first strike, there would be sufficient numbers of re-entry vehicles left on a sufficient number of delivery vehicles (rockets) to cover the target list. Of course, both the US Navy and the US Air Force wanted to be sure that they had enough weapons even after the possible first strike, and so each force programmed for more missiles and warheads. This was seen doubly true in the case of the Air Force in that Strategic Air Command was responsible for both strategic land-based missiles AND for intercontinental nuclear bombers. SAC worked to be assured that each of its two arms of the triad could singly have enough weapons after a Soviet first strike to destroy the USSR. In practice this meant a rapidly proliferating force, especially once MRV and MIRV were introduced.

What level of destruction must be threatened to deter the USSR from attacking the USA? As the whiz kids had determined that the curve of destruction went flat after 400

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57 Although McNamara was buying forces for assured retaliation in line with US pronouncements, he was probably forced to consider first strike options due to the pressure of various Congressmen calling for a review of DoD policies in that area. Roherty, *Decisions of.* p.121.
