The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

THE INGREDIENTS OF DETERRENCE; THEORY, PRACTICE, AND IMPLICATIONS

BY

COMMANDER ALBERT C. MYERS

DISTRIBUTION STATEMENT A:
Approved for public release; distribution is unlimited.

2 MAY 1985

US ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013
The Ingredients of Deterrence: Theory, Practice, and Implications

Commander Albert C. Myers, USN

US Army War College
Carlisle Barracks, PA 17013-5050

2 May 1985

52

Approved for public release; distribution is unlimited.

Deterrence is considered the core of US Defense Policy, but it is a term fraught with ambiguity. The fundamental question is whether it is possible to derive a better appreciation and understanding of the term deterrence and of its attendant theory, that would be of practical benefit to US decisionmakers. Addressing that question required analysis of information obtained from a primary and secondary literature review and from personal interviews with Department of Defense officials. It is concluded that deterrence theory should
be broadened to include several postulates and subpostulates for effective deterrence that were suggested by the analysis. The notion that the United States can better deter aggression against its allies and friends by having a combination of strong American and allied conventional forces in position on the territory of such states is demonstrated theoretically and historically. Such a policy should be studied for application in regions of vital interest to the United States, but where such forces are lacking, as in Southwest Asia.
The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

The ingredients of deterrence: theory, practice, and implications

US Army War College
Carlisle Barracks, Pennsylvania 17013
2 May 1985

DISTRIBUTION STATEMENT A:
Approved for public release; distribution is unlimited.
Deterrence is considered the core of US Defense Policy, but it is a term fraught with ambiguity. The fundamental question is whether it is possible to derive a better appreciation and understanding of the term deterrence and of its attendant theory, that would be of practical benefit to US decisionmakers. Addressing that question required analysis of information obtained from a primary and secondary literature review and from personal interviews with Department of Defense officials. It is concluded that deterrence theory should be broadened to include several postulates and subpostulates for effective deterrence that were suggested by the analysis. The notion that the United States can better deter aggression against its allies and friends by having a combination of strong American and allied conventional forces in position on the territory of such states is demonstrated theoretically and historically. Such a policy should be studied for application in regions of vital interest to the United States, but where such forces are lacking, as in Southwest Asia.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>CHAPTER I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>2</td>
</tr>
<tr>
<td>Investigative Procedure</td>
<td>3</td>
</tr>
<tr>
<td>II. THE NATURE OF DETERRENCE</td>
<td>4</td>
</tr>
<tr>
<td>Deterrence Defined and Bounded</td>
<td>4</td>
</tr>
<tr>
<td>Immediate Deterrence</td>
<td>5</td>
</tr>
<tr>
<td>General Deterrence</td>
<td>6</td>
</tr>
<tr>
<td>Extended Deterrence</td>
<td>6</td>
</tr>
<tr>
<td>Underlying Assumptions</td>
<td>7</td>
</tr>
<tr>
<td>III. DETERRENCE AND US STRATEGIC NUCLEAR APPROACHES</td>
<td>12</td>
</tr>
<tr>
<td>The Evolution of US Strategic Nuclear Doctrine</td>
<td>12</td>
</tr>
<tr>
<td>The Role of Strategic Uncertainty in Deterrence</td>
<td>17</td>
</tr>
<tr>
<td>IV. DETERRENCE OPERATIONALIZED: THE HISTORICAL RECORD</td>
<td>24</td>
</tr>
<tr>
<td>The Smoke and George Study</td>
<td>24</td>
</tr>
<tr>
<td>The Huth and Russett Study</td>
<td>26</td>
</tr>
<tr>
<td>V. CONCLUSIONS: TOWARDS A NEW CONSTRUCT OF DETERRENCE</td>
<td>32</td>
</tr>
<tr>
<td>Postulates for Effective Deterrence</td>
<td>33</td>
</tr>
<tr>
<td>Scenario One - Soviet Threat to Iran: 1987</td>
<td>36</td>
</tr>
<tr>
<td>Scenario Two - Soviet Threat to Saudi Arabia: 1988</td>
<td>39</td>
</tr>
<tr>
<td>Summary and Recommendations</td>
<td>42</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>47</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1</td>
<td>Deterrent Cases, 1900-1980</td>
<td>28</td>
</tr>
<tr>
<td>5-1</td>
<td>US and USSR Interests in Iran</td>
<td>37</td>
</tr>
<tr>
<td>5-2</td>
<td>Effectiveness of US Deterrent Responses in Iran</td>
<td>38</td>
</tr>
<tr>
<td>5-3</td>
<td>US and USSR Interests in Saudi Arabia</td>
<td>40</td>
</tr>
<tr>
<td>5-4</td>
<td>Effectiveness of US Deterrent Responses in Saudi Arabia</td>
<td>40</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Deterrence is a term and concept used frequently by national security analysts and government officials. It is often invoked as a guiding objective of US policy or as a given, an assumption, or a proposition underpinning a larger policy framework. Despite its frequent use its meaning is not always clear; one is obliged, more often than not, to pry into the specific context in which it is used to unearth the intended sense.

Why is this so? Partly it is because some analysts and officials use the term loosely and inappropriately. The main reason, though, that the context of its use must be scrutinized, is that deterrence deals in conditionalities and hypothetical constructs. Deterrence attempts to relate potential, contemplated, or actual actions of one country to future actions or inaction of another country.

BACKGROUND

In its simplest genre, deterrence amounts to the threat of one state to punish another state in order to keep the latter from acting against the interests of the former. A threat to punish can be conveyed by direct communication or by tacit understanding; such threats are not necessarily military in nature, though in practice they tend to be.

Since deterrence seeks to avert such calamities as a loss of territory, loss of an ally or protege, or the unwarranted acquisition by an adversary of a prized area, statesmen have long considered it a key element of their repertoire. Yet, while statesmen may know that they want to deter a foe from
undertaking some sort of hostile action, they are not always sure of how best to do it. This is the case for several reasons.

First, not all crises or near crises permit unambiguous assessment of the stakes considered important by adversaries. A firmly committed foe may have already anticipated a deterrent threat and discounted it as either an acceptable risk, or as an implausible bluff.

Second, statesmen may be disinclined to convey strong enough threats because they fear the consequences of having to carry out those threats if their adversary proceeds anyway with his hostile plans.

Finally, deterrence has been complicated by the enormous destructive powers of nuclear weapons. The awful consequences of their employment have profoundly influenced the conduct of the US and USSR, to the extent that since becoming nuclear superpowers both countries have endeavored to avoid direct confrontation. The paradox of the deterrent effect of nuclear weapons is that such weapons are a deterrent which might never be "called due" or operationalized, because of the horrendous and largely unforeseeable results which would ensue from their use. While the utility of such weapons during crises in which their use would be highly implausible is suspect at best, their enormous influence, because of the possibility of their employment, remains an enduring feature.

**STATEMENT OF THE PROBLEM**

In light of the ambiguity of theory and process which the concept of deterrence can evoke, a fundamental question is whether it is possible to derive a better appreciation and understanding of the term deterrence and of its attendant theory, that would be of practical benefit to key US decision-makers. Addressing that question has been the guiding aim of this research project. As became clear in the course of the project the theoretical
approach could not be separated from a review of the historical record of deterrence.

The following themes were pursued in order to come to grips with the foregoing question:

1. The Nature of Deterrence
2. Deterrence and US Strategic Nuclear Approaches
3. Deterrence Operationalized: The Historical Record
4. Conclusions: Towards a New Construct of Deterrence

Those four broad divisions will be analyzed in separate chapters.

INVESTIGATIVE PROCEDURE

The investigative procedure employed was a detailed analysis of primary and secondary literature sources, supplemented by information derived from interviews of staff members of the Office of the Joint Chiefs of Staff (OJCS) and Department of Defense (DOD). It was requested that information developed from interviews not be attributed to individuals by name; this request has been honored by the author.
CHAPTER II

THE NATURE OF DETERRENCE

While deterrence has long been practiced by statesmen, it was not until the postwar era that a theory of deterrence evolved. This theory has developed in loose conformance with the chronology of the Cold War and with the challenges presented the West by a large, powerful, and ambitious Soviet Union.

Our interests and those of our allies are deemed continually subject to the potential threat of force by the Soviet Union, a threat which must be checked in advance; the prevention of a Soviet resort to force to achieve either mastery over the West or unacceptable economic, political, or territorial gains for the Soviet Union lies at the heart of American and Western thought about deterrence.

DETERRENCE DEFINED AND BOUNDED

In its most general sense, deterrence refers to those steps taken by a state or alliance which prevent another state from taking forceful action. During this process the state or alliance initially contemplating forceful action is somehow compelled to reconsider and ultimately to forgo forceful action, because of certain measures either acted upon or signalled by the defending state or alliance.

These measures, in order to be effective, hinge on having the capacity to alter the original perceptions of the leadership of the state or alliance considering forceful action (the attacker(s)). If one assumes that leadership is proximately rational, then as Bruce Russett and Paul Huth note:

... a deterrent threat is effective to the extent it can produce cost-benefit calculations on the part of the
potential attacker in which the expected utility of an attack would be less than the expected utility of foregoing the attack. The expected gains from an attack must be so small, or the expected losses so substantial, that abstaining from attack will produce a more favorable outcome (greater gains or, more likely, smaller losses).\(^1\)

Analysts have differentiated three broad patterns of deterrence—immediate, general, and extended—into which different deterrent mechanisms can be categorized for ease of discussion.

**Immediate Deterrence**

Immediate deterrence is in many ways the pattern of deterrence most readily grasped. This is so because, at least in theory, it can be viewed as a series of sequential steps taken by two states, with each step largely attributable to a previous action of the other state.

Patrick Morgan identifies the steps as the following: (1) the leadership of one state is considering an attack on another or on something deemed important by the other; (2) the leadership of the other state recognizes this; (3) that leadership, then, threatens to use force in retaliation to prevent the attack and, (4) the other state initially planning the attack desists because of the threatened retaliation.\(^2\)

The term immediate is useful in such a scenario, as it connotes the suddenness with which a threatening set of circumstances can cause a defending state to focus on little else but the immediate threat, and to issue counter-threats of its own in the hope that the state threatening an attack will reverse its stance. Immediate deterrence more closely approximate a "pure" deterrent situation, as cause and effect are more readily discernible than is the case with other patterns of deterrence.

Yet, even in the aftermath of seemingly effective incidents of immediate deterrence, the leaders of the defending state can never be absolutely certain that it was their threat of retaliation that prompted the other state to drop
its plans for attack. Perhaps the latter had been merely saber rattling for effect, or perhaps its leaders changed their position due to a reappraisal of domestic support, or for some other reason not linked to the threats of retaliation being signalled by the defender. This remains one of the enduring paradoxes of deterrence theory.

**General Deterrence**

The second broad pattern of deterrence, general deterrence, occurs within the context of long standing rivalry between two potential foes. As Morgan identifies the process, relations between the two are such that the leaders of one state would contemplate using force to achieve their objectives vis-a-vis the other if the opportunity arose. The other side, sensing the opponent's willingness to resort to force maintains its own forces in kind and periodically issues warnings that it will respond to the opponent's use of force contrary to its interests. The side which periodically contemplates using force only carries out a cursory consideration of resorting to force, owing to the belief or expectation that the opposing state would indeed respond forcefully. This pattern of deterrence provides the theoretical underpinning for much of US strategic nuclear doctrine.

**Extended Deterrence**

Extended deterrence, the third broad pattern, is generally the prerogative of major powers, for it refers to the protection afforded a lessor or allied state by another in the face of threats emanating from a third. Here the sequence is not unlike the first two categories in that the threat of force is what gives rise to an attempted deterrent mechanism. The difference is that it is not the state or states immediately threatened that issue counterthreats which give pause to the attacker. Rather, it is a mentor...
state, usually visibly more powerful than the immediately threatened state or states, which issues such counterthreats.

It follows that extended deterrence occurs both in the immediate extended version—in which a sudden, possibly unanticipated threat is the first step of the process, and in the general extended iteration—in which presumably long standing pledges of support, treaties, or alliances—give pause to potential foes. General extended deterrence is typified by the deterrent linkages between the European members of the North Atlantic Treaty Organization (NATO) and the United States.

UNDERLYING ASSUMPTIONS

Close scrutiny of these main patterns of deterrence suggests that at the basis of successful applications of deterrence lie several fundamental assumptions. These assumptions are not often brought out in the literature on deterrence, but warrant discussion at this juncture. Those which underlie the pattern of conduct during cases of successful immediate deterrence are:

1. The leaders of the state being threatened must recognize that their state is in fact being threatened (or that its interests are) by the state issuing the threat, and they must find this threat credible. It is likely to be judged credible if it is perceived as being supported by sufficient strength to injure as threatened.

2. The leaders of the state being threatened, or, in the case of extended deterrence, the leaders of a major, protective power acting as mentor, must be compelled by the threat to take some action or to formulate some position of their own in response to the threat.

3. One of the actions so taken must be the formulation and issuance of a counterthreat directed at the state which issued the original threat.
4. The leaders of the state which issued the original threat must recognize that they are being counterthreatened, and that this counterthreat is linked to their original threat.

5. The leaders of the state which issued the original threat must find the counterthreat at least partially believable—that is, there is a reasonable probability that it will be carried out failing a retraction of the original threat and credible. A counterthreat is credible if perceived as being supported by sufficient strength to injure the state which issued the original threat, in the manner stated in the counterthreat.

6. The leaders of the state which issued the original threat, who are now in receipt of a partially believable, credible counterthreat, must hesitate or fear to carry out their original threat. Such hesitation or fear can stem from the aversion to receiving any injury whatsoever, or from a more "objective" cost/benefit analysis that projects that less would be gained by attacking than by foregoing the attack entirely.

7. The leaders of the states involved (attacker, defender, or mentor—in the case of extended deterrence), must be sufficiently rational to react appropriately. Being rational, as used here, means having the capacity: to perceive clearly articulated threats and counterthreats; to make reasonable assumptions about one's own strength in relation to that of the potential foe's; to make logical estimates about how important a particular crisis, interest, or ally is to the potential foe; and, as having the capacity to make judicious cost/benefit analyses of the outcomes of proceeding with threats or counterthreats both from the perspective of one's own state, and from the perspective of the potential foe.

In extending this analysis to cases of successful general deterrence, the following underlying assumptions suggest themselves:
1. The leaders of one of the two states which have rival interests must perceive that their state is generally threatened by a potential resort to force by the leadership of the other state, given an appropriate opportunity. That potential resort to force in essence is equivalent to a threat.

2. The leaders of the state so threatened must be compelled by the generalized threat to take some action or formulate some position of their own in response.

3. At least two of the actions by the leaders of the state perceiving a generalized threat must be: (a) the maintenance of forces in being, capable of proportional use in the event of opportunistic, hostile action on the part of the rival state; and (b) periodic statements and warnings that opportunistic hostile action will be forcefully opposed.

4. The leaders of the state which is generating the threat of opportunistic hostile action must recognize that they are being counterthreatened by the rival's forces and periodic warnings.

5. That latter group of leaders must find the counterthreat partially believable and credible. (Previous definitions of these terms apply.)

6. That latter group of leaders who now apprehend a partially believable, credible counterthreat, must hesitate or fear to embark on opportunistic hostile action of the sort which they periodically consider. Such hesitation or fear can stem from the same array of reasons provided in paragraph (6) under immediate deterrent assumptions.

7. Rational behavior again is assumed as depicted in paragraph (7) under immediate deterrent assumptions.

This analysis suggests that inducement of fear or hesitation in the leadership of the state issuing a threat (either specific or immediate) is fundamental to successful cases of deterrence. What one who is seeking to
deter another really wants to do, is to sufficiently jar the opponent's way of thinking about the issues such that he is obliged to conduct a thorough reappraisal of his options. This reappraisal ideally results in the abandonment of aggressive intent.

The set of actions which might conceivably induce fear or hesitation in an adversary's leadership is, in theory, rather broad. As J. J. Martin has observed:

Military force is a necessary but not sufficient means of fostering deterrence. A hierarchy of threats exists that can be used to deter hostile acts: these include diplomatic pressure, overt political or economic action, security assistance to other nations, gradations of conventional military moves and gradations of nuclear military actions.

Nevertheless, the linkages in deterrent situations between the actions of the state attempting deterrence of a potential adversary appear firmer and easier to conceptualize when military force is threatened, as opposed to less robust means.
CHAPTER II

ENDNOTES


3. Ibid., pp. 40-41.

CHAPTER III

DETERRENCE AND US NUCLEAR APPROACHES

No more robust military weapon exists than the nuclear weapon. Upon its introduction in massive numbers into superpower arsenals it would become the ultimate deterrent in the eyes of many, although its ability to influence the outcome of issues not plausibly relatable to its employment has been, and remains questionable.

THE EVOLUTION OF US STRATEGIC NUCLEAR DOCTRINE

US nuclear strategy has gradually evolved since the incorporation of atomic and hydrogen weapons in the American arsenal. That evolution has tended to mirror American perceptions of Soviet nuclear strength vis-a-vis American nuclear prowess, as well as apprehensions regarding Soviet nuclear strategy. While a thorough treatment of the evolution of US nuclear strategy is beyond the scope of this work, some discussion of its main features is germane.

The strategy of "massive retaliation," enunciated by Secretary of State Dulles in January 1954, encompassed the United States placing its military reliance "upon a great capacity to retaliate, instantly, by means and at places of our own choosing," thereby acquiring "more basic security at less cost."1

Such a policy could be pursued more realistically during a period when the United States possessed overwhelming nuclear superiority; to threaten the Soviet Union with nuclear strikes in response to either an attack on the US or on Western Europe was, indeed, credible when the Soviets lacked the capacity
to deliver even a marginally effective nuclear strike against the United States.

By the early 1960's Soviet capabilities had broadened and improved. As Jan Lodal observes:

The Soviets had developed enough nuclear capability to match the threatened use of nuclear weapons against their forces in a European war. The United States could still threaten to stop a Soviet attack with nuclear weapons, but the Soviets could now respond in kind. A US threat to escalate immediately to an all-out strategic attack on the Soviet Union had lost much of its credibility, since any such attack would result in the destruction of American cities. This situation led to the doctrine of 'flexible response' and a consequent buildup in our deployment of smaller 'battlefield' nuclear weapons.2

Defense Secretary Robert S. McNamara articulated several of the key dimensions of "flexible response" in a speech given on 17 February 1962 before the American Bar Association:

Our forces can be used in several different ways. We may have to retaliate with a single massive attack. Or, we may be able to use our retaliatory forces to limit damage to ourselves, and our allies, by knocking out the enemy's bases before he has time to launch his second salvos. We may seek to terminate a war on favorable terms by using our forces as a bargaining weapon—by threatening further attack.... Our new policy gives us flexibility to choose among several operational plans.3

Although Mr. McNamara later seemed to downplay the "counterforce" posture reflected in portions of his ABA speech in favor of the then nascent concept of "Assured Destruction," the "counterforce" approach has been present in US strategic war plans, albeit in varying degrees, for the last twenty years.*4

*"Counterforce" refers to a strategic targetting scheme which endeavors to destroy strategic weapons systems and major weapons systems/capabilities of the opponent. "Countervalue" is a strategic targetting scheme which has as its aim the destruction of the fundamental elements of the opponent's society: his cities, population and economic centers, etc. "Assured Destruction" means having the capacity to respond with strategic forces even after a well-executed first strike such that the aggressor's society would be essentially destroyed, which is clearly a "countervalue" orientation.
The appeals of relying on the policy of "Assured Destruction" were both economic and conceptual. First, it was thought that a minimum strategic force level could be programmed into the budget and sustained year after year. Such a force would be based on calculations of the minimum force level required to survive a Soviet first strike and destroy selected Soviet population centers.5 Second, if the Soviet Union were to adhere to a similar nuclear targeting strategy, then a state of "Mutual Assured Destruction" (MAD) would exist. This would result in strategic stability, as, in theory, neither side could ever rationally expect to emerge with its society intact even after conducting an optimal first strike against the adversary.

However as the evidence mounted that the Soviets were continuing a massive expansion of their strategic forces seemingly unencumbered by the elegant niceties of "MAD," skepticism grew about the viability of "Assured Destruction" as a declaratory American policy. As Leon Sloss and Marc Millot incisively note:

... the fear took root that a deterrent strategy limited in its employment alternatives to massive countervalue attack could well become a self-deterrent in the face of many forms of potential aggression.6

The Nixon and Carter administrations attempted to redress this perceived strategic shortfall in somewhat related fashions, although the efforts of the Carter years were to prove more substantive. Emerging from the Carter administration's strategic policy and targeting review and from pronouncements by Defense Secretary Brown was a policy termed the "Countervailing Strategy." This strategy, which has been in large measure continued by the Reagan administration, is based on the premise that the Soviet Union will be deterred from initiating a nuclear exchange by threatening the assets, forces, and mechanisms it holds most dear. The declared nuclear targeting policy which was subsumed under the "Countervailing" approach includes options to use US
strategic offensive forces to destroy key nodes of the CPSU (Communist Party of the Soviet Union), significant concentrations of Soviet conventional military power, and Soviet strategic nuclear forces.

Improvements in the US strategic arsenal and in the Command, Control, Communications, and Intelligence (C3I) apparatus needed to support and bind it, were judged necessary by the Carter administration. These initiatives have been retained and expanded by the Reagan administration. Program proposals including the MX Missile, B1B Bomber, TRIDENT/D-5 update, and strengthening of C3I systems support the "Countervailing" policy.

As officials assigned to the Office of the Secretary of Defense (OSD) and to the Office of the Joint Chiefs of Staff (OJCS) reiterated to the author in January 1985, the goal of this approach is to demonstrate to the leadership of the Soviet Union an American capability to destroy political and military elements judged vital to the continued dominance of the CPSU, even following a devastating Soviet first strike against the United States. Such a capacity would seem quite capable of forestalling and precluding a rationally calculated Soviet decision to launch a preemptive strategic strike on the United States, through the inducement of substantial fear and hesitation in the minds of the Soviet leadership.

The "Countervailing" approach, because it avers a wider variety of nuclear targeting options than does a strategy fundamentally resting on the notion of "MAD," is not imbued with the perilous self-deterring features of the latter. It thus may be argued, as this author would, that the "Countervailing" approach has strengthened both general and extended deterrence, since the leadership of the Soviet Union could never be absolutely certain that an attack on either the United States or on NATO might not result in the crippling loss of a profoundly vital segment of Soviet political or military power in the USSR proper. This uncertainty probably was not present to such a
degree in Soviet desiderata dealing with NATO contingencies when "Assured Destruction" was the operative US declared policy, although we may never know.

This is not to say that given circumstances of sufficient gravity that the Soviet leadership might not be willing, anyway, to accept the possible destruction of substantial political and military control centers and nodes. Who could predict with surety, how the Kremlin would react in the face of, say, insurrection among its Warsaw pact allies, or even within its own borders while simultaneously grappling with a serious crisis with the West? Such profoundly trying circumstances from the Kremlin's perspective could well alter the weight attached by its leaders to the anticipated costs, benefits, and risks attendant to a belligerent action under consideration as a possible means of diverting attention from domestic disarray.

This suggests the crucial decision for the Kremlin under such circumstances: would the diminishment of CPSU political control over an area vital to the Soviet Union be worth chancing (in the absence of overt military action elsewhere) the possible destruction of the CPSU political apparatus in the Soviet Union proper? Past patterns of Soviet conduct would suggest that circumstances would have to be desperate indeed for the conservative thinkers in the Kremlin to pursue such a course of action, although it would be most imprudent to presume Soviet behavior will automatically conform to Western expectations.

American strategic forces which support a declaratory policy embracing the capability to conduct limited and various nuclear war operations must themselves add to, and not diminish, the fear and hesitation which such a policy very likely fosters in the minds of key Soviet leaders. Such forces should be tailored along the lines which Paul Nitze has cogently articulated:

To achieve deterrence, potential aggressors must be assured of our capability to retaliate appropriately and
effectively. Such assurance depends significantly on our day-to-day alert forces, which must have adequate survivability in the face of any attack which might be made against them. Surviving forces must be appropriate for their mission, responsive to command and control, able to penetrate defenses intended to blunt their effectiveness, and capable of destroying the targets that must be eliminated if we are to pursue a rational strategy in the event of strategic nuclear war.  

Decades of neglect resulting from an overreliance on a strategy based on the concept of "MAD," with the economically enticing theorem of a minimum level of necessary strategic strength, have resulted in vulnerabilities in US strategic forces. As identified by Robert Kennedy, four broad areas must be addressed to overcome current force deficiencies: the land based ICBM component must be revamped; the SIBM force must continue to be modernized; the US strategic bomber force must be modernized; and great emphasis must be placed on insuring the survivability of US strategic Command, Control, and Communication (C^3) nets.  

The Reagan administration is actively endeavoring to pursue corrective measures in all four areas thus reflecting an awareness of the need to couple US strategic policy with effective tools for its implementation. This awareness extends to the analytical and conceptual level as well, as reflected in interviews conducted by the author in January 1985 of key officials assigned to the staffs of OSD and JCS.  

In analytical thinking about different deterrent doctrines the impact of uncertainty on strategic calculation has not always been awarded the attention it deserves. We will now discuss briefly the broad features of strategic uncertainty that affect thoughts about deterrence and deterrent stability.  

THE ROLE OF STRATEGIC UNCERTAINTY IN DETERRENCE

Strategic uncertainty can affect two broad areas relative to the focus of this project: the intellectual process preceding a decision to conduct a
nuclear strike; and, the technical process whereby forces are planned, devised, and deployed to meet the criteria for "success" in execution of nuclear strike plans. This discussion will address the former.

One must assume that prior to a decision to initiate a nuclear exchange, intensive thought would have to be applied to thinking through the hypothetical steps and consequences of such an exchange. Decisionmakers would press planners for details about the expected reaction of the state being attacked. They would press for assurance that their forces would perform as directed and with the expected destructive effects.

To ease further discussion, let us assume that the leadership of the Soviet Union is contemplating a preemptive nuclear strike against the United States during a crisis of considerable magnitude. This strike, if ordered, would have as one of its goals the essential elimination of the land based US ICBM force.

Soviet planners would have to try to unravel and fathom several sets of uncertainty before being able to present to their leaders a plausible case for achievement of that objective. These uncertainties can be grouped as follows: (1) operation of the command and control system; (2) in-flight operation of the attacking force from launch to impact; (3) the effectiveness of the attack on intended targets; and, (4) the nature and effectiveness of American retaliation.9

The Soviet strategic command, control, and communications (C\(^3\)) system would have to operate nearly perfectly and with minimal delay in order to achieve the precise sequencing required (As Kennedy states, "... a disarming first strike would require monumental feats of timing . . .").10 Virtually all the Soviet missiles designated for the attack would have to receive properly validated launch orders within an unforgivingly narrow time envelope.
The possibility of communication breakdowns and transmission losses or errors would contribute to the uncertainty of accomplishing a nearly perfectly timed launch of Soviet strategic forces. Such uncertainty would be magnified if Soviet SLBM missiles were to be relied on in a significant manner, because of the residual unreliabilities inherent in communicating with deployed submarines. In sum, any unforeseen time lag in the arrival on target of Soviet missiles would have largely unpredictable consequences for the effectiveness of the attack and the character of the response to it.\textsuperscript{11}

The in-flight operational uncertainties which Soviet planners would be obliged to confront stem from uncertainties of guidance and from the possibility that some missiles and reentry vehicles may unexpectedly fail. Assigning more than one missile per target could compensate for in-flight failures, but it would also increase the likelihood of mutual warhead interference over the target ("fratricide"). Further, any increase in forces assigned to the initial strike would decrease the size of residual reserve forces.

Upon arrival at the target three more essential uncertainties present themselves to vex Soviet planners thinking through a hypothetical first strike. First, the extent of hardness of US silos would be somewhat uncertain, as would be the exact yield of Soviet missiles targetted on those silos.\textsuperscript{12} Second, this uncertainty would be compounded by carry-over uncertainties stemming from C\textsuperscript{3} breakdowns and unexpected in-flight failures—uncertainties which, in combination, render uncertain a precise estimate of the number of Soviet missiles that would actually arrive on target with the needed accuracy. Third, the phenomenon of "fratricide" would pose additional and largely uncalculable uncertainties for Soviet planners. As Robert Kennedy correctly observes:

\begin{quote}
Incoming RV's might either be destroyed, neutralized or their accuracy degraded by the effects of previous blasts.
\end{quote}
Even where simultaneous detonations are planned in order to avoid fratricide, a few millisecond's delay in arrival of an RV caused either by minor differences in warhead reentry characteristics or by the developing effects of previous downwind detonations, or even by minor variations in silo departure during launch, or guidance corrections during flight, could be enough to subject the RV to the potentially neutralizing effects of nuclear radiation and EMP.

What have been discussed thus far are the operational uncertainties that would warrant consideration by Soviet planners contemplating a preemptive nuclear strike against the United States. While such uncertainties abound, there are others.

Soviet planners would have to contend with fundamental uncertainties about the nature, extent, and effectiveness of the American response to a Soviet first strike. Some of these are self-evident from a review of some of the obvious questions Soviet planners would be compelled to ask themselves under the circumstances:

- Will US forces be on increased alert due to the crisis at hand (the one that is presumably prompting a Soviet review of attack options)?
- Will the United States launch its ICBM force, or a sizeable portion thereof, on warning of imminent attack?
- Even if attack on warning can be ruled out, what are the likely US attack options?
- How effective will the American response be?
- How effectively will Soviet air defenses function in degrading the US response?

Finally, Soviet planners would find it most difficult to calculate with any hope of precision the "social-psychological, environmental, and other effects of the detonation of many nuclear weapons upon their own society." This potentially grave uncertainty would not be reassuring to an anxious Soviet leadership debating the wisdom of a preemptive strike against the
United States, and hoping, in any event, to retain political and military control of the surviving elements of the Soviet Union following the expected American retaliation.

In summing up the effects of these uncertainties, one should not conclude that their net impact is to automatically cause Soviet planners to conclude that they would have little hope of success (from their perspective) in achieving a disarming first strike against the United States. Desperate circumstances and assumed US irresolution, perhaps as displayed by timid international conduct, or by failure to take necessary force modernization steps, might be sufficient to alter Soviet judgements about the wisdom of initiating an attack. Yet these uncertainties cannot be entirely assumed away.

Each element of doubt, each nagging uncertainty, can contribute to a net feeling of discomfiture which may, under the appropriate circumstances, induce sufficient fear or reluctance in the minds of Soviet leaders that they decline to execute the attack under consideration. This has long been recognized intuitively by responsible American leaders, who sense that deterrence is strengthened at the strategic level by increasing Soviet uncertainties through maintenance of a credible TRIAD and by reserving several nuclear attack options.

While deterrence at the strategic level permits a quasi-mathematical approach (though the purpose of numbers of strategic systems is only to induce uncertainty, fear, and hesitation in the mind of the adversary), such is not the case when one ventures beyond the stately matching of nuclear system for nuclear system as practiced by the superpowers. The United States and the Soviet Union have been able to avoid a nuclear exchange by, it can be argued, adhering to the conceptual and technical requirements that their individual
approaches to nuclear deterrence call for. The utility of nuclear weapons as useful deterrent mechanisms in scenarios in which their use would be most unlikely has been almost negligible. The superpowers, no less than other states, have had but mixed success in achieving success in deterrent situations in which the potential foe displayed seemingly less respect for potential military strength than for actually committed forces.
CHAPTER III

ENDNOTES

1. "Text of Dulles' Statement on Foreign Policy of Eisenhower Admin-

2. Jan M. Lodal, "Deterrence and Nuclear Strategy," DAEDALUS,
   Fall 1980, pp. 155-156.

3. Austin C. Wehrwein, "McNamara Warns Soviet to Beware of Limited


5. Ibid., p. 22.

6. Ibid.

7. Paul H. Nitze, "Preserving the ICBM Leg of the Triad," National 

   Planning," The Defense of the West, ed. by Robert Kennedy and John M. 
   Weinstein, pp. 23-29.

   in Strategic Planning," World Politics, October 1979-July 1980, pp. 102-
   103.


11. Sienkiewicz, p. 103.


CHAPTER IV

DETERRENCE OPERATIONALIZED: THE HISTORICAL RECORD

This section of the study will discuss the results of two recent analyses of historical cases of attempted deterrence and of the consequences of those attempts. The purpose is to relate both deterrent successes and failures to patterns of international conduct which would be useful for US decisionmakers.

The cases analyzed reflect, in general, examples of immediate, extended deterrence. As will be recalled from Chapter II, immediate deterrence is concerned with an attempt to forestall by counterthreat a hostile act under consideration for implementation in the near term by another state. Extended deterrence refers to the protection afforded by a mentor state when it attempts to deter an attack on a protege by a third state.

THE SMOKE AND GEORGE STUDY

Alexander George and Richard Smoke's book, Deterrence in American Foreign Policy: Theory and Practice, one of the first comprehensive assessments of the use of deterrence in postwar American foreign policy, analyzes ten episodes of attempted deterrence between 1948 and 1962. By focusing in detail on recent cases of attempted deterrence, the authors hope to highlight strengths and deficiencies of various deterrent approaches.

The study is, to put it mildly, critical of American foreign policy during the postwar period. Throughout the book the authors convey a one dimensional image of US foreign policymakers and leaders, suggesting that these individuals oversimplified complex issues and tended to assess, in a most naive fashion, the motives and likely future actions of our adversaries.
Written in the immediate post-Vietnam war era, such views may be understandable even when they are not demonstrated conclusively by the evidence George and Smoke offer. The study provides some useful insights if one bears in mind the perspective of the authors.

Briefly, their chief findings of relevance to this study can be summarized as follows:¹

<table>
<thead>
<tr>
<th>Problem</th>
<th>Supporting Cases</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. US policymakers were surprised by the action the opponent took.</td>
<td>- Berlin crises of 1948, 1958-1959, 1961; - Korean War, 1950; - Cuban Missile Crisis, 1962.</td>
<td>Policymakers should not assume the opponent is operating with the same set of &quot;rationality&quot; as they are.</td>
</tr>
<tr>
<td>2. Deterrence can be overrelied on and counterproductive to overall US objectives.</td>
<td>- Taiwan Straits Crisis, 1954-1955; - Eisenhower Doctrine, 1957-1958 (Middle East Crises)</td>
<td>Policymakers should be highly selective and discriminating in using deterrence, particularly when attempting to contain an adversary.</td>
</tr>
<tr>
<td>3. US policymakers sometimes relied too heavily on threats to persuade the opponent not to pursue his aims. Threats are sometimes dysfunctional.</td>
<td>- Eisenhower Doctrine, 1957-1958 (Middle East Crises) - Berlin Aide Memoire Crisis, 1961.</td>
<td>Policymakers should consider other policy means (i.e. inducements, diplomatic persuasion, etc.) for reducing or frustrating the challenges of adversaries.</td>
</tr>
</tbody>
</table>

As George and Smoke see things, deterrence theorists erred in viewing "deterrence as a separable, self-contained phenomenon about which a useful general prescriptive theory could be developed."² As they would have it, American policymakers were prone to arbitrarily trying to pursue deterrent mechanisms in place of more flexible methods of influencing adversaries throughout the Cold War era.
Yet such an assessment seems to this observer to be wide of the mark for two main reasons. First, although American statesmen were pursuing a policy of containment vis-a-vis the Soviet Union and the Peoples Republic of China during the period 1948-1962, they viewed each episode of tension or dispute with those two nations as a singularity containing its own risks, perils, challenges, and opportunities. That US statesmen felt constrained at some point during each of the crises to issue threats directed against the adversary stemmed more from a shared perception that a threat to visibly employ power would sway the adversary, than it did from ritualistic adherence to a theoretical paradigm.

Second, since the Soviet Union and the Peoples Republic of China were indeed probing for vulnerabilities in the US policy of containment, it was natural for wary American statesmen to meet such probes with forceful statements and moves—designed, in part, to sustain an American image of resolution.

George and Smoke's study has utility, if only because it highlights some of the principal problems which can arise during applications of deterrence, namely: misjudgements about the opponent's way of appraising the situation, and overreliance on threats as the sole deterrent mechanism.

**THE HUTH AND RUSSELT STUDY**

A more recent work is Paul Huth and Bruce Russett's "What Makes Deterrence Work? Cases from 1900 to 1980." Huth and Russett present a model of deterrent behavior—the expected utility model—and then test it using some 54 cases of extended immediate deterrence.

This model is based on a "rational actor" approach; the states involved are assumed for simplicity of analysis to be functioning entities which make
decisions based on objective appraisals of costs and benefits. Using this approach, a deterrent threat is considered effective if:

... it can produce cost-benefit calculations on the part of the potential attacker in which the expected utility of an attack would be less than the expected utility of foregoing the attack. The expected gains from an attack must be so small, or the expected losses so substantial, that abstaining from attack will produce a more favorable outcome (greater gains or, more likely, smaller losses).

In analyzing the 54 cases depicted in Table 4-1, Huth and Russett tested hypotheses coming under three broad categories: those emphasizing relative power, those concerning the role of past behavior in signaling current intentions, and those stressing the importance of ties between states (trade, political-military linkages, alliances, etc.).

Using multiple regression techniques to test their detailed hypotheses, Huth and Russett develop some powerful empirical findings. Economic linkages (the share of the defender's trade with the protege), arms transfers from defender to protege, and the existing local military balance showed very strong effects in achieving successful deterrence of an attack on the protege.* In the case of trade, if as much as six percent of the defender's trade was with its protege, the chances of successful deterrence were nearly seven out of eight.

Surprisingly, Huth and Russett find that there was a "negative relation between alliance and successful deterrence," and that the defender's past behavior (having fought in the past), made no "systematic difference" to deterrent outcomes. Moreover, the possession of nuclear weapons by the defender had a marginal effect in efforts to deter attacks on a protege.

One can draw three key conclusions from that study which have implications for American statesmen considering ways of strengthening deterrence

*The term "defender" as used here is interchangeable with the term "mentor" which was used in earlier sections of this study.
<table>
<thead>
<tr>
<th>Case</th>
<th>Year(s)</th>
<th>Attacker</th>
<th>Protégé</th>
<th>Defender</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1902/3</td>
<td>Germany</td>
<td>Venezuela</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>2</td>
<td>1904</td>
<td>Russia</td>
<td>Korea</td>
<td>Japan</td>
<td>Failure</td>
</tr>
<tr>
<td>3</td>
<td>1905/6</td>
<td>Germany</td>
<td>Morocco</td>
<td>France</td>
<td>Success</td>
</tr>
<tr>
<td>4</td>
<td>1906</td>
<td>Germany</td>
<td>France</td>
<td>Britain</td>
<td>Success</td>
</tr>
<tr>
<td>5</td>
<td>1908</td>
<td>Turkey</td>
<td>Persia</td>
<td>Russia</td>
<td>Success</td>
</tr>
<tr>
<td>6</td>
<td>1908/9</td>
<td>Austria/Serbia</td>
<td>Austria-Hungary</td>
<td>Germany</td>
<td>Success</td>
</tr>
<tr>
<td>7</td>
<td>1908/9</td>
<td>Austrian/Hungary</td>
<td>Serbia</td>
<td>Russia</td>
<td>Failure</td>
</tr>
<tr>
<td>8</td>
<td>1911</td>
<td>Italy</td>
<td>Tripoli</td>
<td>Turkey</td>
<td>Failure</td>
</tr>
<tr>
<td>9</td>
<td>1911</td>
<td>Germany</td>
<td>Morocco</td>
<td>France</td>
<td>Success</td>
</tr>
<tr>
<td>10</td>
<td>1911</td>
<td>Germany</td>
<td>France</td>
<td>Britain</td>
<td>Success</td>
</tr>
<tr>
<td>11</td>
<td>1912</td>
<td>Serbia</td>
<td>Albania</td>
<td>Austria-Hungary</td>
<td>Success</td>
</tr>
<tr>
<td>12</td>
<td>1912</td>
<td>Austria-Hungary</td>
<td>Serbia</td>
<td>Russia</td>
<td>Success</td>
</tr>
<tr>
<td>13</td>
<td>1912</td>
<td>Russia/Serbia</td>
<td>Austria-Hungary</td>
<td>Germany</td>
<td>Success</td>
</tr>
<tr>
<td>14</td>
<td>1913</td>
<td>Romania</td>
<td>Bulgaria</td>
<td>Russia</td>
<td>Success</td>
</tr>
<tr>
<td>15</td>
<td>1913</td>
<td>Bulgaria</td>
<td>Greece</td>
<td>Serbia</td>
<td>Failure</td>
</tr>
<tr>
<td>16</td>
<td>1913</td>
<td>Serbia</td>
<td>Albania</td>
<td>Austria-Hungary</td>
<td>Success</td>
</tr>
<tr>
<td>17</td>
<td>1914</td>
<td>Austria-Hungary</td>
<td>Serbia</td>
<td>Russia</td>
<td>Failure</td>
</tr>
<tr>
<td>18</td>
<td>1914</td>
<td>Russia/Serbia</td>
<td>Austria-Hungary</td>
<td>Germany</td>
<td>Failure</td>
</tr>
<tr>
<td>19</td>
<td>1914</td>
<td>Germany/Austria-Hungary</td>
<td>Russia</td>
<td>France</td>
<td>Failure</td>
</tr>
<tr>
<td>20</td>
<td>1914</td>
<td>Germany</td>
<td>Belgium</td>
<td>Britain</td>
<td>Failure</td>
</tr>
<tr>
<td>21</td>
<td>1920</td>
<td>Soviet Union</td>
<td>Iran</td>
<td>Britain</td>
<td>Failure</td>
</tr>
<tr>
<td>22</td>
<td>1927</td>
<td>Yugoslavia</td>
<td>Albania</td>
<td>Italy</td>
<td>Success</td>
</tr>
<tr>
<td>23</td>
<td>1935</td>
<td>Italy</td>
<td>Ethiopia</td>
<td>Britain</td>
<td>Failure</td>
</tr>
<tr>
<td>24</td>
<td>1936</td>
<td>Japan</td>
<td>Outer Mongolia</td>
<td>Soviet Union</td>
<td>Success</td>
</tr>
<tr>
<td>25</td>
<td>1938</td>
<td>Germany</td>
<td>Czechoslovakia</td>
<td>Britain/France</td>
<td>Failure</td>
</tr>
<tr>
<td>26</td>
<td>1938/39</td>
<td>Italy</td>
<td>Tunisia</td>
<td>France</td>
<td>Success</td>
</tr>
<tr>
<td>27</td>
<td>1939</td>
<td>Japan</td>
<td>Outer Mongolia</td>
<td>Soviet Union</td>
<td>Failure</td>
</tr>
<tr>
<td>28</td>
<td>1939</td>
<td>Germany</td>
<td>Poland</td>
<td>Britain/France</td>
<td>Failure</td>
</tr>
<tr>
<td>29</td>
<td>1940</td>
<td>Soviet Union</td>
<td>Finland</td>
<td>Germany</td>
<td>Success</td>
</tr>
<tr>
<td>30</td>
<td>1946</td>
<td>Soviet Union</td>
<td>Iran</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>31</td>
<td>1947</td>
<td>Soviet Union</td>
<td>Turkey</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>32</td>
<td>1948/49</td>
<td>Soviet Union</td>
<td>W. Berlin/W. Germany</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>33</td>
<td>1950</td>
<td>United States</td>
<td>North Korea</td>
<td>China</td>
<td>Failure</td>
</tr>
<tr>
<td>34</td>
<td>1954/55</td>
<td>China</td>
<td>Taiwan/Islands</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>35</td>
<td>1957</td>
<td>Turkey/United States</td>
<td>Syria</td>
<td>Soviet Union/Egypt</td>
<td>Success</td>
</tr>
<tr>
<td>36</td>
<td>1957</td>
<td>Egypt/Syria/Soviet Union</td>
<td>Turkey</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>37</td>
<td>1958</td>
<td>China</td>
<td>Taiwan/Islands</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>38</td>
<td>1961</td>
<td>Iraq</td>
<td>Kuwait</td>
<td>Britain</td>
<td>Success</td>
</tr>
<tr>
<td>39</td>
<td>1961</td>
<td>India</td>
<td>Goa</td>
<td>Portugal</td>
<td>Failure</td>
</tr>
<tr>
<td>40</td>
<td>1961</td>
<td>Soviet Union</td>
<td>W. Berlin/W. Germany</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>41</td>
<td>1962</td>
<td>India</td>
<td>Nepal</td>
<td>China</td>
<td>Success</td>
</tr>
<tr>
<td>42</td>
<td>1962</td>
<td>North Vietnam</td>
<td>Thailand</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>43</td>
<td>1965/64</td>
<td>Indonesia</td>
<td>Malaysia</td>
<td>Britain</td>
<td>Failure</td>
</tr>
<tr>
<td>44</td>
<td>1964</td>
<td>Turkey</td>
<td>Cyprus</td>
<td>Greece</td>
<td>Failure</td>
</tr>
<tr>
<td>45</td>
<td>1964/65</td>
<td>North Vietnam</td>
<td>South Vietnam</td>
<td>United States</td>
<td>Failure</td>
</tr>
<tr>
<td>46</td>
<td>1965</td>
<td>India</td>
<td>Pakistan</td>
<td>China</td>
<td>Failure</td>
</tr>
<tr>
<td>47</td>
<td>1966/67</td>
<td>Turkey</td>
<td>Cyprus</td>
<td>Greece</td>
<td>Failure</td>
</tr>
<tr>
<td>48</td>
<td>1967</td>
<td>Israel</td>
<td>Syria</td>
<td>Egypt</td>
<td>Failure</td>
</tr>
<tr>
<td>49</td>
<td>1970</td>
<td>Syria</td>
<td>Jordan</td>
<td>Israel</td>
<td>Success</td>
</tr>
<tr>
<td>50</td>
<td>1973</td>
<td>Soviet Union</td>
<td>Israel</td>
<td>United States</td>
<td>Success</td>
</tr>
<tr>
<td>51</td>
<td>1974</td>
<td>Turkey</td>
<td>Cyprus</td>
<td>Greece</td>
<td>Failure</td>
</tr>
<tr>
<td>52</td>
<td>1975</td>
<td>Morocco</td>
<td>Western Sahara</td>
<td>Spain</td>
<td>Success</td>
</tr>
<tr>
<td>53</td>
<td>1976/77</td>
<td>Guatemala</td>
<td>Belize</td>
<td>Britain</td>
<td>Success</td>
</tr>
<tr>
<td>54</td>
<td>1978/79</td>
<td>Tanzania</td>
<td>Uganda</td>
<td>Libya</td>
<td>Failure</td>
</tr>
</tbody>
</table>

of our allies both in the long term general sense, and in the more immediate sense during a crisis.

First, the development of close economic and political-military ties with a protege tends to strengthen deterrence. What may be operating here is a perception by the state contemplating attack, that the defending state, because it is so bound up in the affairs of the protege, will have much to lose in terms of prestige and economic well-being if it fails to come to the defense of the protege. The attacker then reasons that the defender will very likely retaliate if the protege is attacked, reassesses the matter, concludes it is not worth the added costs and risks, and abandons plans to attack.

Second, the local military balance between the allied forces of defender and protege versus those of the attacker is more important in affecting the deterrent outcome, than is an arbitrary summing up of all military forces theoretically available to both sides. Simply stated, military forces in being and deployed near sites of possible military hostilities have a pronounced restraining impact on the decision to attack. Uncommitted and distant military forces, even if nuclear, seem to have much less impact.

Third, the value of formal military alliances as deterrent mechanisms \textit{sui generis} may be less than is widely believed. It is almost as if the certainty of retaliation by a defender honoring a treaty is a less vexing factor for the attacker to assess, than is the uncertainty of the defender's response in the absence of a treaty.

Perhaps the major contribution of the Huth and Russett study is that it reaffirms with empirical evidence the broad, multidimensional nature of

*Of course, there are other reasons for having a military alliance: to formalize commitment, to provide fora for exchanges of views, to allow timely preparation of contingency plans, to entice other states to join the alliance, and others.
deterrence. As Huth and Russett persuasively conclude:

... success in deterrence [does not] follow merely from establishing a record of 'standing firm' in the past. Insofar as military strength is critical, local military forces—in some combination of forces of defender and local protege—are likely to prove more effective than overall or 'strategic' forces. Finally, an important contribution to effective deterrence may emerge from achievement of a goal that is usually sought for other purposes—maintaining and strengthening the ties of mutual interest among nation—states in an open global economic system.
CHAPTER IV

ENDNOTES


Robert Jervis has written:

Deterrence not only deals with some of the central questions of international politics (How is force manipulated to achieve political ends? How can wars be avoided? Why do weaker states sometimes prevail over stronger ones?); it is also parsimonious. Once one grasps its basic concepts and principles many implications follow.¹

Jervis is alluding to the notion that deterrence theory exerts a profound intellectual appeal not only on the academic community, but also on those with more practical and immediate interests, such as statesmen.

The concept of deterrence as it is commonly used to justify American defense procurement programs or as depicted in US strategic assessments has expanded beyond the explanatory power of the theory as currently developed.

For example, in the Fiscal Year 1986 Defense Secretary's Annual Report to the Congress, Secretary Weinberger states emphatically:

Deterrence is the core of US strategy. It seeks to provide security by convincing a potential aggressor not to commit aggression. For deterrence to succeed, possible adversaries must be persuaded that the risks and costs of aggression will exceed the gains.²

Deterrence in the lexicon of American national security policy has thus been transformed from a servant of political aims into an enduring objective in its own right. That this is the case is neither surprising nor without some justification, for United States' interests often tend to be served by judicious preservation of the status quo.

For US decisionmakers to adhere to a national strategy which rests firmly on deterrence as its core, they ought to possess an appreciation of the basic
functioning and assumptions on which its core element is based. Providing such an appreciation has been the objective of previous sections of this study. It now remains to attempt to expand the practical utility of deterrence theory.

**POSTULATES FOR EFFECTIVE DETERRENCE**

The following postulates and subpostulates are presented which could serve as a heuristic framework for reviewing deterrent options. Some of these ideas reiterate or expand upon notions presented in earlier sections; some have been suggested in the current literature on deterrence; others were derived inductively from the two historical studies reviewed in Chapter IV.

**POSTULATE ONE:** In a crisis or near crisis in which the United States considers that its interests are threatened by the imminent action of an adversary, a more effective deterrent response will be developed if:

a. First, the basic assumptions underlying the criteria for successful deterrence are known and can be met. These have been discussed in detail in Chapter II. They encompass:

1. Having the capacity to assess, estimate, and react with appropriate and reasonable prudence.

2. Recognizing the threat.

3. Formulating a believable, credible counterthreat. The counterthreat can be diplomatic, political, economic, military, or a mix.

4. Insuring the adversary recognizes the counterthreat, apprehends its linkage to the original threat, and finds it believable and credible.

b. Second, a more effective deterrent response will be developed if the following steps are taken:
1. American vital interests and concerns in the region, issue, and dispute are analyzed objectively.

2. The adversary's vital interests and concerns in the region, issue, and dispute are analyzed as objectively as possible.

3. A comparison of both parties' vital interests and concerns is conducted, with a conclusion as to which party is thought to have more at stake. During this process it is important for US decisionmakers to endeavor to perceive the matter at hand from the perspective of the adversary—not to invoke undue "sympathy," but to improve the precision with which the adversary's views are weighed. Further, decisionmakers should be careful to not "mirror-image" or project onto the adversary an imaginary mindset reflecting largely American cultural, historical, and political predispositions. To do so may have disastrous consequences. If the adversary is judged to have more at stake he may be less capable of being detered, unless US decisionmakers take steps to raise American stakes in the situation, and then convey that sense of increased importance to the adversary.

4. The adversary's options for attaining his inferred or stated goals are assessed and assigned probabilities of selection and success. An estimate of the costs and benefits of each option should be conducted.

5. US options are developed for inducing fear and hesitation in the adversary to pursue his inferred or stated goals. Each US option should be assigned a probability of success, and have its associated costs and benefits clearly delineated.

6. Thought is given to reasonable inducements or offers to the adversary as a means of causing him to reconsider and cancel his hostile plans. A broad range of policy options should be reviewed concurrently with a consideration of military deterrent options. Perhaps the adversary can be persuaded by means apart from military threats to forgo his plans.
7. Thought is given to steps that will increase the adversary's uncertainties. Ominously worded diplomatic cables, or unusual ship, troop, and aircraft movements would render it more difficult for the adversary to calculate the risks associated with his intended or threatened action. Such steps should be taken very circumspectly; risks to overall American interests must be taken into account which might arise from these measures.

POSTULATE TWO: If the United States is attempting to extend protection to another state (protege) then the following factors, if in existence prior to the deterrent invoking crisis will render the US deterrent response more likely of success:

a. Extensive trade and economic linkages with the protege.
b. Longstanding political ties with the protege.
c. Strong US and protege military forces in place, with a well developed infrastructure and effective contingency plans. Such forces are inherently more believable and credible than are forces hastily assembled and transported to the protege's territory while the crisis is unfolding. Forces in place signal a firmer American commitment and present the adversary the virtually guaranteed prospect of vertical escalation by the United States to assure the survival of those forces.
d. A resolute, reassured and socially cohesive populace. This populace ought to be convinced of the need to resist outside aggression and be willing to make the necessary economic and personal sacrifices to provide for an adequate defense. Although judgements in this area lie in the realm of the intangible, there is little doubt that they enter into the calculations of potential adversaries. Policies striving for "reassurance" of American and protege citizens are essential in advance of crises which may ultimately require significant hardships. As Michael Howard notes, "The object of reassurance is
to persuade one's own people, and those of one's allies, that the benefits of military action, or preparation for it, will outweigh the costs.\textsuperscript{5}

The implications of these postulates and subpostulates can be applied to two hypothetical scenarios which depict Soviet threats of aggression in areas of interest to the United States: Iran and Saudi Arabia.

\textbf{Scenario One - Soviet Threat to Iran: 1987}

In this scenario, Ayatollah Ruhollah Khomeini has passed from the scene following the inconclusive wind down of the Iran-Iraq war. The succession process had not been worked out satisfactorily; thus, a struggle for dominance has erupted among rival factions of the leading Shiite clerics. Complicating affairs has been the reemergence of the pro-Soviet Marxist Tudeh party which had long been thought moribund. Tudeh inspired strikes, work slowdowns, and civil disruptions are everyday events in Tehran and other large cities. To the North, Azerbaijani nationalists have declared an independent republic made up of the provinces of East and West Azerbaijan which border the Soviet Union.

The Soviet Union has viewed these developments with a mixture of worry and anticipation. From the perspective of the Kremlin, upheaval in Iran and the rise of an independent Azerbaijani Republic on its immediate Southern border are viewed as security threats—threats posing opportunities as well as risks. The Soviets have therefore made the decision to invade Iran with strong ground forces under the aegis of the Soviet-Persian Treaty of 26 February 1921. Three objectives provide the impetus for that decision: (1) the capture of Tehran and installation of a Tudeh puppet government; (2) suppression and dissolution of the Azerbaijani Republic; and (3) a massive ground and tactical air forces build up in Iran to enhance future "security operations."
Intelligence reports and satellite imagery have provided Washington good indicators that something of great significance is planned for the forces stationed in the Soviet military districts bordering Iran. The President and the National Security Council (NSC) are reviewing options to deter a Soviet incursion into Iran.

We now evaluate in tabular form US and Soviet interests in Iran, and the expected effectiveness of several possible American deterrent strategies.

In Table 5-1 interests are categorized in four broad areas: security, economic, world order, and ideological. The level of interest is rated as either High, Medium, or Low. These evaluations are those of the author, based on his best judgement. Admittedly this framework is highly simplified and is only suggestive of the approximate level of interest shown.

**TABLE 5-1**

**US AND USSR INTERESTS IN IRAN**

<table>
<thead>
<tr>
<th>SECURITY</th>
<th>ECONOMIC</th>
<th>WORLD ORDER</th>
<th>IDEOLOGICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>R</td>
<td>U/R</td>
<td>R</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>U</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>U</td>
<td></td>
<td>R</td>
</tr>
</tbody>
</table>

USA=U; USSR=R

Total: US - one High, two Medium, and one Low

USSR - three High and one Low

Conclusion: The USSR has a higher degree of interest in events in Iran, and hence would have more at stake than the United States in a dispute focussing on Iran. This may render the Soviets intrinsically less prone to deterrence than would otherwise be the case.
Table 5-2 next provides a framework for analyzing the effectiveness of possible deterrent responses to a Soviet threat to move against Iran. Again these reflect the best judgement of the author.

**TABLE 5-2**

**EFFECTIVENESS OF US DETERRENT RESPONSES IN IRAN**

<table>
<thead>
<tr>
<th>US DETERRENT RESPONSE</th>
<th>SOVIET PERCEPTIONS OF:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LIKELIHOOD</td>
</tr>
<tr>
<td>STRATEGIC NUCLEAR OPTION</td>
<td>NIL</td>
</tr>
<tr>
<td>CONVENTIONAL OPTION I</td>
<td>LOW</td>
</tr>
<tr>
<td>CONVENTIONAL OPTION II</td>
<td>HIGH</td>
</tr>
<tr>
<td>CONVENTIONAL OPTION III</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>THREAT TO INVADE CUBA</td>
<td>LOW</td>
</tr>
<tr>
<td>DIPLOMATIC AND ECONOMIC SANCTIONS</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

I - Insertion of US Corps sized Army unit, three USAF Tactical Air Wings, and a Marine Amphibious Brigade (MAB).

II - Insertion of two US Divisions, two USAF Tactical Air Wings, and a Marine Amphibious Unit (MAU).

III - Show of force comprised of the Division Ready Brigade (DRB) of the 82nd Airborne Division, two USAF Tactical Air Squadrons, and a MAU.

All options include increasing the US Naval presence to at least three Carrier Battle Groups (CVBG'S) in the North Arabian Sea.

This analysis suggests that of all the reasonable deterrent options open to the United States, only one—Conventional Option I—would have a better than even chance of deterring a Soviet invasion. That option would entail a massive infusion of American combat power under the most difficult and challenging of circumstances, into a distant country whose populace while not

38
pro-Soviet, is by and large vehemently anti-American. Grave risks of vertical escalation are also attendant with this option. For this and other reasons, its likelihood of selection by the President is deemed low. In reviewing the other available options, one is then confronted with the dismaying thought that a Soviet invasion of Iran as depicted in this scenario may well be a nondeterrable phenomenon.

**Scenario Two - Soviet Threat to Saudi Arabia: 1988**

The American President decided not to insert US forces into Iran, and the Soviets commenced an invasion of Iran on Thanksgiving Day, 26 November 1987. He did convey to the Soviet First Secretary a threat to use carrier based air to strike Soviet forces should they proceed south of a line connecting Ahwaz, Shiraz, and Kerman; the President has further pledged to keep the Straits of Hormuz open.

Nevertheless, by early 1988 more than 70 percent of Iranian territory has fallen under Soviet domination, while a Tudeh party functionary has been installed in Tehran by the Kremlin as nominal "head of state." According to intelligence reports Soviet forces have not thus far strayed south of the Ahwaz-Shiraz-Kerman line, although there appears to be a massive buildup of forces in the Susangird and Dizful areas ominously near the Iraqi frontier.

The President's advisors warn of a possible Soviet attack into Iraq, Kuwait, and thence into Saudi Arabia, with the aim of seizing the Saudi oil fields; deterrent options are under review.

Using the methodology previously discussed, Table 5-3 provides a framework for judging US and Soviet interests in Saudi Arabia. Again these evaluations reflect the views and judgements of the author.
**TABLE 5-3**

US AND USSR INTERESTS IN SAUDI ARABIA

<table>
<thead>
<tr>
<th>LEVEL OF INTEREST</th>
<th>SECURITY</th>
<th>ECONOMIC</th>
<th>WORLD ORDER</th>
<th>IDEOLOGICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>U</td>
<td>U</td>
<td></td>
<td>R</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>U</td>
<td>R</td>
<td></td>
<td>R</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td>R</td>
<td></td>
<td>U</td>
</tr>
</tbody>
</table>

USA=U; USSR=R

Total: US - two High and two Medium

USSR - one High, two Medium, and one Low

Conclusion: The United States has a higher degree of interest in Saudi Arabia and hence would have more at stake than the Soviet Union in a dispute focusing on Saudi Arabia.

Table 5-4 provides a framework for analyzing the effectiveness of various deterrent responses to a Soviet threat to invade Saudi Arabia.

**TABLE 5-4**

EFFECTIVENESS OF US DETERRENCE RESPONSES TO A SOVIET THREAT TO INVADE SAUDI ARABIA

<table>
<thead>
<tr>
<th>US DETERRENCE RESPONSE</th>
<th>SOVIET PERCEPTIONS OF:</th>
<th>LIKELIHOOD</th>
<th>MILITARY UTILITY</th>
<th>POTENTIAL FOR VERTICAL ESCALATION</th>
<th>OVERALL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FOR VERTICAL ESCALATION</td>
<td></td>
</tr>
<tr>
<td>STRATEGIC NUCLEAR OPTION</td>
<td>LOW(-)</td>
<td>HIGH</td>
<td>NIL</td>
<td>MEDIUM(-)</td>
<td></td>
</tr>
<tr>
<td>CONVENTIONAL OPTION I</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>HIGH(-)</td>
<td></td>
</tr>
<tr>
<td>CONVENTIONAL OPTION II</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>MEDIUM(+)</td>
<td></td>
</tr>
<tr>
<td>CONVENTIONAL OPTION III</td>
<td>LOW</td>
<td>LOW</td>
<td>MEDIUM(+)</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>THREAT TO INVADE CUBA</td>
<td>LOW(+)</td>
<td>LOW</td>
<td>HIGH</td>
<td>LOW(+)</td>
<td></td>
</tr>
<tr>
<td>DIPLOMATIC AND ECONOMIC SANCTIONS</td>
<td>HIGH</td>
<td>NIL</td>
<td>UNKNOWN</td>
<td>LOW</td>
<td></td>
</tr>
</tbody>
</table>

40
I - Use of US forces already in place and deployed to Saudi Arabia:
  two Divisions (one mechanized and one armor) and three USAF Tactical Air
  Wings. Also envisions later insertion of one Marine Amphibious Brigade
  (MAB) and additional ground forces.

II - Insertion of US Corps sized Army unit, four USAF Tactical Air Wings, and
  one MAB.

III - Show of force comprised of the Division Ready Brigade (DRB) of the 82nd
  Airborne Division, two USAF Tactical Air Squadrons, and a Marine
  Amphibious Unit (MAU).

All options include maintenance of at least three Carrier Battle Groups
(CVBG'S) in the North Arabian Sea.

Conventional Option I is estimated to have a high deterrent value because
it presumes a significant US force is already present in the likely area of
hostilities. The Soviets would view the employment of the US force as a
foregone conclusion, and as having a high potential for vertical escalation.
In such a scenario, the Soviets are placed in the awkward position of having
to decide whether or not to embark on a course of action sure to bring their
forces into direct conflict with American forces already entrenched and
arrayed for best defensive effect. This is quite different from the Iranian
scenario, in which US forces, if committed, could well arrive after the fact
of a Soviet invasion thus nullifying their deterrent impact.

The other conventional options are deemed less credible since they rely
on forces which must be readied, assembled, and transported to Saudi Arabia
from the United States. Such a process would not, in any event, commence
until completion of deliberations by the NSC and implementation of a Presiden-
tial decision.

Any lag in providing capable ground and air forces to Saudi Arabia in
such a scenario would dilute their deterrent effect on the leadership in the
Kremlin. Again, we emphasize, forces arriving after a Soviet incursion has begun, have no deterrent effect at all because the threat to invade has been operationalized. Such forces may, of course, serve to delay or thwart Soviet objectives.

This analysis has applied the framework of the postulates and subpostulates for effective deterrence that were suggested earlier in this chapter, to two hypothetical scenarios. While some simplifications and adjustments were made to achieve conciseness, the discussion describes an orderly scheme for appraising US and adversarial interests, and for weighing the potential effectiveness of several deterrent responses.

**SUMMARY AND RECOMMENDATIONS**

It would be useful at this point to summarize where we have been, and what we have concluded from this analysis.

In Chapter II, the three broad patterns of deterrent behavior—immediate, general, and extended deterrence—were discussed along with the assumptions which underlie and distinguish them. That analysis suggested that the induction of fear and hesitation in the minds of the leadership of the state one is attempting to deter is a necessary precursor to causing that state (the attacker) to reverse its hostile plans. Immediate deterrence is typically pursued by a state during a crisis or precrisis scenario. General deterrence can best be characterized by the process of matching and regulation of nuclear forces by the United States and the Soviet Union—a process which, for the present, has enjoined the utmost restraint on both parties to avert a decisive confrontation. Extended deterrence is in essence a form of assured defense provided one state by another, when the former is under threat of hostile action by a third state.
General deterrence was analyzed more closely in Chapter III which presented a survey of the principal iterations of US nuclear strategic doctrine. A rather detailed discussion of the current "Countervailing" doctrine and an analysis of the implications of strategic uncertainty demonstrated the linkages between the two. A balanced and modernized US TRIAD, capable of executing a wide variety of potentially ominous attack/retaliation options, serves to compound the serious uncertainties that would vex Soviet military planners attempting to hypothesize the wisdom of a Soviet preemptive nuclear strike against the United States. Pending the required force improvements being pursued by the Reagan administration as reflected in the MX missile, B1B Bomber, TRIDENT/D-5 update, and C3I program proposals, strategic nuclear deterrence ought to remain relatively stable.

Although beyond the scope of this study, further assessment of the impact on strategic nuclear deterrence of the President's Strategic Defense Initiative (SDI) would be most useful, as the manner in which it will affect strategic equilibrium is unclear. Some analysts find the concept stabilizing, because, they aver, it would substantially increase Soviet uncertainty. Others consider it potentially destabilizing, because it might encourage the Soviets to someday seriously contemplate a preemptive nuclear first strike against the United States, lest they become prone to such a first strike themselves against which their retaliatory forces could not respond effectively. Then there is the matter of cost. The SDI's technology developmental costs alone could exceed $70 billions by 1993; costs of that magnitude obviously carry with them the potential of diverting sizeable funds from other programs of proven deterrent value. Additional study of the impact of this program in a conceptual, analytical, and strategic framework would seem prudent.
This study then turned to a review of two analyses of historical attempts at immediate deterrence. These suggested that successful deterrence during periods of acute and largely unexpected crisis springs from more than one source. The ideal span of deterrent elements includes extensive economic and political linkages (but not necessarily formal alliances) with a state one is attempting to protect from attack. Strong local military forces already in place significantly enhance the likelihood of a successful deterrent effort.

Building on that theoretical and historical foundation, several postulates and subpostulates which comprise a framework for reviewing different deterrent options were presented. That framework attempts to articulate mechanisms which can contribute to developing effective deterrent responses prior to, and during crises or near crises. An analysis of two hypothetical scenarios which could, indeed, confront US decisionmakers was then conducted using the suggested framework.

Central to development of an effective deterrent response is the requirement to assess, weigh, and perceive the various nuances of the deterrent situation from the perspective of the adversary. As noted in a much earlier section of this study, this is easier said than done. Not all crises or near crises permit a clear assessment of the stakes deemed important by adversaries. Deterrence is further complicated by the ever present possibility that the adversary is "nondeterrable:" he may be so firmly committed to his planned course of action that he discounts the deterrent response as either an acceptable cost, or as a bluff lacking all credibility.

In spite of those intrinsic difficulties, pursuing effective deterrence will remain an abiding goal in many regions of the world for American decisionmakers. Significantly, one of the most objective studies to date of available historical data relating to deterrence—the Huth and Russett
research note—suggests that having a capable military force deployed well in advance of a crisis has a most positive effect on deterrent outcomes.

This study recommends that such a policy be analyzed for possible implementation in areas of vital importance to the United States—such as Southwest Asia—where US ground and air forces are not now deployed. In particular, such deployments to Saudi Arabia could in the not too distant future prove critical to deterring an expansionist Soviet Union. Second, it is recommended that the postulates and subpostulates for effective deterrence presented in this study be considered for use by the decisionmakers when assessing deterrent options.

If this analysis has illumined even slightly the mechanisms of deterrence through its review of underlying assumptions, its discussion of the historical record, and through a formulation of a framework for analyzing deterrent options, then its objectives have been in large measure realized.
CHAPTER V
ENDNOTES


6. This is a somewhat modified version of the framework for assessing national interests discussed in Donald E. Nuechterlein, "The Concept of National Interest: A Time for New Approaches," ORBIS, Spring 1979, pp. 73-92.


BIBLIOGRAPHY


Nikte, Paul H. "Preserving the ICBM Leg of the Triad." *National Defense,* Vol. 64, July-August 1979, pp. 30-34.


