STRATEGIC SURPRISE ATTACK

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This research paper reviews the open literature of surprise attack and concentrates on the works of Roberta Wohlstetter, Barton Whaley, Michael Handel, Richard Betts, Alex Hybel, and Ariel Levite. The characteristics and causes of surprise are summarized and areas for additional research are identified. The author asserts that Western defense planning is geared to deterrence of an all-out, bolt-from-the-blue attack which is the most improbable form of surprise.

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Executive Summary of

STRATEGIC SURPRISE ATTACK

Surprise attack is as old as war itself. Its history can be traced to the ancient writings of Chinese warrior Sun Tzu, and its presence felt in current military operations in the Persian Gulf and the Middle East. Surprise has historically been considered a tactical art of battlefield maneuver, but the technological revolution of the 20th century has transformed surprise attack into a strategic force capable of changing the outcome of a war in a single stroke. Despite its centuries old legacy, the academic study of surprise is a product of the past two decades. The results are striking and challenge our basic concepts of intelligence, warning, and political response. Virtually all major wars of the 20th century have begun with a surprise attack. None of the surprise attacks, however, were bolts-from-the-blue. That is, the attacks followed a period of crisis and preparations for war were evident well in advance. Yet, despite the presence of intelligence warning information, the nations under attack were still effectively surprised.

Strategic analysts tend to confuse bolt-from-the-blue with surprise attack. Bolt-from-the-blue is the launching of an attack without any prior force buildup and without any prior warning to the potential victim. It is but one subset of surprise attack and the most improbable one at that. Surprise occurs despite warning and typically springs from period of prolonged crisis or conflict. Western defense plans which are geared to deterring an all-out, bolt-from-the-blue strike are overlooking the more historically probable scenario of a surprise attack which would likely occur towards the tail end of a crisis, when alert forces are being stood down and a diplomatic solution appears near.

The dedicated study of surprise attack has not yielded a unified body of theory to either predict the circumstances under which surprise will occur or to aid decision makers in formulating defense strategies against surprise. Most studies of surprise focus on the initiation of war and the role of strategic warning in policy decisions. Very little attention is given to surprise attacks which occur during a war or to tactical warning and its role in alerting and mobilizing defense forces. Since most researchers agree that surprise is a product of protracted crises and conflict, and since the principal reason for surprise is inadequate political and military response to available warning, further research into intrawar surprise, tactical warning, and military alerting and mobilization are wholly justified.

While the West downplays the importance of surprise attack, concentrating instead on confidence building measures and arms control treaties, the Soviet Union continues to emphasize surprise and deception in their military doctrine. The Soviets, too, have dismissed the bolt-from-the-blue scenario, preferring instead to achieve surprise through the manipulation of enemy perceptions.

Surprise and deception do not need to be 100% foolproof to be effective. They need only confuse the victim long enough to preclude effective response. The issue at hand is not a probability assessment of whether or not surprise attack will occur at any specific point in the future. We are concerned instead with the situation in which deterrence, for whatever reason, has failed, and the Soviet Union reaches that conclusion before we do.

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CHAPTER I

INTRODUCTION

Background. "The only thing less probable than war itself is that it would start in the way we expect."[1] War is not inevitable as the solution to international conflict. But when the decision for war is made, surprise--and its frequent companion, deception--are inevitable. As one analyst notes, "The improbability of war varies directly with the probability of surprise."[2] Up until the 20th century surprise attack was primarily a tactic for prompt victory on the batttlefield. Its scope was limited by the range of primitive firepower and short legged logistics, and its impact was confined to the narrow arena of battle. But the industrial and technological revolutions changed the nature of warfare and, along with it, the effects of surprise attack. The capability now exists to swiftly deliver enormous levels of destructive power to the strategic heart of an opposing nation with little or no warning. As one observer noted, "The new combination of nuclear explosives with missile delivery systems has, by its potential for sudden decisive wars, raised the salience of surprise to an issue of survival itself".[3]

Indeed, the academic study of surprise attack did not begin until the 1960's, shortly after the advent of nuclear weapons and intercontinental ballistic missiles. Prior to 1962, surprise and deception were typically handled as topics of battlefield strategy or as after-the-fact historical exercises in fixing blame for failure in battle. The collective knowledge pertaining to those subjects was usually transmitted from one generation of field commander to the next by oral history or limited treatises on their tactical employment. Since 1962, however, a number of scholarly books and articles have appeared on the subject, but the field of study is new and its

scholars have yet to produce an agreed-to body of theory on surprise and deception.

That the field of study devoted to surprise attack should fail to produce any formal body of theory is indicative of the course followed by the world's first nuclear power nation--the United States--in formulating its response to the threat of surprise. With the surprise attack at Pearl Harbor still fresh in its memory and George Kennan's famous 1946 "X" telegram (which portrayed a post-war world in inevitable conflict with Soviet hegemony) being widely circulated in the halls of government, the United States renewed its efforts to obtain timely intelligence information on the military status and political disposition of hostile nations. In particular, the Soviet Union--the world's second nuclear power--was the target of renewed U.S. intelligence collection.[4] In 1955 President Eisenhower presented his "Open Skies" proposal which was based, as one author described it, "on the idea that, with sufficient observation of each other's military forces, neither side could achieve surprise in an attack and, lacking the advantage of surprise, would be deterred."[5] Thus, the author continues, "surprise-attack schemes...are based on deterrence as the fundamental protection against attack. They seek to perfect and to stabilize a situation of mutual deterrence. This means that they seek to enhance the integrity of particular weapons systems, not to dismantle or to degrade those systems."[6] Much of the national focus on the prevention of surprise attack has therefore evolved into issues of managing, measuring, and monitoring nuclear weapons. As a result, terms such as "arms control", "treaty verification", "nuclear stability", "first strike weapons", "countervailing strategy", etc. have come to dominate our lexicon while "surprise" and "deception" have fallen into disfavor and are assumed to be defined away by the success of the aforementioned nuclear strategies. Studies of "how much is enough?" are prevalent in contemporary literature, but papers devoted to the question "what if deterrence fails?" are far

fewer in number.

One of the principal reasons for this evolution in strategic thinking is the tendency of defense analysts to focus on the worst-case scenario of an all-out nuclear attack with minimum warning time. Since the key to defense against surprise attack is to reduce the vulnerability of strategic forces (thereby preserving the weapon system and enhancing deterrence), worst-case planning assumes launching of an enemy attack from an ungenerated posture with few if any warning indicators, the so-called "bolt-from-the-blue" scenario. Alexander George notes that,

> American analysts concerned with the warning problem have focused attention primarily upon the danger of a surprise all-out military attack...Thus the major uses of warning contemplated by U.S. planners have focused upon (a) the use of available warning to alert military forces in order to reduce their vulnerability and to improve their response time; (b) the use of available warning to reinforce deterrence by signalling to the adversary a strong and credible commitment to respond. 7

And as Air Force Chief of Staff General Larry D. Welch points out, deterring the "bolt-from-the-blue" attack is paramount to the development of our strategic nuclear forces.

> There are two key characteristics of the daily task of deterring a surprise attack--the so-called 'bolt out of the blue' attack. The first characteristic of that daily task is that it is daily. And it is long term. The second characteristic is that a surprise attack would, by definition, be in absence of a compelling crisis or confrontation...We have today, and are building for tomorrow, daily alert forces that provide a clear retaliatory capability that would make a surprise attack an absolutely irrational act. You will note that I did not say a surprise attack is automatically an irrational act. Instead, I said we must have the forces that make a surprise attack an irrational act. 8

When such an extreme and demanding threat scenario as the "bolt-from-the-blue" case is measured against the highly sophisticated intelligence and early warning system that has evolved in the U.S. over the past forty years, the perceived threat of

surprise attack rapidly fades. In fact, articles in defense publications and a recent book on surprise attack assure readers that surprise is highly unlikely in an age of high technology reconnaissance and surveillance systems.[9] Author Ariel Levite wrote that "it is my belief...that the prospects for achieving complete and total strategic surprise...are no brighter, and are possibly even dimmer, than at any other time in the recent past." [10]

At first glance such confidence would appear justified. Both U.S. and Soviet intelligence systems are capable of providing timely and accurate force status information on each other's country and it is difficult to conceive of any scenario in which mobilization or generation of forces would go unnoticed. The net effect, as Paul Bracken writes, has been a "sharp decline in discussion about and consciousness of surprise nuclear attack. The 'bolt-from-the-blue' attack is now considered such an unfashionable topic that it is almost never discussed seriously by students of nuclear strategy."[11] Instead, the only credible concern today centers on prevention of what General Welch termed the lone "irrational act" or as what other observers refer to as the desperate act of a "rogue Soviet submarine."[12]

To guard against the likelihood of such irrational acts--or other potential incidents which could lead to war by accident or miscalculation--nations are working to build safety-valve crisis communications systems and strategic defense shields against accidental launch. Three such systems are either inplace today or under study for possible future deployment. The first and most famous measure is the Direct Communications Link (DCL) or "Hot Line" between Washington and Moscow which was established in 1963. Since then, DCLs have been set up between Paris-Moscow in 1966 and London-Moscow in 1967.[13] Efforts are now underway to upgrade the Washington-Moscow link with high speed facsimile transmissions and upgraded diplomatic communications links.[14] The second effort

inv[illegible]es establishment of the recently agreed to Nuclear Risk Reduction Centers in both Washington and Moscow. The centers would augment the capabilities of the DCL and help prevent misinterpretation of a nation's actions during periods of crisis, military accident, regional conflicts, or terrorist activity.[15] The third and final proposal is a recent recommendation by Senator Sam Nunn, chairman of the Senate Armed Services Committee, to build an Accidental Launch Protection System (ALPS) as a hedge against an unauthorized ballistic missile attack. Although no legislative action is currently planned to support this proposal, industry is presently assessing the technical feasibility and effectiveness of such a system.[16]

In each case it is clear that protection is being sought against an accidental or irrational breach of nuclear deterrence which, except for the occurrence of an anomalous incident, is presumed to remain as stable as ever. Such diplomatic proposals, combined with nuclear forces geared to deterring the improbable "bolt-from-the-blue" attack, serve to all but eliminate strategic surprise attack as a viable issue for national concern. As William Van Cleave writes,

> ...the U.S. national security apparatus has subjectively reduced its [surprise attack] importance as a planning factor and, instead, has increasingly rejected its plausibility. The pronounced tendency today is to base force planning on the assumption that the United States has received, identified, and reacted effectively to strategic warning.[17]

One additional reason for the deemphasis on surprise is that the ultimate defenses against such an attack (such as high rates of force readiness or policies of launch on warning) are prohibitively expensive or politically infeasible. Increasingly, deployment of strategic systems such as the proposed Peacekeeper, rail garrison ICBM (which is dispersed only upon receipt of warning information) may represent a future trend in defense planning which places assured faith in nuclear stability and our national capability to foresee all but the most remote eventualities of war.

In sum, although surprise and deception have retained their tactical properties in the battlefield environment, the introduction of nuclear weapon systems have transformed them into a force capable of deciding the very outcome of a war and threatening the viability and strategic war making capacity of a country. Nations continue to exploit tactical surprise, but strategic surprise has been subsumed under measures to manage and control nuclear weapons. Arms control treaties, survivable retaliatory forces, and crisis communications links have reduced and isolated the perceived threat from surprise to that of a highly improbable event.

The Problem. Surprise attack is inevitable and occurs despite warning. Western confidence in nuclear deterrence ignores the fact that all major wars of the twentieth century have begun with a surprise attack. Furthermore, in-depth study reveals that none of this century's 68 strategic surprise attacks have been a "bolt-from-the-blue," yet our nuclear forces are designed to deter this highly improbable form of all-out attack. Overwhelming confidence is placed in our ability to detect preparations for war, but despite an abundance of intelligence indicators the nations under attack were still effectively surprised.[18] As a result, Western military strategies and new weapon systems are developed on the basis of strategic assumptions which appear to be historically invalid.

Analytical confusion results from the misconception that "bolt-from-the-blue" and "surprise attack" are one in the same. In fact, bolt-from-the-blue is but one subset of surprise, and the most improbable one at that. Elements such as unexpected changes in national doctrine, technological breakthroughs, deception, misinterpreted warning signs, failure to comprehend the mind set of the enemy, and diplomatic confusion, all combine to form the multidimensional character of surprise. It all adds up to the probability that a nation will be surprised even when

it is aware of its adversary's intent.[19]

While Western nations prepare to deter an all-out attack, the Soviet Union has already rejected a bolt-from-the-blue attack strategy, preferring instead to rely on surprise through manipulation of enemy perceptions.[20] And while policymakers may believe that surprise has been overcome by international arms control agreements, the Soviet Union continues to emphasize surprise in its doctrinal literature. William R. Van Cleave summarizes the Soviet belief in surprise and its implications for the U.S.:

> Soviet military literature indicates that the Soviets believe that surprise attack could be the determinative event of a nuclear war; that a surprise attack could strategically disrupt and even forestall the enemy's use of nuclear weapons; and that surprise attack is feasible....
>
> The Soviet Dictionary of Basic Military Terms proclaims that the unexpected use of nuclear weapons is among the ways to achieve decisive surprise....[21]
>
> ...a combination of Soviet force improvements, and relative neglect on the part of the United States, has dramatically increased the *military feasibility and attractiveness of a surprise* Soviet attack on U.S. deterrent forces.[22]

Clearly, the relative improbability of a Soviet bolt-from-the-blue strike does not mitigate our vulnerability to surprise attack.

Just as modern technology has permitted surprise and deception to achieve strategic importance, the emergence of Third World countries (and manipulation of their superpower sponsors) has altered the definition of military "victory". Surprise is now a prime instrument in regional, conventional conflicts where the objectives are limited but the consequences are strategic. Not only can Third World countries combine sophisticated technology and surprise in order to achieve quick victories, but they can also quickly draw superpower states into unanticipated confrontations.[23]

Since the appearance of the first scholarly work on surprise attack 26 years ago, we have yet to see an abatement of international attempts at surprise nor have we seen any marked improvement in a nation's ability to avoid surprise. The purpose of this research paper will be to examine the nature and study of surprise and to analyze its impact on national policymaking decisions.

Research Approach. This study is not concerned with the probability of war in the next month, the next year, or the next decade. Rather, it centers on the point at which deterrence has failed and the victim nation reaches that conclusion far too late to avert surprise.

The most prominent writings in the field of surprise attack will be reviewed and the major elements of surprise as discussed by all authors will be presented. Conclusions will be drawn about the adequacy of current research and areas requiring future study will be identified. Soviet thinking on surprise and deception will be discussed along with the role of crisis decision making in formulating a response to surprise attack. Research findings will be summarized and presented along with recommendations in Chapter VII. The intent of this study is to consolidate the major research findings on surprise and to provide a "quick study" on the subject for scholars, defense planners, and military leaders.

As this study will indicate, surprise may be impossible to avoid but its effects can be minimized if the phenomena of surprise is properly understood. Clearing up the misconceptions about surprise will go a long way towards establishing an effective deterrent.

CHAPTER II

THE NATURE OF SURPRISE

Historical Importance of Surprise. The history of surprise attack can be traced back to the legendary stories of the Trojan Horse, Gideon, Hannibal, and the Peloponnesian War. Genghis Khan was considered to be a 13th century master of surprise and Napoleon, "Stonewall" Jackson, and General William Sherman all intuitively understood the principles of deception, surprise, and maneuver in crushing the enemy.[1] One serious student of surprise in warfare was Lieutenant General Waldemar Erfurth, official military historian for the German Wermacht. In his 1938 book, Surprise in War, he wrote:

> Surprise is a particularly efficient means of defeating the enemy and as old a method as war itself. The history of war shows that through the centuries, almost all decisive victories have been preceded by successful surprises, despite tactical and strategical changes... Surprise is the key to victory.[2]

From Julius Caesar in 47 B.C. ("The most potent thing in war is the unexpected") to General Douglas MacArthur in 1950 A.D. ("Surprise is the most vital element for success in modern war"), surprise and deception have played major roles in the outcome of war and in shaping our geopolitical landscape.[3] The many successes of military surprise attack are well chronicled but in a few famous instances, surprise actually backfired and led to the ultimate defeat of the aggressor. One such example is the Japanese attack at Pearl Harbor. Although recognized as a stunning military success, it galvanized the American spirit and brought the United States fully into the war. In addition, Pearl Harbor is a case where, quite possibly, surprise may have actually saved the United States Pacific Fleet. It was Fleet Admiral Nimitz who pointed out that if the approaching Japanese naval battle group had been detected and the United States warned, Admiral Kimmel's forces would have

departed the Hawaiian Islands to engage the Japanese at sea. But since the Japanese had unexpectedly changed their naval doctrine to make use of newly emerging airpower, the results may have been even more disastrous. Nimitz concluded, "The Japanese would have sunk every one of our ships in deep water."[4] Japan's self-imposed constraints in conducting the air raid also aided the U.S. If Admiral Nagumo had not limited his aerial reconnaissance on the eve of the attack (for fear of detection), the aircraft carrier Enterprise would surely have been discovered just 200 miles from Hawaii.[5] And Nagumo's disputed decision not to order a second wave assault against Pearl Harbor undoubtedly saved many American lives, ships, and repair facilities.[6] In at least one historical instance, then, a surprise attack may ironically have helped preserve the forces of the victim nation.

But apart from the Pearl Harbor attack, the German offensive against Russia in 1941, and the Egyptian-Syrian attack on Israel in 1973, virtually all surprise attacks are successful in achieving or exceeding their long-term military objectives. Richard Betts concludes that "military surprise is among the greatest dangers a country can face. Of the major wars in Europe, Asia, and the Middle East that have reshaped the international balance of power over the past several decades, most began with sudden attacks."[7]

The Legal Status of Surprise and Undeclared War. As armed conflict between nations continued through the ages, the law of the land attempted to keep pace. The legal philosophy of the ancient Greeks and Romans led to the belief in the 6th century A.D. that "no war is just if it be not notified and declared."[8] In 1642 Grotius published The Law of War and Peace which stipulated a requirement to issue a declaration of war before hostilities began. But up until 1907, there is very little evidence of this practice being followed with any degree of regularity. A renewal

of interest in this procedure followed the 1904 Japanese torpedo attack on the Russian fleet which took place "without warning or previous declaration."[9] Following this attack, international concern led to the drafting of Article 1 of Convention III, Hague Conventions of 1907, which read:

> The contracting Powers recognize that hostilities between them must not commence without a previous and unequivocal warning, which shall take the form either of a declaration of war, giving reasons, or of an ultimatum with a conditional declaration of war.[10]

It has been correctly noted that Article 1 does not define any specific period of time which must elapse between the formal announcement and the firing of the first shot. A 1962 Department of the Army Pamphlet observed that "this Article does not stipulate that a particular length of time must elapse between a declaration of war and the commencement of hostilities. Therefore, surprise is still possible while complying with the Convention."[11]

During World War I the conditions of Article I were regularly adhered to with declarations of war being issued several days before hostilities began. But in World War II the practice was again ruptured as Nazi Germany and Imperial Japan waged war well ahead of any formal statements. An interesting opportunity for further legal clarification of this point was passed up by the International Military Tribunal for the Far East following conclusion of the war. The issue involved the delivery of a Japanese diplomatic note to the U.S. Government on the morning of December 7, 1941, scheduled to arrive thirty minutes before the Pearl Harbor attack. But due to delays in decoding the message, it was not delivered until one hour after the attack. Although the indictment filed in the Tribunal charged "offense against peace" and "offense of murder", the Tribunal waived ruling on these charges since the aggregate acts of aggressive war were already found to be "criminal in the highest degree."[12] Regardless of the legal ruling, the Japanese note only severed

diplomatic relations with the U.S. and certainly would not have provided sufficient time for warning. The actual declaration of war by Japan was not received until 66 hours after the attack.[13]

Since the end of the World War II, formal declarations of war have fallen into disuse. This is due in large part to a shift in the legal basis that nation states claim for resorting to war. Previously, states asserted and exercised their right to offensively wage war to settle a claim. During the past 40 years, however, (and since formalization of the United Nations charter) there has been a marked trend of nations claiming self or collective defense as their legal right to resort to war.[14] The generally acknowledged last formal declaration of war issued in keeping with Article 1 was a note sent to the Japanese Ambassador by Winston Churchill on December 8, 1941. After chastising the Japanese for "...wanton acts of unprovoked aggression committed in flagrant violation of International Law...," Churchill closed his note with, "I have the honour to be, with high consideration, Sir, Your obedient servant." Reflecting on the nobility he instilled during the formal passage into war, Churchill commented, "Some people did not like this ceremonial style. But after all, when you have to kill a man, it costs nothing to be polite."[15]

Interestingly, it was another prominent World War II figure, Joseph Stalin, who was perhaps the last world head of state to actually expect a formal declaration of war from an enemy. In the Spring of 1941, as German troops massed along the western border of Russia, Stalin was being warned by his intelligence network that an attack would be launched on June 20 and that "there would be no ultimatum or declaration of war."[16] But despite these highly accurate reports, Stalin trusted his personal agreement with Adolf Hitler and withheld mobilization of his troops for fear of provoking the Germans. Hitler, however, did not share Churchill's sense of European civilization and the Red Army was dealt a

stunning defeat.

Regrettably, the age of chivalry has long since passed and aggressor nations no longer feel honor bound (if they ever truly did) to formally declare their hostile intent. The Cold War, unstable Third World alliances, and calculated deception have created a world in which surprise and undeclared war now march hand-in-hand.

Concepts and Definitions of Surprise. In On War Clausewitz wrote that "surprise lies at the root of all operations without exception".[17] Clausewitz, however, believed that surprise was more relevant to the rapid and maneuverable world of tactics than to the realm of strategy where the "fog" and "friction" of war were likely to hinder its success.[18] But as we discussed in the opening chapter, the speed and range of modern weapons have elevated surprise in warfare to an issue of national survival. It is therefore necessary at this stage of military evolution to distinguish between strategic and tactical surprise. One of the best definitions is provided by Barton Whaley:

> By "surprise" I mean those instances where a sudden military action by one antagonist has not been predicted, much less anticipated, by its intended victim....
>
> "Strategic surprise" is distinguished from "tactical surprise" by the degree to which the military action affects the victim's mobilization, deployments, or grand strategy. In general, "tactical surprise" grades into "strategic surprise"...where the locus of command shifts from the narrow zone of battle with its field commanders to directly involve other regions and high military or political leaders.[19]

To this definition we might add the notion that, whereas strategic surprise impacts a nation's central war making capacity and threatens its viability as a sovereign state, tactical surprise is limited to specific military engagements in which the damage inflicted would have little chance of directly terminating the war. Strategic

surprise has the potential for war termination while tactical surprise is relevant to battlefield victory.

While contemporary scholars are inclined to define surprise as "...a sudden realization that one has been operating on the basis of an erroneous threat perception"[20] or "...an art form created through deception and bounded by rationality and misperception"[21], I believe that Thomas Schelling's "...surprise is everything involved in a government's...failure to anticipate effectively"[22] says it best. Moreover, it is obvious that any static definition of surprise will inevitably fail to capture its dynamic and multidimensional character. It is only in the examination of the characteristics of surprise that we comprehend the scope of the phenomena under study.

Characteristics of Surprise.

Confounds Expectations. By definition, surprise is the occurrence of an unexpected event. As such it falls outside the range of our expectations and defies the element of certainty we desperately seek in planning our military defense and charting our political course. Prior assessments, estimates, and assumptions are at once rendered obsolete by surprise and new plans must be hurriedly drafted to keep pace with the unfolding attack.[23] One military author commented, "It is a condition that is not normally anticipated and is rarely deterred. In the context of modern military history, surprise attack is, for the defender, a political-military problem that has not been solved."[24]

Economy of Force. Simply put, "surprise is sought because it reduces the costs of facing a fully alerted adversary and the chances of being pre-empted."[25]

It allows the aggressor to marshall his forces at a place and time of his choosing while forcing the enemy to waste his resources by deploying them in response to spurious information. As we noted in the introduction, once the decision for war is made, surprise is clearly the preferred attack option. In fact, the historical study of surprise reveals that the only occasions on which surprise is rejected is when a nation has opted for coercive diplomacy in lieu of immediate war, and overtly deploys its forces as a diplomatic signal. But within the normal framework of war, surprise is viewed as a scarce national resource that can only be exploited once. There are inevitable tradeoffs as to the optimum timing for surprise, but history indicates that "when stakes get vary large, a great deal of surprise can be expected."[26] There is also considerable evidence that since surprise reverses some of the perceived power imbalances between nations, it is frequently the strategy of choice by weaker nations or those which are equal or only marginally superior in force. Surprise is rarely considered by nations with a distinct advantage in power.[27]

The prime objective of surprise is to ensure that the potential victim's warning time will always be less than his mobilization or response time. If a military attack can be conducted within an opponent's response cycle, the chances for success are extremely high. Richard Brody writes,

> He may know the attack is coming, but he does not have the time to complete his countermobilization. In the 1973 war, the Israelis did have "warning" of the Arab attack. The problem, however, was that the warning time was only ten hours while the mobilization time of the Israelis was 72 hours.[28]

Inevitability: Surprise Despite Warning. A common fallacy today is the assumption that a surprise attack is one that is conducted as a "bolt-from-the-blue", that is, an attack which takes place without any prior political

crisis, military mobilization, or other warning indications. Historically, however, surprise attacks have grown out of a threatening political context and victim nations have all been aware of impending hostilities.[29] Yet surprise occurs. Richard Betts summarizes a rather remarkable finding:

> A striking lesson of history...is that nations often fall victim to surprise attack despite ample warning.
>
> ...there are no significant cases of bolt from the blue in the twentieth century. All major sudden attacks occurred in situations of prolonged tension, during which the victim state's leaders recognized that war might be on the horizon. Surprise succeeded despite ample political warning, and paradoxically, in some cases because of it.
>
> Pure bolts from the blue do not happen.[30]

Surprise attacks tend to ride the ebb and flow of a crisis and usually occur on the downside of the curve, during a period of relaxed tension when a settlement may be in sight. Typically, they follow false alarms and "the trend is that the greater the number of false alerts, the greater the chance of their being associated with surprise."[31] One of the reasons is that, as warnings begin to accumulate, the "cry wolf" syndrome sets in and the victim nation becomes desensitized to the possibility of immediate war. Additionally, the mounting number of threat indicators poses a problem for discerning signals from noise and for guarding against possible deception. In reflecting on the U.S. surprises at Pearl Harbor in 1941 and Cuba in 1962, Roberta Wohlstetter wrote:

> There was never a single, definitive signal that said, "Get ready, get set, go!" but rather a number of signals which, when put together, tended to crystallize suspicion. The true signals were always embedded in the noise or irrelevance of false ones.[32]

Contrary to popular assumption, then, forewarned is not always forearmed. We may well ask, If nations are not surprised by the forecast for war, what does surprise them? The answer lies in the impact and military effect of surprise.[33]

Shock Effect. One of the difficulties in grappling with the subject of surprise is its subjective nature and psychological underpinnings. Ultimately, a nation's perception of threat, interpretation of warning signals, and decision to respond are all shaped by the mental habits of its particular society and culture. Both the calculations for launching a surprise attack and for building a defense against surprise require a full appreciation of your own as well as your adversary's frame of reference. Israeli Lieutenant General Bar-lev correctly assessed the differences between surprise and other modes of warfare:

> Surprise is a paramount principle of war that belongs in the sphere of psychology. Unlike some other principles that depend on the means of war, surprise relies mainly on the conceptual ability to overcome the enemy's understanding of what is going on. It is directed against the psychology of the enemy with the intention of exploiting his weak points.34

Because the sphere of military operation for surprise is the human mind, the primary objective is to disrupt the thought process, disorient the enemy, and instill shock (with all of its ramifications) into every corner of his domestic, political, and military system. Author Amnon Sella writes:

> In general terms the intention of a surprise attack is to shock and paralyze the political-military system, in the hope that any recovery will at best be slow. If it is successful, the shock of the attack will make it difficult for those immediately involved to understand what is happening (that is to "read" the battle), it will confuse priorities and disrupt communications.35

Sella's case study of the German attack on Russia in 1941 is a good lesson in the intangible aspects of wartime command and control. In the first three days following the blitzkrieg the Russian Red Army quickly disintegrated in the face of severed communications, inadequate information, and crumbling authority. Officers, too, felt the strain. Sella writes,

> ...the commander of the W Front Air Force could not stand the shock of losing nearly all his planes and committed suicide on the first day of the war....The pressure of surprise combined with the clash of wills brought about unbearable tension. Pavlov, Commander W Front, could not recover from the first shock for a whole week. He lost control of his armies and issued conflicting orders which only increased confusion.[36]

Shocked by Hitler's reversal of their personal agreement and humiliated in front of his own general staff (while awaiting a German ultimatum that never arrived), Stalin was severely shaken and retreated to private quarters for over a week.

The shock of surprise attack often extends well beyond the battlefield and impacts the domestic and political life of a country. Following the successful Egyptian attack against Israel in 1973, public protest demonstrations and a national investigation committee resulted in the firing of several high ranking Israeli military leaders and Prime Minister Golda Meir and Defense Minister Moshe Dayan were forced to resign. The Falklands War also took a toll on British officials, many of whom were forced to resign for failing to anticipate or foresee the Argentinean invasion.[37] Cabinet and defense officials are particularly vulnerable following a sudden attack and it is not unusual for new administrations or governments to be formed in the wake of surprise.

Force Multiplier. Surprise clearly gives an advantage to the attacker by allowing him to choose the time, place, and method of attack and to mass his forces against his opponents weakness. If deception prior to the attack was even marginally successful the attack may be able to land unopposed or at least to meet with minimal resistance. Weaker nations are therefore able to engage stronger opponents because surprise reverses combat power ratios and negates numerical superiority in forces.[38]

The combat power of the attacking nation is also improved by the shock effects of surprise. Disrupted communications, for example, disorient a force by denying it access to battlefield intelligence and prevent effective use of its combat elements to repel the attack. Not only must the initial thrust of the strike be met but it must done while recovering from overrun positions. As a result the combat power of the aggressor nation increases almost geometrically. In summarizing the history of Arab-Israeli conflicts between 1947 and 1974, one author concluded that "the combat capability of the side achieving surprise was--on the average--almost doubled."[39]

Politically Destabilizing. Apart from prompting immediate leadership changes in the victim nation, surprise can also rapidly alter the perceived balance of power in any region of the world. This risks escalation of the conflict, especially when superpower sponsor nations believe their strategic interests are at stake. The difficulties in controlling surrogate countries is well documented and the potential for nuclear powers being inadvertently drawn into regional conflicts is very real.

Superpowers themselves must carefully calculate the strategy of first-strike and second-strike weapons. Surprise is especially important today because of its ability to threaten the retaliatory forces of the opposing nation and render deterrence meaningless with the turn of a key. Nuclear weapons have also brought surprise and preemption into a close relationship. When one nation reaches a generated alert posture the other nation will be confronted with the dilemma of awaiting possible attack or preempting in order to minimize potential losses. Thomas Schelling suggests that "We live in an era in which a potent incentive on either side--perhaps the main incentive--to initiate total war with a surprise attack

is the fear of being a poor second for not going first."[40] It is this condition of modern nuclear deterrence that has led nations to seek control of nuclear weapons rather than attempt to directly resolve the problem of surprise.

Increasing Swiftness. The birth of airpower, perhaps more than any other modern technological improvement, enhanced the effectiveness and lethality of surprise. Troops and supplies can now be transported across borders within hours and global communications provides nearly instantaneous command and control. The result is improved coordination of the attack and reduced warning time for the victim. Michael Handel of the Army War College writes:

> Surprise could now be achieved simultaneously on several levels: in timing, the place of attack, rapidity of movement, the use of new technologies delivery and weapons systems, the frequent appearance of new doctrines and innovative tactics to match the new technologies, as well as in the choice of the political-military goals for war itself...
>
> The possibility that an unanticipated attack could quickly determine the outcome of an entire war thus became a very serious threat to the survival of states...[41]

Surprise is becoming an even more potent weapon and much of the technology is well within reach of lesser developed countries.

In sum, surprise is as timeless as war itself. Military leaders have long practiced the art of surprise and deception in achieving battlefield victory and count it among their most trusted weapons. Various laws and codes of conduct for war have legally permitted the use of surprise so long as hostilities followed a declaration of war. That principle, however, has not been followed since 1941.

Until the turn of the twentieth century surprise had resided exclusively in the realm of field tactics. But the speed and range of modern weapons has created a

strategic category of surprise with potentially devastating consequences. Whether "tactical" or "strategic", surprise, at heart, is the occurrence of an event that is unexpected by its victim but well planned by its practitioner.

By definition, surprise confounds prior expectations of an opponent's behavior and succeeds despite prior warning. It provides the attacker with enormous advantages in economy force and dramatically multiplies the effectiveness of his combat power. Surprise rules by the impact of shock and destabilizes leaders of victim nations as surely as it disorients their army. Its speed is so swift and its dimensions of attack so diverse that an effective deterrent has yet to be devised. Importantly, as history demonstrates, once the decision for war has been made, surprise is inevitable. And despite advanced warning of an enemy's intent, surprise will likely succeed.

CHAPTER III

THE STUDY OF SURPRISE

Origins and Scope. The dedicated study and systematic analysis of surprise is generally acknowledged to have begun in 1962 with the publication of Roberta Wohlstetter's seminal work, Pearl Harbor: Warning and Decision.[1] In concluding her study of the surprise attack at Pearl Harbor, Wohlstetter sounded the theme for two decades of subsequent research:

> The history of Pearl Harbor has an interest exceeding by far any tale of an isolated catastrophe that might have been the result of negligence or stupidity or treachery, however lurid. For we have found the roots of this surprise in circumstances that affected honest, dedicated, and intelligent men. The possibility of such surprise at any time lies in the conditions of human perception and stems from uncertainties so basic that they are not likely to be eliminated, though they might be reduced.[2]

Since then an increasing number of articles have appeared on the subject but only a few dedicated authors have attempted book-length or dissertation-quality analyses.[3] Following Wohlstetter's landmark book the next major analysis of surprise was Barton Whaley's unpublished 1969 doctoral dissertation Stratagem: Deception and Surprise in War. Although available in limited numbers it consists of one volume of thorough research findings and another volume of detailed case studies. It is mandatory reading for any serious student of surprise. Michael Handel of the Army War College began publishing articles on surprise in the mid-1970's and to this day his detailed research represents the best available analysis of the 1967 and 1973 Arab-Israeli wars. His overall contribution to the theory of surprise continues to be immeasurable. Perhaps the number one book on surprise--exemplary for its well-written style and completeness of coverage--is Richard Betts' Surprise Attack: Lessons for Defense Planning published in 1982.

Betts analyzes surprise from every conceivable angle and his book is both an excellent introduction to the subject as well as a ready reference for anyone concerned with national security.

Whereas the previously cited research drew general conclusions from specific case studies, two recent works by Alex Hybel (The Logic of Surprise in International Conflict, 1986) and Ariel Levite (Intelligence and Strategic Surprises, 1987) attempt to establish a scientific framework for the study of surprise. In addition, both books present controversial perspectives. Hybel contends that surprise succeeds because the attacker is able to manage his victim's sense of vulnerability through deception and management of threat perceptions. His theory presupposes, however, that the aggressor has near-perfect knowledge of its victim's mental frame of reference, a capability which actually eludes most nations and, if it were readily knowable, would also be used by the victim to avert surprise. Levite on the other hand believes that previous surprise attacks have been successful because, contrary to popular opinion, nations did not have sufficient intelligence warning. His contention, however, overlooks the fact that not all warning is derived from intelligence systems (the news media and general public knowledge of the situation contribute greatly) and that the problem of attack warning will always be an incomplete puzzle--the "smoking gun" is never found until its bullet arrives on target.

The range of opinion in the field of surprise is quite pronounced. Differences range from Levite who states that "...it would have taken an incredible stroke of luck for the United States to obtain concrete advance warning of Japan's intention to launch the attack"[4], to Wohlstetter's conclusion that "never before have we had so complete an intelligence picture of the enemy."[5] But the research of all authors points to one inescapable conclusion: surprise follows a period of crisis or tension

between nations which, at a minimum, should have alerted the victim. As we observed earlier, nations are not surprised by the decision for war but they are surprised by the eventual attack.

Theory of Surprise. That surprise continues to succeed despite warning and past experience has led some scholars to conclude that "studies of military surprise have reached the point of diminishing returns."[6] Michael Handel believes the issue "concerns a general failure to apply our empirical knowledge and theoretical insights to the operational environment of decision and policy-making. We have clearly been unable to help decision makers make better decisions."[7] He continues:

> The theory of surprise...is therefore an excellent example of a theory which possesses strong explanatory power, but which forms a weak basis for prediction. If the validity of a theory lies in its predictive potential, then the theory of surprise has failed repeatedly...Even the most refined theory of surprise and the most highly organized intelligence services cannot guarantee against surprise.[8]

The repeated occurrence of surprise also tells us that history has been a very poor teacher. Richard Betts emphasizes that "there appears to be very little learning from experience. The same mistakes are made recurrently, despite postmortems that one would expect to help governments avoid the fate of earlier victims."[9]

At issue is the question of what we expect any theory of surprise to provide. Should such a theory help an aggressor better prepare his attack strategy, or should it assist the intended victim in averting surprise? Should theories of surprise be considered as subcategories of larger fields of inquiry such as deterrence theory, escalation control, or treaty monitoring and verification? Can theoretical analysis lead to comprehensive policy prescriptions for crisis management? Although the complete avoidance of surprise may never be possible, Alex Hybel believes it is feasible "to minimize surprise by understanding the circumstances under which it

might be sought, the variety of obstacles that must be surmounted in order to achieve different surprises, and the types of steps that must be taken to overcome such obstacles."[10]

The first step in attaining such a goal is to develop a framework for the systematic analysis of the factors contributing to surprise and predictive statements about those factors and the probability of surprise under various conditions of warning information, military readiness, and political climate. In a narrower vein, Hybel believes it should be possible to "construct a typological theory of surprise that identifies a finite number of patterns linking types of surprises intended with types of means employed."[11] But the study of surprise is necessarily historical by nature and analytical difficulties are quickly encountered when any attempt is made to reconstruct history, interpret the meaning of its component parts, and postulate a course of action for the future. Furthermore, each occurrence of surprise is unique and since the planning for surprise always attempts to circumvent any defensive hedges, it is difficult (if not nearly impossible) to accurately generalize about future contingencies.

Analytical Bias. In order to fully comprehend the study of surprise it is important to understand some of the inherent limitations in its research. Not only is such clarity required for the sake of accurate scholarship but the analytical problems encountered in the study of surprise are similar in nature to the problems encountered by warning officers and heads of state in evaluating threat information.

A Study of Success. At the outset it is good to realize that only successful surprise attacks are available for analysis. There is virtually no open

literature available on attempts at surprise that have failed or were cancelled prior to initiation (abortive surprise). Ariel Levite points out that "the failure to consider abortive surprise attempts, which unfortunately characterizes virtually the entire literature on strategic surprise, amounts therefore to more than mere neglect of a valuable research tool--a quasi control group."[12] A nation's past deliberations or plans for attack are rarely declassified for fear of upsetting diplomatic relations or revealing strategic inclinations. Only on rare occasions will articles appear by historians--working with recently declassified documents--on formulated but unrealized plans for war. Gordon Chang's recent article on President Eisenhower's consideration of using nuclear weapons against Communist China in the 1950s is one such example.[13] But even then it is only democratic governments that consent to such declassifications and only after a healthy length of time. We may never know what war plans were considered but dropped by closed, totalitarian nations.

Only one true case of unsuccessful surprise attack has been examined (the failed Japanese venture at Midway Island in 1942) and that review was performed by only one author.[14] Some consideration has been given to the U.S. discovery in 1962 of the Soviet missiles in Cuba as a case of deterred surprise. But the question remains as to whether the Soviets or Cubans were actually planning to immediately use the missiles to launch an attack or whether the missiles were simply increased ante in the Cold War poker game, perhaps as leverage against U.S. missiles in Turkey. The Cuban episode was selected by two researchers because, even though the crisis was defused and war averted, there is legitimate reason to believe that the Soviet missiles could have been detected much sooner than they actually were.[15] Alex Hybel writes, "...although Moscow failed with its strategy of surprise, Washington could not claim an across-the-board victory, because the missiles could have been identified earlier than October 14."[16]

Reconstructing History. In the aftermath of a surprise attack, victim nations typically convene investigation committees to explore the causes for the failure in warning and to fix blame or devise new defensive strategies. Testimony and political positioning during such investigations is often contradictory because determining ultimate responsibility for the debacle is a very sensitive issue. Indeed, one of the political aftershocks of surprise is the inevitable purge of government officials, intelligence chiefs, and military leaders. The impact on historians and scholars is also worth noting. In discussing the investigation which followed the Pearl Harbor attack, Roberta Wohlstetter records the following:

> Who saw what MAGIC and who gave what to whom on the evening of December 6 is a very touchy subject. The reams of testimony are loaded with contradictions. Accounts in the fall of 1945 almost invariably conflicted with accounts presented to earlier investigating bodies. In 1945 documents were withheld or had disappeared and memories had been "refreshed" or had totally blanked out, so that in some cases the main response to the insistent questioning makes a dull refrain: "I don't remember." Even senators intent on making political capital of the investigation got tired and let the matter drop.[17]

> Intelligence officers...might have been expected to claim that they had close liaison with all departments within their own service, or else admit to failure in one important aspect of their jobs.[18]

Another aspect of self-serving testimony is that the warning information received by military commanders prior to the attack is perceived as increasingly deficient as the post-attack investigation deepens. Wohlstetter states that "a most typical feature...is that each commander stresses the ambiguity of the signals he did receive and the unequivocal precision of the signals he did not receive."[19]

Retrospective Analysis. It has been said that "surprise attack... can be truly understood only in retrospect."[20] This fact introduces a perceptual bias that

tends to portray the sequence of events leading up to the surprise as inevitable. Scholars studying surprise always have the benefit of beginning with the actual attack and tracing the warning evidence backwards towards the initial decision for war. Since they possess foreknowledge of the outcome, the historical evidence appears to point unmistakably to the final conclusive event. But as Steve Chan notes, "...the difference between 'signal' and 'noise' becomes clear only in retrospect."[21] Intelligence officers and decision makers who participate in a crisis do not know the final outcome nor do they have at their disposal all the information ultimately available to historians. They must work with incomplete data, account for deception, and predict the future. Whereas the scholar begins with a known event and proceeds back to a definite beginning, policymakers begin with an ambiguous situation and proceed to an unknown future. Consequently, the perspective on any single piece of information will be altogether different for the scholar and the policymaker. For the researcher this introduces a "hindsight bias" that affects the analysis of surprise. In discussing experimental data on foreknowledge and human judgement, Chan finds the following:

> Reports based on hindsight knowledge consistently exaggerated the initial estimates in the direction of the correct answer, thus manifesting the "I-knew-it-all-along" syndrome...Thus, the reported outcomes appeared less surprising to the subjects in hindsight than in foresight.
>
> With regard to retrospective analyses of warning failures, hindsight bias can also prompt researchers to overemphasize teleological, deterministic interpretations of history...[22]

Evaluation Criteria. In planning a surprise attack the aggressor always has the option of cancelling or postponing his strike. One such reason could be the discovery of his plans by the intended victim. But it is always difficult to determine whether the attacker has stood down because the victim's intelligence system worked well or whether he altered his plans for other reasons. In the case

of Pearl Harbor, if the U.S. had detected the Japanese fleet and if the Japanese, aware of their loss of surprise, had elected to turn back, the U.S. early warning could be interpreted as either effective deterrence or a false alarm. Warning systems designed to deter aggression are difficult to evaluate because the attack option belongs to the aggressor. As Steve Chan explains,

> ...strategic warning is contingency forecasting. That is, the occurrence of the predicted event is not inevitable. In fact, the very reason for issuing a warning is to mobilize policy actions to avoid or minimize the chances of an event's occurrence, and failing that, to lessen its impact. Consequently, whether or not the predicted event comes to pass provides a poor basis for evaluating strategic warning.[23]

From the victim's perspective the problem of surprise attack is one of both intelligence warning and political response. Assessing whether the national disaster was due to an intelligence failure or a policy failure is often an impossible task. For these reasons it is difficult to establish any specific criteria or historical yardstick for evaluating the success of warning systems.

1969 "Stratagem" Study. Of all the studies performed in the area of surprise and deception one of the most significant is Barton Whaley's Stratagem. Analysis was made of 169 battles in 16 wars from 1914 to 1968, including 68 cases of strategic surprise and/or strategic deception.[24] It is one of the few quantitative studies of surprise and its major findings are summarized below.

Rate of Surprise. Over the 55 year period of study, strategic surprise and/or deception occurred an average of 1.3 times per year. If the only war years during that time are considered then the rate of surprise rises to 2.2 per year.[25] Compared to all other forms of military activity it is a very rare event and is treated like a scare resource.

Combat Environment. Whaley found that "...in the 20th Century at least, surprise is present in almost all (85%) of amphibious landings, but in only about half (58%) of the land and other environments."[26] A breakdown by mode of combat for both strategic and tactical surprise is listed below.

Combat Mode	Occurrences
Land	125
Amphibious	33
Air	4
Naval-Air	3
All naval	1
Airborne	1
TOTAL:	167 [27]

Mode of Surprise. The most frequent type of surprise is that which occurs with respect to the place of attack. The second most frequent is the time of attack. Whaley reports the following:

> The most common mode in which surprise appears is place (or direction), being present in 72% of all instances of surprise studied. Place is closely followed by time (66%) and strength (57%), trailed by intention (33%), and ended by style, which was present in only 25% of all instances of surprise.[28]

Military Success. Whaley also found a direct relationship between the intensity of surprise (that is, the number of modes of surprise used in an attack) and its overall success. Analysis of the five modes (place, time, strength, intention, style) revealed that "surprise very rarely appears in only one of its modes...surprise of place usually coincides with surprise in time or strength."[29] The most impressive finding of his study is the degree to which surprise contributes to meeting or

exceeding the objectives of the military attack:

> Out of 59 battles fought without any initial surprise, only 2% substantially exceeded its general's expectations while 60% ended in abject failure. Conversely, out of 50 battles where surprise was intense (rated 3 or more on a 0-to-5 scale), 34% far exceeded their objectives and only 2% ended in failure.[30]

Casualty Ratio. Besides exceeding expectations for military objectives, surprise also produces remarkable advantages in the number of casualties produced by the attack. Whaley describes his findings:

> ...the mean average casualty ratios favor the initiator of military operations by only 1-to-1.7 in non-surprise circumstances buy by a thumping 1-to-14.5 when surprise is present. That is, surprise is more than eight times as effective at producing casualties.[31]

The above ratios are inflated by a small number of surprise attacks that produced an inordinately large number of casualties When 5% of the highest and lowest casualty producing battles are eliminated, however, the data shows that "while the usual non-surprise operations produce casualty ratios of about 1-to-1, those with surprise yield ratios of 5-to-1. That is, surprise may be rather reliably depended upon to quintuple the enemy's casualty rates, relative to one's own."[32] Casualty ratios are also effected by the intensity or number of modes of surprise that are employed in the attack. The following breakdown depicts the relative advantage.[33]

Number of Modes	Mean Casualty Ratios
0	1: 1.1
1	1: 1.7
2	1: 4.5
3	1: 5.4
4	1: 4.1
5	1: 11.5

Surprise with Deception. The main thrust of Whaley's work is that surprise and deception are integrally related and that deception is far more important to the success of a surprise attack than is secrecy of the operation. Whaley found that "of the 61 cases of strategic military surprise that occurred between 1914 and 1968, no more than 4 can be exclusively or even mainly attributed to the initiator's passive security."[34] And he adds, "deception, not security, is the most effective guarantor of surprise."[35]

Deception is a relatively inexpensive operation that has "at least an 80% chance of yielding surprise."[36] The main advantage lies in that while it requires only a very low cost investment on the part of the attacker, it tends to induce the victim to wastefully expend valuable defensive resources against false threats. For example, from 1940 to 1942 Hitler's SEA-LION hoax tied up Britain's limited defenses against an invasion that was never planned. The result was that Britain misapplied approximately "25 divisions for about 18 months, a total misallocation of 38 division-years."[37] The deception employed by Britain against Germany was even more effective. From 1943 onward, approximately 10% of the entire German Army inventory was rendered unavailable for combat through purposeful deception.[38]

Timing. Whaley discovered that approximately "one-third of all military operations...are, for various reasons, unable to meet their deadline."[39] The results showed that 43.9% of D-Day deadlines were delayed, 4.9% were accelerated, and 51.2% remained on schedule. In short, punctuality should not be expected from the attacker.

No statistically significant correlations were found for attacks occurring on specific days of the week or in avoidance of special holidays (e.g. Christmas, Easter, etc.). The general trend, however, indicates that Sunday is the least preferred day of attack while Friday is the most likely.[39] No compelling military rationale is available to explain this finding.

Research Observations. During phase one of this research project I surveyed the literature cited in the bibliography and concentrated on the principle works of Wohlstetter, Whaley, Handel, Betts, Hybel, and Levite. Their work represents the main body of scholarly thought on the subject of surprise and the findings I now present are intended to serve as a basis for future research and theoretical analysis.

Study Boundaries. With the exception of volume two of Whaley's Stratagem, Levite's analysis of Midway, and Wohlstetter and Hybel's discussion of Cuba, virtually all studies focus on the role of surprise in the initiation of war or pre-war intelligence and diplomatic activities. None of the studies clearly examine surprise as it occurs during war. For example, the Chinese invasion of Korea in 1950 is well documented but MacArthur's surprise landing at Inchon is rarely mentioned. Hitler's Operation Barbarossa in 1941 is the subject of much intensive study but the Allied invasion of Normandy in 1944 is not.

One reason for this anomaly appears to be that some researchers do not believe there is any difference between the conditions of pre-war warning and trans-war warning. Some speculate that once war has broken out a country is automatically and continuously forewarned until war termination is reached. Furthermore, some writers believe that surprise which occurs during a war is strictly tactical and only of interest to field commanders. That reasoning, however,

is at odds with history which points to numerous examples of surprise occurring during a war, some of which have changed the entire direction and outcome of the war (strategic consequences).

Another possible explanation may be an academic perception that surprise during war only represents a natural flare-up of hostilities and, as such, is more properly the concern of escalation control theorists. Since the emphasis would be on conflict management rather than deterrence of war, trans-war surprise may be thought of as less consequential or as a topic to be pursued during cease-fire or armistice negotiations.

This finding is remarkable when we consider that all authors believe and state that surprise occurs after a period of tension or prolonged crisis. Presumably, a period of crisis or tension could easily involve a regional conflict, conventional war, or terrorist incursion. If we consider a likely scenario for World War III, it is a nuclear war that would escalate and grow out of a conventional entanglement in Europe, the Middle East, the Pacific, etc. Surprise which springs from limited conflicts, escalates, and entangles nuclear superpowers is the paramount problem. In this sense, trans-war surprise and warning should be a prime topic of study rather than a distant cousin.

Early Warning. When the subject of advanced warning of hostilities is discussed in the literature it is focused almost exclusively on strategic warning and only scant attention is paid to tactical warning. Except for Wohlstetter's review of air defense radars at Hawaii during 1941 and the potential warning time available had they been fully operational, there is virtually no historical research available on tactical warning. Before we develop this point further it is best to reconsider the Joint Chiefs of Staff definition for strategic and tactical warning:

Strategic Warning: Notification that enemy initiated hostilities may be imminent. This notification may be received from minutes, to hours, to days, or longer, prior to the initiation of hostilities.

Tactical Warning: A notification that the enemy has initiated hostilities. Such a warning may be received any time from the launching of the attack until it reaches target.[40]

Strategic warning generally involves the collection of intelligence data for the purpose of providing national decision makers with the most accurate and timely information available upon which to base policy decisions (which may include deployment of military forces). With respect to defense against impending attack its role would be to gear up a nation's military machine and to put that nation on a wartime footing. On the other hand, tactical warning is designed to alert a nation to the outbreak of hostilities and to activate or set in motion the procedures for rapid engagement of military forces. In short, strategic warning prepares a nation for war while tactical warning transitions a nation from peace to war.

The distinction between strategic and tactical warning is quite significant when we consider the prior research on surprise. In all of the studies there is a general consensus that various forms of communications, processing, and assessment difficulties plague the intelligence warning system. It is also evident that these deficiencies exist in intelligence services regardless of whether surprise occurs or not. In other words, intelligence shortcomings certainly contribute to the mishandling of information during a crisis, but their cause-and-effect relationship in the ultimate failure to avert surprise is less conclusive. As virtually all researchers agree, the true source of the problem is political response to strategic warning. The question for a potential victim is how to translate the available warning into an effective response. As Betts concludes, "...the primary problem in major strategic surprises is not intelligence warning but political disbelief."[41]

The problem of translating warning into military alert orders and mobilization appears to be the central issue. Yet there appears to be little dedicated research on this subject. The few articles that have addressed alerting and crisis management have primarily emphasized deterrence and escalation control and were not developed with regard to surprise attack. Since tactical warning is responsible, in part, for the activation of a nation's armed response to attack, its absence from the research literature on surprise is remarkable.

The issue becomes more urgent when we again consider the scenario of a protracted conventional conflict in which surprise erupts and threatens to escalate the crisis. During such a conflict strategic warning systems would be dedicated to supporting the field commanders' need for tactical intelligence and, given the range of wartime activity, would be heavily tasked. In all likelihood the responsibility for alerting a nation to trans-war surprise and mobilizing a response would then fall squarely on the shoulders of the tactical warning community. It is the nature of this specific problem that will concern the second half of this study.

Chapter Summary. The study of strategic surprise is a little over two decades old. The research findings to date have been insightful but their conflicting conclusions have failed to produce a unified theory of surprise or warning. The research itself must be approached with an awareness of the inherent analytical biases involved in the study of surprise. Although most authors are in agreement on the environment in which surprise occurs, there is unresolved debate on the extent to which intelligence and policy failures are intertwined and on how warning can be effectively translated into response.

CHAPTER IV

WHY SURPRISE SUCCEEDS

In March of 1941 a Joint Estimate report on potential threats to Hawaii reached the following conclusion:

> It appears that the most likely and dangerous form of attack on Oahu would be an air attack. It is believed that at present such an attack would most likely be launched from one or more carriers which would probably approach inside of three hundred miles.....
>
> In a dawn air attack there is a high probability that it could be delivered as a complete surprise in spite of any patrols we might be using and that it might find us in a condition of readiness under which pursuit would be slow to start....1

During the same year U.S. intelligence--though limited in overall capability by years of intrawar neglect--possessed the capability to break the top-priority Japanese diplomatic code known as MAGIC. The MAGIC decryptions meant that the U.S. "knew what a message said before its intended Japanese recipients."[2] As MAGIC was painting a picture of mounting tension between the U.S. and Japan, U.S. Ambassador Grew warned that Japanese involvement in a suicidal conflict could not be ruled out. In a November 25, 1941 meeting of the War Council, President Roosevelt stated that "we were likely to be attacked perhaps...next Monday, for the Japanese are notorious for making an attack without warning." Two days later, on November 27, a message was sent to Hawaii which began, "This dispatch is to be considered a war warning."[3] But despite the early military threat projection, the ability to read Japanese diplomatic traffic, the consensus of impending war by the highest levels of government and the issuance of a "war warning", the U.S. was caught totally by surprise on the morning of December 7, 1941.

The United States, however, is far from alone in falling victim to surprise despite prior warning and evidence of imminent attack. By mid-June 1941 the

German army had massed along the Western border of Russia and Stalin had received no less than 84 separate intelligence indicators, including a prediction that hostilities would commence on June 20 and would not be preceded by an ultimatum.[4] Stalin rejected the warnings and the Wermacht, without notice, rolled into Russia on June 22 (pre-attack sabotage activities did begin on June 20 as forecast). In October 1973 Egyptian mobilization for war had been detected by Israeli intelligence which issued a report on October 1 entitled "Movement in the Egyptian Army--the possibility of resumption of hostilities".[5] The report was ignored and five days later the Egyptians struck. Michael Handel writes:

> On the morning of the attack, Israel passed a warning to the Arab states...stating that she was aware of the situation and ready for war, and implying that she could not be surprised and that, therefore, any attack would fail.[6]

The Israelis, however, misjudged the time of the attack by several hours and suffered an embarrassing defeat.

The preceding examples again raise the question, How can a nation that is forewarned still be surprised? There is no simple, easy answer to this question but a review of the case studies reveals that the contributing causes tend to fall into three categories: political reluctance to act, intelligence processing and assessment problems, and active deception by the aggressor. As we explore each of these categories in detail we will gain an appreciation for the multifaceted nature of the problem and an understanding of why a solution may always elude us.

Political Reticence.

The Desire for Certainty. A former Director of the Central Intelligence Agency once lamented, "American people...expect you to be able to say that a war

will start next Tuesday at 5:32 p.m."[7] Since formal declarations of war are no longer issued prior to the start of war, nations continue to search for the one certain, unambiguous signal that will prove another nation's hostile intent. But in the age of Cold War secrecy, opposing nations must rely upon intelligence collection to gather evidence of preparations for war. Interception of communications and surveillance of military activities yields abundant information about the status of forces but human analysis is required to derive an approximate political cause. In November 1941, U.S. intelligence in Hawaii was aware that the Japanese embassy was burning its communications code books, but "code destruction in itself cannot be taken as an unambiguous substitute for a formal declaration of war."[8] As valuable as MAGIC decryptions were in terms of establishing the deterioration of diplomatic relations, there was no clear indication of Japanese intent and certainly no mention of Pearl Harbor as a specific target.

There are two problems with the question of certainty. First, the exact details of a strategic attack plan are certainly the most highly guarded and tightly held secrets of a state. Some countries have resorted to sending false war plans to their field commanders, transmitting the actual war plans only hours or minutes before the actual attack. Thus the definitive signal may never be available for intercept. Second, even if conclusive indications are available, a nation may be unaware of how to take advantage of its fortuitous warning. The classic case in point is the Japanese attack on the Philippines on December 8 (December 7 Hawaii time) 1941.

Following the air raid on Pearl Harbor the Japanese planned to attack other U.S. fortifications in the South Pacific including air fields in the Philippines. Besides awareness of the Japanese buildup in the Southeast Pacific (an area where the U.S. had originally expected the Japanese to attack), "news of Pearl Harbor was

received at Manila an hour after the Pearl Harbor attack, at least 3 hours before the planned Philippines attack, and some 9 hours before the actual Philippine attack."[9] Roberta Wohlstetter points out that such advance warning was of no advantage.

> When the Japanese bombers arrived shortly after noon, they found all the American aircraft wingtip to wingtip on the ground. Even the signal of an actual attack on Pearl Harbor was not an unambiguous signal of an attack on the Philippines, and it did not make clear what response was best.[10]

In many respects the American indecision over protecting the B-17s in the Philippines is an even more striking example of failed response in the face of warning than the attack at Pearl Harbor. (Yet, few researchers choose to investigate this case). Unequivocal warning signs are always desired but seldom available. Unmistakable signals, however, do not guarantee adequate response.

Overconfidence in Defense. Following their decisive victory in the 1967 Six Day War, Israel grew so confident in its defense posture that one reserve general was led to remark, "Now we are heading for a catastrophe: there are three men at the top who do not know what it means to be afraid."[11] During the interwar years Minister of Defense Moshe Dayan had calculated the balance of strength between Israel and Egypt and concluded that the favorable balance of Israel's military power "outweighs all other considerations and motives, and puts a break on the immediate renewal of hostilities."[12] That perception of military advantage, combined with the belief that 24 to 48 hours of strategic warning would be sufficient for defense, set the stage for subsequent political decisions which would betray Israel at the moment of truth.

In 1941 commanders at Hawaii were convinced that the very presence of the U.S. fleet and the Army Air Corps would be a decided deterrent against any Japanese adventurism. Admiral Kimmel believed that his fleet had been on a

"wartime footing" for some time and was prepared for any contingency. Confidence loomed so large that General Marshall sent a note to President Roosevelt in May that said, "The Island of Oahu, due to its fortifications, its garrison and its physical characteristics, is believed to be the strongest fortress in the world.....With this force available a major attack against Oahu is considered impracticable."[13]

Overconfidence in the preparedness of military defenses typically gives heads of state a false sense of security when assessing incoming threat warnings and, when the falseness of their belief is exposed, contributes greatly to the shock effect of surprise.

Strategic Assumptions and Focus. As with overconfidence in a nation's defense, failure to comprehend the mind set of the aggressor and overreliance on balance of force measurements tends to diminish the impact of strategic warning. One author notes that in the 1973 Yom Kippur war, "strategic premises smothered tactical indicators."[14] In reviewing the Barbarossa, Pearl Harbor, and Yom Kippur surprise attacks, Abraham Ben-Zvi concluded:

> In none of the cases did the tactical information from the field lead to a reassessment of strategic assumptions; and, when discrepancies resulted between tactical and strategic assumptions, the latter prevailed.[15]

One of the most difficult problems in averting surprise is developing a mental image of the enemy, what researchers refer to as ethnocentric bias. When assessing behavior from another culture there is a tendency to interpret that behavior in terms of the beliefs and characteristics of your own culture. As Michael Handel explains:

> ...perceptual errors are the result of either projecting one's own culture, ideological beliefs, military doctrine, and expectations on the adversary (i.e. seeing him as a mirror image of oneself) or of wishful thinking, that is molding the facts to conform to one's hopes.
>
> ...ethnocentric biases furnish powerful explanations for most strategic surprises.[16]

The biggest impact of ethnocentric bias is a failure to understand the enemy's calculation and assessment of the risks involved in a surprise attack. What may be an irrational, high risk scenario in one culture is a very rational, acceptable risk in another culture. On December 6, the eve of the Pearl Harbor attack, Secretary of War Henry Stimson wrote to the Chairman of the Senate Foreign Relations Committee, "I entirely fail to see the dangers...by a nation as powerful as ours against another nation as susceptible to them as Japan is in her present condition."[17] One year earlier in a letter to The New York Times Stimson declared that "all the evidence...indicates that they [Japan] are more afraid of war with the U.S. than anything else."[18] The problem lies in assuming that other nations share the same logic basis in calculating the risks, gains, and losses of military action. Indeed, as warnings grow more intense before the outbreak of war, there may be a greater inclination to project one's own cultural beliefs onto the enemy in order to preserve a sense of security in the face of ominous indicators. Ben-Zvi explains:

> ...on the eve of the surprise attack the decision-makers of the victim state attributed to their adversary their own line of reasoning. Overlooking the fact that the enemy was not necessarily guided by a similar train of thought, they failed to overcome the cultural boundaries that separated them from the conceptual world of their opponent.[19]

Another aspect of the perception problem is that nations not only fail to appreciate cultural differences in risk calculation, but they also fail to understand the nature of surprise and its optimal exploitation. As we discussed in chapter two, aggressor nations view surprise as a scare resource, a strategy that may only work

once. The enemy may thus be rationally waiting (by his standards) for the optimal moment to attack and it will probably be timed to coincide with his perception of when the stakes are great enough to warrant the risk of surprise. Until that moment, the attacker's behavior will consist of routine, low-stakes operations. For the potential victim, however, the rules of risk and surprise should warn that peacetime assumptions of behavior will always be contradicted. Robert Axelrod states that "a rule of inference about the other side's behavior which has worked in a series of low-stake situations may not work when the stakes are greater, precisely because the other side may have been waiting to exploit a standard operating procedure as a resource for surprise."[20] Failure to understand the rationale for surprise can be as lethal as failing to understand the enemy.

In addition to ethnocentric bias, the tendency to place too much faith in balance of force calculations can also lead to surprise. As accurate as national intelligence estimates may be of another nation's military capability, those peacetime assessments are immediately invalidated by surprise. Because surprise is a force multiplier that doubles the combat power of the attacking nation and produces nominal casualty ratios of 1:5 in favor of the attacker, pre-war force ratios are instantly irrelevant.

The inherent advantages of surprise often lead weaker nations to launch an attack, especially if their risk calculations are different or if they are only interested in applying political pressure through limited objective warfare. In either case, stronger nations often fail to appreciate the importance and significance of surprise for weaker states. Although history proves there is no correlation between military capabilities and political intent, research by political scientists indicates that a nation's assessment of another nation's intent tends to parallel the assessment of capabilities. The higher the capability the more serious the intent;

the lower the capability the lower the intent.[21]

Combined with cultural biases that obscure the view of an enemy's intent, force calculations frequently lead stronger nations to conclude that there is little likelihood of attack. The assumption, of course, is that opposing nations have reached the same force calculations and assess the risks by the same cultural standards. The history of surprise, however, points to the fallacy of these assumptions. As Ben-Zvi reports on the United States view in 1941, "American policy makers remained firm in their conviction that the Japanese decision whether or not to wage war would be based primarily on military considerations, rather than on nationalistic, ideological, or psychological grounds."[22]

Different Concepts of Victory. One of the most predominant misperceptions is due to the Western preoccupation with ambition and the assumption that most wars spring only from opportunism and national greed. But security and fear of loss can be equally powerful incentives for war. In the case of Imperial Japan in 1941, the consequences of maintaining the status quo were viewed as tantamount to national defeat. The Japanese decision to attack the United States was based on their view of limited objective warfare. Alex Hybel writes,

> Japan attacked Pearl Harbor not with the hope of defeating the United States militarily, but rather with the more limited objective of eliminating the United States Fleet so it could not interfere with the numerous amphibious operations necessary to conquer the "Southern Strategic Area."[23]

Tokyo assumed (and hoped) the U.S. would be willing to accept minimal losses and sue for peace in the Pacific.

The emergence of the Third World has also introduced new definitions of victory into the dictionary of warfare. The Western notion of war is based on Clausewitzian theory which postulates that war is a tool to achieve

political objections, an extension of international politics by other means. War is to be pursued until victory is achieved. But in a 20th century environment that includes mass communications, nuclear superpower sponsors, and international forums such as the United Nations, "victory" can now be achieved by simply out-leveraging another country in world opinion. Casualties on the battlefield are being augmented by televised images of war that arouse social protest and international debate and/or sanction. It is now entirely possible for a weaker nation to launch an attack, destabilize superpower interests, and gain world sympathy for their cause. The eventual settlement may fall far short of traditional "victory" but the attainment of strategic objectives is just as real.

In 1973, Anwar Sadat predicted that Israeli gains in the 1967 war could be reversed, borders redefined, and Israel still kept in check by a successful combination of surprise and manipulation of the superpowers. Alex Hybel analyzes the situation:

> The achievement of this more limited objective [return of territory gained in 1967] was no longer dependent on Egypt and Syria's ability to defeat Israel and reclaim the territories. Instead, it depended on their ability to destabilize the Middle East to the point where the situation became a threat to American-Soviet detente.
>
> Given this new rationale, the two Arab states did not need the resources to inflict a major defeat on the Israelis; they could launch an attack that had more limited objectives than those anticipated by Israel.[24]

Different concepts of victory now contribute to surprise by making its occurrence more likely for two reasons. First, war can be fought for limited goals with far less potential for severe consequences. Second, Third World nations do not need to build an overwhelmingly superior military force to be victorious. The combination of modern weapons and the advantages of surprise can produce a favorable outcome in a short period of time.

Irrationality. If national ambition and combat power ratios were the only issues involved in the decision for war, the outcome of any potential conflict could be computed well in advance, the "loser" could quietly capitulate, and far fewer wars would occur. But the decision for war is not always a rational one and such irrationality sews the seeds of surprise. As Winston Churchill observed of the Japanese attack on Pearl Harbor, "madness...is an affliction which in war carries with it the advantage of surprise."[25]

During the early stages of planning Hawaii Operation the Japanese prediction of success varied between 40% to 60% and the Japanese government was initially opposed to such a risky operation. But even in correctly calculating their overwhelming disadvantage to U.S. industrial strength, the Japanese found a rationale for attack. Richard Betts explains:

> The navy's General Staff did a study in August concluding that by using a surprise "ambush" strategy Japan might have a chance for victory as long as it had a 5:10 force ratio with the United States. Research told them the ratio would be 7:10 at the end of 1941, declining to 6.5:10 in 1942, 5:10 in 1943, and only 3:10 by 1944. The planners also appreciated the overwhelming American industrial advantage, assessing estimates of U.S. war potential as seven to eight times greater. In fact, Japanese estimates of U.S. aircraft production for 1941-43 were better than the American estimates! Chief of the Naval General Staff Osami Nagano told the emperor: "The government has decided that if there were no war, the fate of the nation was sealed. Even if there is war, the country may be ruined. Nevertheless a nation which does not fight in this plight has lost its spirit and is already a doomed nation."[26]

By Western standards of logic the Japanese calculations should have precluded any consideration of war. The Japanese, however, had a far different understanding of the deterrence equation. For example, the presence of the American fleet at Hawaii should have served as an effective deterrent against a Japanese attack. But when the U.S. fleet sailed from San Diego to Hawaii the

Japanese took a far different view. Admiral Yamamoto declared, "The present situation, i.e., that of the U.S. fleet in the Hawaiian Islands, strategically speaking, is tantamount to a dagger being pointed at our throat."[27] Cultural differences were only part of the Japanese pathology in 1941. There was also a national militaristic fever that culminated in irrational gambles in the Far East and elsewhere. This sentiment is evident War Minister Tojo's comment, "Sometimes a man has to jump, with his eyes closed, from the veranda of Kiyomizu Temple."[28]

Propaganda and the prospects for self-deception also figure prominently in irrational decision making. At the outset of World War II the German propaganda machine was extremely effective in scaring most of Europe into defeat before the German army ever arrived. Hitler's ploy of flying the same Luftwaffe aircraft repeatedly over target countries gave the illusion of a far larger air force than the Nazis actually possessed. But in addition to impressing Allied intelligence services the Germans also succeeded in duping themselves into believing their own falsified military force data. Such false confidence motivated them to undertake operations where rational judgement would have dictated otherwise.[29]

Besides the Japanese, history also questions the rationality of Germany's decision to open a second front against Russia and Egypt's gamble to attack a far superior Israel. In each instance the tide of battle ultimately turned against the attacker and they eventually lost the war. Although irrational war decisions do not bode well for future success, they are certainly beneficial in achieving surprise.

Doctrinal and Technological Surprise. As profound as the realization that ethnocentric assumptions are false is the discovery that a country has unexpectedly changed its military doctrine or has fielded a new, potent weapon.

This frequently represents a most significant form of surprise because the victim nation must completely reformulate its concept of aggressor strategy and tactics.

For over thirty years the Japanese had prepared for a decisive naval engagement in its home waters against the U.S. But in 1940 Admiral Yamamoto realized through the process of war gaming that a defensive naval battle gave the advantage of the initiative to the attacker. In addition, Yamamoto was also a firm believer in airpower. Together these two elements--one doctrinal, the other technological--eventually changed Japanese strategy and doctrine. The biggest surprise of all, however, was Yamamoto's success in convincing the Japanese government, a traditionally conservative group, to abandon its orthodox procedures. The U.S. had accurately predicted impending war and correctly assessed Japanese interests in the East Indies. What it failed to discern, however, was Yamamoto's new strategic doctrine, his threat to resign unless his plan was adopted, and the decision of the Japanese government to acquiesce to his desires for a surprise attack. As a result, the Japanese abandoned their traditional naval strategy of using battleships for homewater, bastion defense and adopted a new strategy of launching aerial strikes from carriers at a range well beyond the Japanese mainland. One of the reasons the U.S. viewed Oahu as a "bastion" is that they never considered the possibility of a Japanese air attack. All U.S. threat assessments pointed to a possible submarine based assault.

Examples of technological and doctrinal surprise abound in the history of warfare. The effective use of tanks in the German blitzkrieg against France and the Egyptian decision to achieve air superiority by using ground based missiles rather than fighter aircraft to counter the Israeli planes, are just two vivid examples. The key here is that new doctrine and new weapons go hand-in-hand. The capability of tanks was well known at the end of World War I but its doctrinal

potential wasn't discovered until the Germans perfected it. Conversely, the Japanese doctrinal tendency for surprise was well known but their use of aircraft carriers and the development of new aerial launched torpedoes for use in shallow water was unexpected. Richard Betts describes the doctrine - technology relationship:

> The most militarily telling innovations are those in which the development of a new possibility is coupled quickly with an appropriate strategic and tactical concept, and is applied promptly in battle before the enemy becomes aware of, absorbs, and adapts to it.[30]

Hope for Diplomatic Solutions. The most fundamental political reason why nations fall victim to surprise is their natural desire to avoid the unpleasant realities of war. No nation wants to believe that war is on the horizon and every effort is made to explore diplomatic solutions as an alternative to armed conflict. But in waiting for political deescalation a number of problems can arise to leave a nation more vulnerable than ever to surprise.

One aspect of doctrinal surprise is that, as we witnessed with Japan, there is much uncertainty and debate within the attacking nation itself. Regardless of how ruthless an aggressor may be, the decision for war is not reached lightly. Such deliberations are also known to the potential victim who hopes that more moderate elements of the opposing government will prevail. Wohlstetter writes, "In 1941...American experts...tended to credit the moderates in Tokyo with more influence than they actually had."[31]

In November 1941, as war appeared to be increasingly inevitable, Secretary of State Cordell Hull recognized the need to continue negotiations with the Japanese in order to buy additional time for an Army and Navy buildup. The Army felt it needed three more weeks and the Navy requested an additional three months. In a November 27 memo to the President, General Marshall and Admiral Stark

wrote, "The most essential thing now, from the United States viewpoint, is to gain time...Precipitance of military action on our part should be avoided so long as consistent with national policy."[32]

The 1973 Yom Kippur war is a classic example of a nation being surprised while waiting for a peaceful settlement. Several factors contributed to the Israeli dilemma. First, though aware that the Egyptians were massing their forces in a manner consistent with previous attacks, Israel intentionally avoided mobilizing its forces because previous false alarms proved costly and because they wished to avoid provocative action. Second, Golda Meir valued world opinion and her relationship with the U.S. more than the advantages which could have been gained through a preemptive strike. Third, Israel believed the Soviet Union would restrain its client state, Egypt, in order to preserve detente with the U.S. And fourth, Henry Kissinger, convinced of Egypt's sincere willingness to negotiate, convinced Meir to cancel any preemptive attack plans.[33]

Postponing military response while diplomats continue to negotiate is a dangerous time for any country. The obvious hope that the crisis can be defused will cause a nation to withhold action until the very last moment. An uncomfortable dilemma is also encountered between mobilization and standing down: provoke a previously uncommitted enemy to attack or stand down and suffer possible defeat.

The Impossible Becomes Possible. Patton once commented, "Never attack where the enemy expects you to come. It is much better to go over difficult ground where you are not expected than it is over good ground where you are expected."[34] This simple statement summarizes a key maxim of sudden attack: decisive surprise can be achieved by accomplishing what the victim believes to be

impossible. Wermacht General Erfurth wrote, "The idea that something 'cannot be done' is one of the main aids to surprise....Experts tend to forget that most military problems are solvable provided one is willing to pay the price."[35]

History is replete with examples of commanders overcoming insurmountable odds and taking the enemy by surprise. MacArthur's landing at Inchon, the Allied invasion at Normandy, and the Japanese attack at Pearl Harbor are but a few of the celebrated long-shot attacks that achieved decided success. Indeed, planning the unexpected becomes the expected in surprise operations. For example, while reviewing their fleet transit route to Hawaii, Japanese Commander Genda told Vice Admiral Nagumo, "If you think the northern route is bad, then you must remember the American admirals will think the same."[36]

This leads to a situation where operations which are deemed to be high risk because of their seeming impossibility actually become, in an overall sense, less risky due to their advantage in surprise. Michael Handel refers to this condition as a paradox of surprise: "The greater the risk, the less likely it seems, and the less risky it becomes. In fact, the greater the risk, the smaller it becomes."[37]

Attack Outpaces Response. As we discussed earlier, one of the characteristics of surprise is the goal to conduct the attack within the victim's response cycle. When case studies of surprise are examined we discover the universal maxim that attacks always unfold faster than the ability of the victim to adapt to them. The attacker has the advantage of knowing what his plans are but the victim must read his signals amidst deception, communicate the attack warning to higher headquarters, determine an appropriate course of action, and respond with the correct level of military force. Richard Betts points out, "Even if it takes only a reasonable time to form a consensus that war is coming, this is insufficient

if it is less than the time the enemy needs to complete preparations."[38]

While the victim is deciding on a course of action the attack continues to evolve and one of the first targets will be the victim's communications network. Deprived of accurate information on the unfolding attack the victim must make his decisions with incomplete information. Amnon Sella describes the German attack on Russia in June 1941:

> ...the Germans concentrated their efforts on eliminating communications between HQ and the troops...German air-raids and subversion achieved a chaotic confusion in the flow of information between the centre and the front...no one had either a complete or a true description of the situation along the whole front.[39]

Defenses will always be stressed to keep pace with the evolving attack. The essence of political response to a surprise attack must be quick adaptation to ambiguous signals and partial information.

To summarize the political reasons why surprise succeeds, we see that a nation must first overcome the inbred confidence of its defense establishment to withstand any attack and bypass preconceived notions about the enemy in order to accurately assess the threat. This reassessment of the enemy, however, is made more difficult by different, non-Western definitions of victory, unexpected changes in military doctrine, and potentially irrational decision making on the part of the enemy. Lastly, nations must understand that their natural incentive to delay the outbreak of war increases their vulnerability to surprise, that the enemy will probably attempt to accomplish the impossible, and that the eventual attack will outpace their ability to process information and determine an appropriate response. We turn now to the second category of elements that contribute to the success of surprise, the workings of intelligence systems in providing strategic warning.

Intelligence Collection and Assessment. The classic dilemma faced by the intelligence community is captured best in this anecdotal story told by an analyst who served in the British government from 1903 to 1950: "Year after year worriers and fretters would come to me with awful predictions of the outbreak of war. I denied it each time. I was only wrong twice."[40] The central problem involves the relatively rare occurrence of strategic surprise (1.4 times per year from 1914-1968) and the relative stability of deterrence despite numerous world hot spots. As Richard Brody explains:

> Even in such a volatile arena as the Arab-Israeli conflict, the prediction that a war will not break tomorrow would have been accurate more than 99.974 percent of the time since 1949. Unfortunately, such a system would have missed the three major wars which did occur in 1956, 1967, and 1973 and which notably all started with highly successful surprise attacks.[41]

The central paradox of intelligence is that it is designed to detect preparations for war and prompt mobilization of defense forces in order to deter war. But if conflict fails to break out, then it is difficult to determine the accuracy of the intelligence forecast. Michael Handel refers to this as the "self-negating prophecy" of intelligence: "Information on a forthcoming enemy attack leads to countermobilization which, in turn, prompts the enemy to delay or cancel his plans. It is thus impossible--even in retrospect--to know whether countermobilization is justified or not."[42] And as Richard Brody points out, "...if our intelligence had warned of the impending Japanese strike, it would have been equally mistaken. The Japanese would then simply have turned back claiming an exercise and the warning would have been registered as a false alarm."[43]

The task confronting the intelligence community is a difficult one for theirs is the job of producing certainty from uncertainty, resolving ambiguous signals into a

coherent world picture for top level decision makers. Discerning relevant signals from irrelevant ones (signals amongst the noise) is complicated by the inherent uncertainty of enemy planning itself. The enemy may possess several valid attack or policy options and decide only at the last moment which one to implement. Up until the actual attack, all signals may be equally valid. Handel explains:

> One reason that we rarely obtain clear signals from the enemy is simply that few such signals exist. Even the enemy's military and political elite is uncertain about its own goals; more than one set of military, national, and political aims may, in fact, coexist. For example, until September 1941, the Japanese had not decided whether to attack Russia or to turn south toward Southeast Asia....Prior to the Yom Kippur War of 1973, the Egyptians and the Syrians found it difficult to reach an agreement on the D-day and H-hour for the attack. The timing was finally determined on October 3, only three days before the outbreak of war.[44]

The net effect is that, as Luttwak and Horowitz state, "There is no difference between 'signals' and 'noise'--except in retrospect. There is no true and false data; in a deeper sense all strategic warning data is noise."[45]

Indications and Warning (I&W) data includes such things as troop deployments, military maneuvers and exercises, communications traffic, cancellation of leaves, etc.[46] Regardless of the intensity of activity in these categories a nation can only discern that an opponent is preparing for war, not that he intends to start a war. Determining which signal or set of signals constitutes a declaration of war is virtually impossible and the political dangers of erroneous interpretation dictates extreme prudence. The very best a nation can hope for from I&W data is to "determine the opponent's position on the decision stairway toward action."[47]

Despite the growth in intelligence systems by all countries over the last two decades, there is a serious discontinuity between the availability of intelligence information and the nature of the subsequent political decision. When we

previously examined the political elements of successful surprise we noticed that intelligence data frequently fails to impact on the strategic assumptions of the decision maker. In this section we will explore the dysfunctions of the intelligence machinery that contributes to this situation.

Enemy Indecision. "What the enemy himself does not know can scarcely be determined by one's own intelligence services."[48] Given that the aggressor always has the option of changing his plans before the attack, the victim is confronted with an inherently uncertain situation, regardless of how good the intelligence data. Barton Whaley's research data (cited in Chapter III) illustrates that the attacker changes his D-Day approximately one-half of the time due to such factors as bad weather, incomplete preparations, or desire to manipulate the victim's mind set. In November 1941 the Japanese government issued supplemental orders to its fleet instructing them to turn back if negotiations with the U.S. proved successful.[49] Pearl Harbor could have been cancelled by Japan on 24 hours notice.

Adolf Hitler was notorious for postponing an attack, stressing the opposition's nerves, and then executing a precision surprise attack:

> ...attacks were planned and then cancelled in November 1939 and January 1940, while the attack was finally carried out in May 1940. Before each of the planned offensives, a number of timely and, in retrospect, reliable warnings were received by British and French intelligence. Yet the Allies lost their confidence in some reliable sources of information...because the predicted attacks did not take place. By 10 May, the day the Germans at last launched their offensive in the west, the Allies were completely surprised despite the multitude of warnings they had received but brushed aside.[50]

Intelligence information may in fact be one hundred percent accurate but if the aggressor chooses to change his plans the credibility of the warning system is suddenly in question.

Pieces of the Puzzle. Intelligence data is gathered from several different sources (e.g. signals, communications, human reports, etc.) and tends to arrive at different locations, at different times, and with different priorities. The information tends to be spread out among different systems and agencies and works its way towards the central point of decision at different speeds. Steve Chan writes that "In the real world of strategic analysis, warning signals are usually scattered across individuals and bureaucratic units. They are also introduced incrementally over a long period."[51] In the case of the warning signals received prior to Pearl Harbor:

> ...no single person or agency [in Washington, D.C.] ever had at any given moment all the signals existing in this vast information network. The signals lay scattered in a number of different agencies; some were decoded, some were not; some traveled through rapid channels of communication, some were blocked by technical or procedural delays; some never reached a center of decision.[52]

Apart from the bureaucratic delays encountered in receiving warning information, there is also a perceptual problem of trying to assemble a unified picture of the threat from individual pieces that arrive at different intervals. Bearing in mind the earlier signal-to-noise problem, the analyst is not only working with incomplete information, but also information which may not be relevant to the issue at hand. Social scientists have assessed the impact of this perceptual puzzle on human judgement:

> Research on human judgment has shown that subjects given only relevant information make very different estimates as compared to those given both relevant and irrelevant information...The latter consistently made distorted judgments, even though they possessed the necessary evidence for arriving at the correct solutions. It is important to stress that the irrelevant information in this case did not contradict the relevant information; it was merely not pertinent to, and therefore useless for, the judgmental tasks the subjects were asked to perform.[53]

For assessing a rapidly evolving surprise attack or the final preparations on the eve of war, the analyst must not only complete the puzzle with fragmentary data but he must also realize that the data may or may not reflect actual enemy plans. The sequential receipt of data may create a false picture of the true attack plans which are unfolding in accordance with an internally ordered, prearranged scheme. One researcher noted that "...the physical events will be observed chronologically while the enemy's plan will be ordered logically."[54] In addition, "Acts that are part of different plans may be temporally contiguous and acts that are part of the same plan may be quite separated in time."[55]

Hypothesis formation and threat assessment is therefore a very uncertain enterprise. Predictions based on indications and warning data are usually cautious and heavily qualified.

Data Collection. The process of sensing, intercepting, and otherwise gathering data is referred to as intelligence collection. Given the number of systems dedicated to that task today there is an abundance of information available for analysis. Sometimes, too much. Betts reports that during the 1973 Arab-Israeli war, "...an overload of data threw the Defense Intelligence Agency into chaos, and collection of technical intelligence continued to be 'untimely as well as indiscriminate'."[56]

As prolific as intelligence collectors may be, they too are finite in number and constrained in growth by limited budgets. Limited collection assets are devoted to high priority targets which for the nuclear superpowers usually means monitoring themselves for treaty compliance, technological breakthroughs, etc.[57] When intelligence assets are spread thin the opportunity is always present for non-targeted regions such as Third World states to emerge as "surprise" problem

areas. A greater problem may be encountered during periods of multiple crises when conflicts erupt in several different parts of the world at the same time.

Once war breaks out virtually all intelligence from that region becomes tactical in nature as the focus shifts to combat support.[58] It may be difficult at that point for strategic warning systems to provide both tactical indicators from the battlefield as well as indications of other strategic preparations for war. Then, too, there is always the question of how well the entire system will work when deterrence finally fails. Betts recounts the events during the August 1968 Soviet invasion of Czechoslovakia:

> Intercepts that would have helped keep intelligence up-to-date were delayed in processing for several days, and reports from clandestine intelligence sources were slow to arrive....because Warsaw Pact units undertook final movements with nearly perfect radio silence, the "jump off" was not detected by normal NATO monitoring methods. General James H. Polk, commander of the U.S. Seventh Army, first heard about the attack from an Associated Press dispatch from Prague, and President Johnson was informed, not by Western intelligence, but by Soviet Ambassador Dobrynin....When the Pact struck, the three top NATO officials were away from their posts .... Many lower-level officials were traveling or enjoying a night out, some not even having left word where they could be reached...."one important Western information centre was receiving official intelligence reports up to 12 hours behind news agency reports from the Czech capital". Alliance leaders were notified of the invasion by Moscow, not by NATO headquarters.[59]

Intelligence collection by itself does not guarantee the smooth flow of warning indicators, regardless of how voluminous the data or how varied the sources. Legitimate questions should be raised about the appropriate interaction between strategic and tactical warning sensors once war breaks out. Are strategic warning systems overtasked by attempting to support tactical intelligence requirements of field commanders? Can tactical warning sensors, which produce data that requires minimal human interpretation, be designed for tactical battlefield applications?

Conflict of Secrecy and Action. Information provided by intelligence systems is generally highly classified in order to protect the sources and methods involved in collection. This obvious and justifiable need for security, however, produces two interesting problems. First, some information is so highly classified that only a few top members of government have access to it and they must usually commit the information to memory. Such was the case with the MAGIC traffic in World War II. Access to MAGIC was limited to nine U.S. officials including "President Roosevelt; the Secretaries of State, War, and the Navy; and the Directors of Military and Naval Intelligence."[60] That MAGIC was never reported to have been compromised is a tribute to the integrity of the security measures. But, as Roberta Wohlstetter explains, it nevertheless contributed to erroneous estimates:

> ...no one ever had a chance to sitdown and analyze the messages over a period of time, to check trends, to make quantitative estimates and comparisons....Most readers scanned the messages rapidly while the officer in charge of delivery stood by to take the copy back again.
>
> The use of this top-secret material in 1941, then, had to be impressionistic.
>
> Those who saw it had it in hand only momentarily, and the brevity of their examination naturally limited their analysis and inference.[61]

Second, intelligence sources are frequently protected at the expense of absorbing an enemy attack. During World War II Winston Churchill, aware that the Germans were planning to bomb Coventry, chose not to warn that city in order to protect the security of the Ultra signals intelligence system. A similar concern is expressed today over use of the Direct Communications Links (DCL or "Hot Line") during times of crisis. There is theoretical concern that acknowledgement of certain details about the crisis over the DCL will compromise important intelligence resources. One group of researchers speculate:

> The costs and risk of further escalation in such situations will have to be weighed against the risks of revealing intelligence sources and methods or of conveying sensitive information that could later be used to the advantage of an adversary.[62]

One would certainly think that if decision makers erred that it would be on the side of peace and crisis stability. But in a pluralistic decision making government such as the U.S., all interests (including security) would certainly be represented in times of crisis. A similar problem could also be encountered on the other side of the Hot Line where Soviet security services could tightly control the release of any information to the West.

False Alarms and Desensitization. Given the likelihood of changes to D-Day schedules and other reports that simply prove to be false, there is a constant problem of false alarms in any warning system. This complicates the already troublesome signal-to-noise problem by desensitizing warning officers and leads to the "cry wolf" phenomena which undermines confidence in the warning system.

During the Korean war there were numerous reports--such as the United Nations Command intelligence summary and CIA reports--which warned that "substantial Chinese forces were entering or had already entered North Korea."[63] But such warnings were lost in the deluge of other field reports which were becoming increasingly routine. In 1949, for example, there were 874 reported border violations and, in 1950, numerous other skirmishes all along the frontier.[64] When the North Koreans finally did attack on June 25, 1950, surprise was total and complete.

Numerous historical examples illustrate the problem when too many false reports are received and further reports are ignored.

> ...the German attack on Norway in April 1940 preserved surprise because the Norwegian foreign minister had been immunized against the indicators. Before Christmas, and again February, he had received warnings of impending German attack, and nothing had happened....
>
> The Dutch also failed to react to inside information. Colonel Hans Oster, deputy chief of German counterintelligence and a clandestine opponent of Hitler, had told the Dutch military attache in Berlin each time the attack was planned. But Hitler postponed the attack numerous times between November 1939 and May 1940, so the Dutch were 'overwarned,' and Supreme Commander General I.H. Reynders ignored the reports. When Oster gave another warning ten days before the actual attack, the attache did not even pass it on to The Hague.[65]

False alarms pose a twofold problem in that nations often overcompensate for their occurrence and aggressor nations, skilled in deception, can manipulate the false alarm cycle to desensitize a victim and achieve surprise.

Political Disbelief. Although intelligence agencies are established to serve as the official eyes and ears of a nation, many heads of state insist on being their own intelligence officers. Hitler was famous for rejecting intelligence which did not suit him and Moshe Dayan ignored a key estimate just six days before the Yom Kippur war. Joseph Stalin had developed an excellent espionage network which provided him with highly accurate and timely predictions of German activity. Yet Stalin mistrusted those reports and frequently purged intelligence officers who disagreed with him.

More subtle considerations also come into play. One researcher found a 'strong correlation between the degree of their [decision maker] familiarity with the source of information...and the level of their confidence in the intelligence warning.'[66] Political theorists George and Smoke suggest that a decision makers predisposition to not act in response to intelligence indicators will negatively affect their receptivity to threat warnings.[67] Political preoccupation with other theaters of operation can also impede response to warning. In the Fall of 1941, U.S. attention

was focused on Europe and efforts to aid Britain. Wohlstetter writes:

> The assumption was still, as Marshall had put it much earlier, "If we lose in the Atlantic, we lose everywhere." This meant that the Far East simply had to stay quiet. The power of this wish was certainly as effective in limiting the range of our Far Eastern policy as it was in delaying our response to the last-minute military signals.[68]

Political receptivity to warning and predisposition to action are two barriers which intelligence officers must overcome in establishing their case for a valid threat warning.

Estimations and Threat Perceptions. Another perceptual aspect of the intelligence problem is the tendency to define the relevant data in terms of initial, apriori beliefs. Researchers have found that "...people's judgments are affected by the initial definition of a problem" and that "people require weightier evidence before rejecting their expectations than retaining them." The research concludes, "If the initial feedback confirms a hypothesis, experimental results suggest that people tend to hold on to this hypothesis even though subsequent evidence overwhelmingly denies it."[69] The implication is that, given political dispositions to avoid war and to wait for a political solution, threat warnings must achieve a much higher standard of credibility and believability than other information. This usually requires information from multiple sources to converge on the same conclusion at the same time. Since intelligence data works its way through the system at different speeds, it is very difficult for a threat warning to reach the point of "critical mass" where well anchored strategic assumptions are finally unseated.

It has also been said that "Intelligence agencies tend to report what they think their leaders want to see or hear; The decision-making leadership see or hears what it wants, no matter what intelligence is reported."[70] This is particularly

true for national intelligence estimates which frequently achieve consensus through compromise. The ultimate bureaucratic standard today is that of a coordinated, agreed to position by all participating agencies. To achieve that level of agreement, however, compromise is required on many points which may be accurate but controversial for one reason or another. Such consensus seeking, however, should really be the antithesis of the intelligence process. Thomas L. Hughes observed,

> Consistency, after all, is not a goal of intelligence....The intelligence community is not the Supreme Court....intelligence is supposed to provide current unimpeded judgments. As a vehicle for ventilating a variety of viewpoints, the intelligence process should be highly suspicious of consensus.[71]

Perception and estimation of threat often gravitates toward initial, preconceived beliefs and represents the lowest common denominator of an agreed to threat. Since threat estimates are used as a basis for formulating a nation's defense posture, significant misconceptions at the outset could lead to inadequate force levels.

Expectation and Perception. As an extension of our previous discussion, it is worth noting that prior expectations of enemy behavior influences perceptions of events and interpretations of warning notices. At Pearl Harbor the level of concern over a possible Japanese attack was very low. Consequently, on the morning of the air raid the radar operator initially interpreted the formation of unknown targets on his screen as B-17's arriving from the U.S. Reports of submarine activity around Hawaii were given low priority handling and, until bombs actually began exploding on Oahu, the dive bombing aircraft were believed to be young pilots joyously violating flight rules on a Sunday morning.[72]

The predominant threat to Hawaii was believed to be sabotage which might be committed by the Island's large Japanese population. Hence, when

Hawaiian intelligence received intercepted reports of a Japanese request for locational data on U.S. ships at Pearl Harbor, they assumed it was part of a "bomb plot."[73] Furthermore, the final November 27 war warning which alerted Hawaii to "hostile action at any moment" was interpreted by Army intelligence as a sabotage alert.[74]

As scientific research indicates, people tend to see what they want to see. The same holds true for intelligence warning messages which, despite their accuracy and timeliness, may not be able to penetrate human preconceptions.

In sum, intelligence collection and assessment contains inherent elements of uncertainty that precludes predictions of unambiguous warning. Intelligence gathering is effected by the state of the enemy's decision process (which can change unexpectedly), arrival of different indicators at different times, and an abundance of signals that may overwhelm his system or desensitize his warning officers to any real threat. A few of the deficiencies may be technological but, since intelligence is a distinctly human endeavor, most of the problems appear to be perceptual - either on the part of the intelligence analyst or the national decision maker. In this chain of activity it would be difficult to find a "cause" for surprise. But suffice to say these factors certainly contribute to the overall success of surprise, especially when an enemy is actively working to exploit and deceive the early warning process.

Deception. This third and final element of activities that contribute to the success of surprise differs from the previous two in that it focuses on the aggressor rather than the victim. It pertains to strategies and techniques for leading the victim down a false path and for exploiting his preconceptions. The attacker realizes that, in this day and age of omnipresent reconnaissance and espionage, that

secrecy is a perishable commodity when mobilizing troops for a surprise attack. Deception is designed to compensate for that erosion of secrecy, to lead the future victim to misinterpret what he sees and hears. Deception does not need to be one hundred percent foolproof to be effective. It need only succeed and prevail long enough for the attacker to achieve his objectives before the victim can respond.

"Stratagem" Research. In Barton Whaley's milestone work, Stratagem: Deception and Surprise in War, we are treated to an indepth analysis of the interplay between an enemy's deceit and his strategy for attack. Whaley notes that historical studies of deception are rare and that analytical studies of the subject are virtually nonexistent. Knowledge of deception, like surprise, was passed from one generation of field commander to the next through oral history and battlefield tactics manuals. A formal doctrine of deception was never developed. Its role in early warfare was impromptu in nature. A senior military officer once commented, "deceptions...for the ordinary general were just witty hors d'oeuvres before battle."[75]

But as surprise grew in importance, so did deception. And as modern technology began to penetrate the cloak of secrecy surrounding military operations, it became necessary to develop alternate strategies for planning and executing surprise. Attempts at good security were often countered by even better enemy intelligence gathering--leaks of information became inevitable. Whaley found that in only 7 out of 54 cases of surprise was security the determining factor. In all other cases it was deception that "aided the achievement of strategic surprise."[76] Strategies for preserving the war plans of a nation became so important that Winston Churchill was moved to remark, "In war-time, truth is so precious that she should always be attended by a bodyguard of lies."[77]

Sun Tzu wrote, "All warfare is based on deception."[78] And deception, like surprise, has developed its own disciplined school of study. The body of research in the field of deception is considerable and lies beyond the scope of our task here. But for the sake of illustrating its relationship to surprise attack we will examine deception as it is discussed by the theorists of surprise. There are two apparent strategies for the employment of deception that we will consider. One is to present the victim with false alternatives and the other is to exploit his preconceptions.

False Alternatives. In presenting false options the goal is to create additional ambiguity for the victim. As the Elder von Moltke once said, "Gentlemen, I notice that there are always three courses open to the enemy, and that he usually takes the fourth."[79] Whaley's research bears out von Moltke's lament:

> The most elegant stratagem is that in which the victim is offered only a pair of alternatives to choose from and then made to pick the wrong one.
>
> ...the best stratagem is the one that generates a set of warning signals susceptible to alternative, or better yet, optional interpretations, where the intended solution is implausible in terms of the victim's prior experience and knowledge while the false solution (or solutions) is plausible.[80]

One of the most remarkable findings of Whaley's study is that deception always seems to work, regardless of how knowledgeable, skillful, or sophisticated the victim may be. And regardless of how often deception is employed, it continues to work.

> One of the major unexpected findings of this study is that only a small repertoire of stratagems are needed to insure surprise after surprise. In other words, the mere fact that most specific ruses may become familiar to the victim does not necessarily reduce much less destroy their efficacy.[81]

Forms of falseness which may be detectable by the victim historically include sending of false war plans to field commanders, posturing of front line forces in a defensive position, and continuing diplomatic negotiations for the sake of allaying the victim's fears. In 1941 the Japanese sent war plans for Chinese targets to their field commanders but then changed the intended target to the Philippines and Malaya just before the attack.[82] Also in 1941, the Germans placed their troops along the Russian front in a defensive stance to protect against a possible Russian preemptive attack.[83] Their defensive posture, however, confused Russian intelligence and confirmed Stalin's theory that Hitler was only using his forces for increased bargaining power. And on December 1 of that same year, the Japanese instructed their diplomats to continue negotiations to "prevent the U.S. from becoming unduly suspicious."[84]

Exploiting Preconceptions. The anchoring of a nation's beliefs in preconceived notions--along with the difficulty of perceiving another culture's mind set--not only biases interpretation of intelligence data but also provides the enemy with fodder for deception. Knowledge of the enemy can be a double-edged sword: if the enemy knows what information an opponent possesses about him he can manipulate the victim's perception of that information to his advantage.

Under this strategy the attacker attempts to ascertain the victim's preconceptions and works to ensure that those beliefs remain intact.[85] This, in turn, bolsters the victim's confidence in his intelligence service and reduces his anxiety over a possible attack. The paradox for warning systems is that as their techniques improve for gathering information on the enemy, the opportunities for deception and surprise increase accordingly. As Robert Axelrod observes, "The

reason is simply that the more a side can observe, the more things can be presented as patterns of behavior in order to build up a false sense of confidence in the ability to predict."[86]

Deception, then, is a low cost way to induce the victim into wasting his valuable defensive resources on false enemy war plans or on his own false assumptions. While most techniques of deception appear to be fairly crude and easily detectable when examined in peacetime, their effectiveness improves dramatically during periods of conflict and tension. As British author R.V. Jones commented, "...it is surprising how effective deception can be in the stress and speed of operation."[87]

Chapter Summary. The true "causes" of surprise attack lie in the aggressor's initial motivation for war. But his successful implementation of surprise rests on a combination of the victim's political receptivity to warning and intelligence gathering capabilities, and on his own ability to conduct successful deception prior to the attack. Given the nature of political decision making and the human frailties of perception and information processing, it is easy to see why surprise succeeds despite warning.

CHAPTER V

SOVIET PERSPECTIVES ON SURPRISE AND DECEPTION

History and Doctrine. Although surprise and deception were part of Soviet military doctrine well before World War II, the emphasis was primarily on tactical application in battle. The German invasion of Russia in June, 1941, however, dramatically altered the Soviet view of surprise.[1] The immediate official response was denial as Stalin, humiliated by his misjudgments on the eve of the German attack, refused to admit to the relevance of surprise. As a result, although the lessons of surprise were well learned by the Russian military, the academic study of surprise was not permitted until after Stalin's death. Barton Whaley explains:

> This intimate linkage of Stalin's name and role with the topic of surprise made any critical reappraisal of the subject taboo during his lifetime. Similarly, it has remained one of the more sensitive topics since his death in 1953, because it is one of the central questions involved in the reappraisals that go with the struggle over de-Stalinization.[2]

The Soviet Union is a nation that has lived through the devastation of war and fully understands the consequences of invasion. Their knowledge of surprise was gained by studying the techniques of their attackers, particularly the Germans in World War II. David Glantz of the U.S. Army War College says:

> Few nations have suffered as greatly from the consequences of surprise and deception as the Soviet Union. Few nations have labored so intensely to reap the benefits of surprise on the battlefield. The experience of surprise and deception has come to play a key role in contemporary Soviet military thought and practice.[3]

The Soviets have continued to refine and promote their doctrine of surprise. In 1969 Colonel A. Plostovalov declared: "A more important condition for achieving victory than overall superiority in weapons and manpower is the ability to use concealment in preparing one's main forces for a major strike and the element of

surprise in launching an attack against important enemy targets."[4] And in 1976 Lieutenant General M.M. Kir'yan, senior member of the Voroshilov General Staff Academy, wrote: "Surprise is one of the most important principles of military art."[5] The Soviet Dictionary of Basic Military Terms defines surprise as:

> One of the principles of military art, ensuring success in battle and in operations. Surprise makes it possible to inflict heavy losses upon the enemy in short periods of time, to paralyze his will and to deprive him of the possibility of offering organized resistance.[6]

During the course of this research project I have been asked bemusedly by colleagues, "Do you really think the Soviets are going to launch a surprise attack?" To which I could only reply, "Do you think the Soviets would ever launch an attack that didn't take advantage of surprise?" This collegial exchange on the subject of surprise goes far deeper than assessing the probability of war. It reflects the fact that U.S. has never known the ravages of war to the same extent the Soviet Union has. The perception of Western nations is affected by the "habit of peace" and war appears an unlikely occurrence if for no other reason than we wish it so.[7] But the view of the Soviet Union is far different and reflects years of fending off invaders. Dr. Joseph Douglass illustrates the difference in Soviet and U.S. thinking: "The difference is, they do not believe war is impossible. They believe war is definitely possible, and because of the enormity of the attendant consequences, they believe they should prepare for it."[8]

There has been much debate recently about Perestroika and the alleged shift in Soviet military doctrine from the offense to the defense. Translating such pronouncements into reality, however, is another matter. As U.S. Defense Secretary Frank Carlucci said, "We hear what they say. Let's wait and see what they do."[9] But regardless of what stance Soviet doctrine assumes in peacetime, the real question is how that doctrine will function during times of war. Richard Betts

observes, "Current Soviet doctrine as it is understood in the West...is not necessarily what that doctrine would be in event of war."[10] And since the history of surprise teaches us that knowledge of an opponent's behavior during low-stakes (peacetime) situations should not be extrapolated to periods of crisis, it is important that we understand the Soviet frame of reference for surprise and deception.

Planning for Surprise. Experience in World War II taught the Soviets that surprise can provide a tremendous advantage to the attacker, especially one that has few resources at his disposal and is in a militarily inferior position. The Soviets expect surprise to produce a significant change in the correlation of forces, both at the beginning of war as well as during the remainder of the conflict, by demoralizing the enemy, paralyzing his decision making apparatus, and bringing combat power to bear at the point of enemy weakness.[11] The lethality of nuclear weapons and their concomitant potential for decisive victory in the early stages of a war has also impressed the Soviets. One analyst notes, "Soviet military literature indicates that the Soviets believe that surprise attack could be the determinative event of a nuclear war; that a surprise attack could strategically disrupt and even forestall the enemy's use of nuclear weapons; and that surprise attack is feasible."[12]

But despite their commitment to surprise, the Soviets place little emphasis on the bolt-from-the-blue scenario. The Soviets, too, believe that war will emerge from a festering international crisis, a situation which should provide abundant strategic warning for generation of their forces. Soviet military forces are closely linked to their strategic warning system and some analysts believe this supports a preemptive strike option. Paul Bracken wrote that, "The concept is a doctrine of preemptive attack, and the capability is a system of warning and command that supports just such a strategy."[13] Betts discusses the implications of

Soviet military writings on the subject of warning and preemptive attacks:

> ...Marshal Sokolovskiy said, "It is also impossible to completely conceal the preparation of a surprise attack from present-day strategic intelligence," and the government would have time to take countermeasures. Soviet confidence in political and strategic warning, however, supports a preemptive option. Two officers noted in Voyennaya mysl' that Soviet "armed forces must be prepared to disrupt these aggressive plans by inflicting destructive strikes."[14]

Other researchers believe, however, that although preemption may not be altogether foreclosed as an option, it certainly is not the preferred Soviet approach. Joseph Douglass points out that,

> Preemption, while better than striking second, is not a preferred Soviet strategy....surprise is far more important than preemption because in preemption, independent of who initiates, the Soviet and U.S. missiles "pass each other overhead"...All that preemption does is to prevent the other side from successfully seizing the initiative.[15]

A new, paradoxical possibility is raised by the suggestion that, as Western surveillance systems improve and intelligence gathering against the Soviets precludes undetected military buildup, the Soviets may be forced into a zero-mobilization attack option. Dr. Douglass states, "In examining the tradeoffs between mobilization and surprise attack, the Soviets appear to have reached the conclusion that more is to be gained from a surprise attack from an understrength posture than from a fully mobilized attack against a warned and ready enemy."[16] Others note that the Soviets have developed a capability to launch an attack from an in-place position and may not be willing to forego surprise simply for the sake of forward basing and full mobilization. Lieutenant Colonel A.L. Elliott concluded that "Current Soviet forces in Eastern Europe have achieved an in-place reinforced status" and that "A lengthy mobilization is no longer required..."[17] And Petersen and Clark state that "It is quite unlikely that the Soviets would be willing to compromise surprise or to put frontal aviation at risk by forward-deploying aircraft that cannot

be sheltered."[18] Ironically, then, the same surveillance systems which were initially intended to avert surprise by making preparations for war difficult to conceal, may now render surprise attack less detectable by forcing the enemy to launch his attack with minimum or no mobilization.

Regardless of <u>how</u> the Soviets elect to use surprise, whether to support a strategy of preemption or attack from an in-place position, it is clear that the historical lessons of surprise have been well understood.

<u>Legacy of Deception</u>. In Soviet doctrine surprise and deception are tightly interwoven. Surprise is frequently viewed as the ends and deception the means. Deception in the Soviet Union goes well beyond the realm of the military and permeates all sections of Soviet society. Its roots can be traced to the basic ideology of Marxism and Leninism. Author William Van Cleave explains how deception became an integral part of Soviet society:

> ..."strategic deception, whether military or political, has been an integral feature of the Slavic tradition." It was absorbed by the tsars and has been systematically developed and modernized by the Soviets. Secrecy, deception, and disinformation are intrinsic and deeply ingrained characteristics of the Soviet system and its approach to the world. They are also cardinal elements of Soviet strategy.[19]

Officially, the Soviets define deception (maskirovka) as:

> The means of securing combat operations and the daily activities of forces; a complexity of measures, directed to mislead the enemy regarding the presence and disposition of forces, various military objective, their condition, combat readiness and operations, and also the plans of the command ... maskirovka contributes to the achievement of surprise for the actions of forces, the preservation of combat readiness and the increased survivability of objectives.[20]

As with surprise, the Soviets gained much of their experience in deception during World War II. During the war they conducted "50 major strategic operations over 140 fronts" and virtually all of these actions achieved surprise

through deception.[21] The Soviets were consistently able to redeploy entire infantry and tank armies without detection by the Germans. Today the Soviets continue to demonstrate their proficiency in deception with such surprise operations as the 1968 Czechoslovakian occupation, the 1979 invasion of Afghanistan, and the Polish coup in 1981.

Soviet techniques of deception include production of deception plans alongside real ones for commanders at all levels, issuance of spurious orders for offensives in false directions, and the battlefield positioning of old weaponry to fool enemy reconnaissance systems.[22] An important part of Soviet deception is their propaganda and disinformation campaign which has increased dramatically over the past 25 years.[23] In 1968 the Soviets established the Principal Directorate of Strategic Deception (GUSM) within the General Staff to "coordinate all activities by the Soviet armed forces directed at attaining the element of surprise in any operations."[24] Victor Suvokrov explains Ogarkov's success in creating GUSM by noting, "it was acknowledged that surprise is the most important element in victory, therefore military planning must be under the control of disinformation and not the contrary."[25]

Deception and surprise are interrelated in Soviet doctrine and are incorporated at every level of Soviet military planning. It is important to keep in mind that surprise and deception need not be totally complete in order to be effective. In the "fog of war" simply a "high state of ambiguity and uncertainty about real Soviet intentions" could delay Western response sufficiently for the Soviets to achieve their objectives.[26]

Perception Management and Influence of Crises. As decisive as surprise and deception can be, they are of little value unless linked to a plan for exploitation. That means understanding the nature of surprise in international conflict well enough to maximize their advantages.

The Soviets have virtually discarded bolt-from-the-blue as an operational strategy and prefer instead to manage the perceptions of their opponents. Since Western intelligence systems have almost eliminated the possibility of undetected mobilization, the Soviets believe it is important to adversely influence and manipulate what an enemy does see and hear. As an extension of the theory of deception, it is important that the enemy be lead to reach the wrong conclusion about the intelligence information he does receive.[27]

Earlier in our Chapter II discussion on the inevitability of surprise we noted that surprise tends to follow the ebb and flow of a crisis. That is, surprise tends to follow periods of tension and false alarms. When this characteristic of surprise is combined with Soviet doctrine, we begin to see a scenario for surprise far more credible than any bolt-from-the-blue condition. Richard Betts describes the condition of surprise that could lead to optimal exploitation:

> As the historical case studies will show, it is common for prolonged crises to involve several mobilization scares in which the attacker raises the baseline of his readiness, while the victim stands down after initial false alarms....the ideal preparatory deception would be a series of mobilizations and stand-downs to set up the cry-wolf phenomenon...[28]

The Soviets could exploit such a situation by using a combination of aggressive military moves along with inducements for peace negotiations to create discontinuity between Western desires to resolve the crisis and preparations for military intervention. This process of "raising and then dampening the temperature of a crisis" has a number of precedents in Soviet history. During the 1962 Cuban

missile crisis the Kremlin threatened total war at the same time Khrushchev was making conciliatory overtures. In the 1973 Yom Kippur war the Soviets first offered to join the U.S. in a joint peacekeeping expedition but then threatened unilateral action.[29] Hines and Petersen speculate:

> NATO perceptions might be influenced through the generation of a false "peak" to a political crisis and the subsequent initiation of hostilities after such tension has been artificially defuzed. Surprise might also be achieved by attacking at a time when the enemy does not yet believe the crisis has reached a point that justifies overt military action.[30]

Cycling up-and-down the ladder of crisis tension would more than likely be accompanied by an intensive propaganda campaign that would force Western leaders to answer false Soviet allegations in the media about the nature of the conflict. Such a ruse, combined with other techniques of surprise and deception, could certainly render the West extremely vulnerable. As Dr. Stephen Cimbala explains, "The possible disbelief in the very idea of a Soviet strategic attack, especially when a crisis seemed to be fading, could demobilize the U.S. counterattack to relatively more preferable outcomes for the Soviets."[31]

Chapter Summary. The Soviet history of warfare, fought mostly on their own soil, has probably equipped them with far more skill and acumen in surprise and deception than their Western counterparts. While the West deemphasizes surprise as a subject of study, the Soviets have formally incorporated surprise and deception into their military and political doctrine. U.S. confidence in having deterred a bolt-from-the-blue attack is perhaps misplaced when we consider that the Soviets, too, have rejected such a scenario. Emphasis instead is placed on managing the perceptions of the West and inducing enough ambiguity to achieve surprise.

CHAPTER VI

CRISIS RESPONSE AND ALERTING

Detecting enemy preparations for war and correctly assessing the likelihood and nature of an attack is only one half--albeit the most studied half--of the surprise attack problem confronting a nation. Equally important is how a country chooses to respond to threat indicators and how it uses its available warning time to alert and mobilize its forces. Since virtually all surprise attacks in the twentieth century have been preceded by a period of crisis, we might rightfully ask why nations have been unable to effectively deter or respond to imminent aggression.

A clue can be found in the dramatic case of the Japanese attack on the Philippines in 1941, an attack which revealed that U.S. defenses were "simply not prepared for sudden air attack and had no capacity for responding to warning."[1] News of the surprise attack on Pearl Harbor reached the Philippines nine hours before the Japanese raid on Clark field, but during those precious hours "there was a good deal of discussion and disagreement on what to do next, how to disperse the aircraft or whether to try and keep them in the air to avoid destruction."[2] The issue here is not one of unpreparedness as some may believe, but rather a problem of irresolute decision making in the face of crisis.

Crises have been defined by authors Gordon Craig and Alexander George as "conflicts of interests which erupt into war-threatening situations either through the deliberate action of the parties involved or through inadvertence."[3] During a crisis a decision maker must work with incomplete and conflicting information and decide upon an appropriate course of action while under pressure of time and grave consequences for his nation. Within this maelstrom of crisis decision making ambiguous warning signals arrive, are interpreted with varying degrees of

accuracy, and are used by a decision maker to help maintain control of the situation and delicately coordinate diplomatic and military moves. The goal is to synchronize a nation's response to the warning it receives. Problems appear, however, in translating warning into alert and mobilization orders which are clearly understood by both sides and easily controlled. Given the frequency of international crises and the close relationship between crisis and surprise, the words of former Defense Secretary Robert McNamara take on added importance: "Today there is no longer any such thing as military strategy; there is only crisis management."[4]

The Role of Warning. Intelligence information may serve many purposes within a government but certainly its most vital function is to warn of enemy attack. In that sense warning is different from "estimates" of capabilities or "forecasts" of future behavior. As Thomas Belden aptly puts it, "it implies decisions to take actions."[5] The purpose of warning lies in direct contradiction to the objectives of deception. Whereas deception is intended to induce the victim to waste his resources, warning is designed to economize forces in defending against the attack. Richard Brody writes that warning "allows one to be ready only some places at some times rather than everywhere, all the time."[6] But political predisposition to act on warning implies the willingness to accept the attendant risks and costs of mobilization. As such, a recommendation for alerting and mobilization is the most serious action ever undertaken by an intelligence organization. Michael Handel explains:

> ...deliberations concerning whether or not to declare an alert or mobilization...[are] the most critical policy recommendation[s] an intelligence organization will ever have to make.

[continued]

> Every mobilization involves heavy political, material and psychological costs in addition to greatly increasing the danger of war. A status-quo-oriented country (such as the US and NATO, Israel in 1967 and 1973)...will therefore try to avoid mobilizing except in the most extreme circumstances.[7]

The primary purpose of alerting and mobilization is to reduce the vulnerability of military forces by increasing their readiness and to demonstrate national resolve by ensuring the aggressor is aware of your intent to respond. Theoretically, then, war is deterred and surprise is averted. But translating warning into alerts can be problematic and, if not properly timed, can render a nation even more vulnerable to surprise. The heart of the problem is false alarms, the raising of the alert status and generation of forces to meet an attack that never materializes. Two cases illustrate the point.

Prior to the attack on Pearl Harbor there were "three periods of extreme tension in American-Japanese relations that resulted in alerts in the Hawaiian Islands."[8] The alerts were declared in June 1940, July 1941, and October 1941. None of the alerts were ordered on the basis of privileged intelligence information such as MAGIC, but concern rose instead from a general knowledge of the political situation. Since no hostile action followed the alerts, subsequent intelligence warnings began to fall on deaf ears. Interestingly, alerts were ordered without any specific indications of a threat, but, later, when indicators did appear in MAGIC and other sources, no alert was called. Wohlstetter observes that "A curious kind of numbness seemed to characterize these last moments of waiting, a numbness that was an understandable consequence of long association with signals of mounting danger."[9] Consequently, when the U.S. intercepted a Japanese, Honolulu-to-Tokyo message on December 6 that read, "...in all probability there is considerable opportunity left to take advantage for a surprise attack against these places [Pearl Harbor, Hickam, Ford, and Ewa]," it failed to register as a warning or to generate

an alert.[10]

A similar series of events transpired prior to the Yom Kippur war in 1973. Between 1971 and 1973 the Egyptians staged three military exercises that closely resembled the preparations undertaken for the actual attack in October. Israel mobilized its forces in response to strategic warning during each time but an Egyptian attack was never launched. Following each alert there was extreme criticism of the heavy costs associated with the mobilizations. Consequently, when indications appeared again in late September, 1973, the Israelis were extremely reluctant to order an alert.

These two cases highlight some of the central problems facing decision makers when attempting to respond to warning during a prolonged period of tension. In each case hostilities were anticipated and steps for enhanced readiness were undertaken. But when an attack failed to take place the credibility of the warnings began to fade and the nation was unprepared when the actual attack arrived. These were truly cases where, as Richard Betts points out, "Readiness at the wrong time may yield unreadiness at the real moment of vulnerability."[11] We will now examine some of the specific reasons why alerting and mobilization are difficult to synchronize with warning.

Financial and Political Costs. Mobilization, like the surprise it is intended to counter, is a precious national resource that should only be used when necessary. When mobilizations occur, a nation's manpower and materiel are impacted and transportation systems are no longer as responsive to the public. There is very little political margin for error in ordering alerts. For smaller nations the impact can be quite dramatic. Alex Hybel notes that "During a military crisis, Israel's economy is completely paralyzed, for every male citizen between the

ages of 18 and 55 is called to service."[12] The partial mobilization ordered during the April-May 1973 false alert cost Israel ten million dollars.[13] In addition to financial costs, mobilizations also tend to foster "war hysteria" among the populous which, in turn, puts added pressure on decision makers during an already tense period.[14]

The problem of political pressure is particularly troublesome today for large, democratic nations whose constituency includes various anti-war organizations. One editorial writer recently commented that it was "impossible to drive the Pershings so much as a few kilometers down the Autobahn without stirring up numberless West Germans."[15] A similar problem may be encountered by the new U.S. Peacekeeper ICBM which will be dispersed onto the commercial railway system upon receipt of strategic warning. Although a crisis like the 1962 Cuban missile episode may galvanize the nation sufficiently to overcome social protest, incidents such as the 1973 nuclear alert which was caused by conflict in the Middle East may not inspire the same national consensus.

Alert Fatigue. Alerts tend to follow the up and down cycle of crises. As the crisis peaks, so does the state of military readiness. And as the crisis appears to subside, alert forces are stood-down. This on-again-off-again cycle of crisis tension can place a heavy burden on the resiliency of military systems and adversely impact their overall combat capability. Bruce Blair explains the problem:

> ...protracted alert could eventually cause mission capability to drop below peacetime levels, owing to suspension of major maintenance and training, and to fatigue. Similar adverse consequences attend cycling up and down the alert ladder...Eventually, readiness will gravitate toward an equilibrium point that is far below the initial optimum level, and it may even fall below normal steady-state capability.
>
> ...alert operations are not planned with diplomatic considerations in mind...[16]

The problem is that military weapon systems are designed for combat, not crisis management or diplomatic signaling. This is especially true for modern strategic weapon systems which have large infrastructues for support. The weapon itself may be capable of withstanding protracted or cyclic rates of high readiness but the same may not hold true for its associated manpower, logistics, or security functions. Such weapons could be highly susceptible to exploitation by an adversary skilled in manipulating the tides of a crisis. William R. Van Cleave points out:

> U.S. forces cannot be maintained on generated alert for very lengthy periods; and U.S. forces coming off of relatively protracted periods of generated alert would be even less robust and ready than forces in the normal day-to-day posture. Crew fatigue would be high for all forces, as would systems fatigue....
>
> A U.S. posture that relied on generated alert, then, could be more vulnerable to Soviet deception than one that did not. The Soviets could gain even more from a surprise attack immediately following a crisis and stand-down of U.S. forces than one during normal day-to-day alert....The Soviets might seek to defuse a crisis prior to a surprise attack by any number of political overtures, indications of reasonableness and a desire to negotiate, and apparent moderation of objectives.17

When assessing the vulnerability of strategic systems to surprise attack, then, attention should focus on responsiveness during prolonged crises in addition to the prevailing concerns for the bolt-from-the-blue scenario.

Reciprocal Alerting, Escalation and Accidental War. Perhaps the most difficult problem confronting decision makers in a crisis is that of controlling the level of conflict and tension. The actions taken by a defending nation, although defensive in their view, constitutes strategic warning for their adversary and may be interpreted as hostile or possibly preemptive. Nations can never be sure if their opponents are interpreting their actions in the way they were intended. Craig and

George provide the following example from the Middle East.

> It is extremely difficult to predict how a given military move will be perceived by an opponent. For example, certain Soviet naval maneuvers during the 1973 crisis raised the question whether the Russians had the limited aim of backing up their client Egypt or intended to pose a threat to the U.S. Sixth Fleet in the Mediterranean. Likewise would the deployment of U.S. carriers to the eastern Mediterranean be viewed as a tactical move to support Israel or a strategic one to position them to attack the USSR proper?[18]

Since superpower nations possess the capability of monitoring one another on a continuous basis, the actions by one country can have a reciprocal effect on the other. And as the crisis continues and grows more intense, it will become increasingly difficult to discern whether the adversary's actions are part of his original plan or a response to a diplomatic maneuver. This problem was apparent even prior to the attack on Pearl Harbor. Wohlstetter states that, "As the year 1941 drew to its close, the interaction of Japanese and American moves became more and more complicated, until finally it was impossible to distinguish stimulus from response."[19] In fact, the U.S. alert declared in July 1941 was based on anticipated Japanese response to American diplomatic actions and not on any initial move by the Japanese.[20]

The danger foreseen by many is that when nations with interactively linked surveillance and intelligence systems begin to monitor crisis movements, that the chain of subsequent events may outpace the diplomatic means of control. In such a scenario "an alert of military forces on one side thus runs a risk of provoking a reciprocal alert....it could entwine the adversaries in a vicious circle of reinforcing alerts and suspicions."[21] Michael Handel writes:

> ...mobilizing one's armed forces, even as a precautionary move, can precipitate the outbreak of unplanned war by triggering an automatic mobilization/countermobilization on the part of the antagonist--which is what occurred on the eves of World War I and the Six-Day War of 1967.[22]

Paul Bracken summarizes the gravity of concern by pointing prophetically to the lessons of World War I:

> What set off the interlocking alerts of the European armies in 1914 was not the isolated assassination of the archduke in Sarajevo but the decision to mobilize....In the summer of 1914 everything functioned the way it was supposed to. There were no accidents in the usual sense of the term.[23]

Concern for such possibilities is heightened by superpower involvement in the Third World, their difficulty in controlling client states, and the unpredictable nature of events which may inadvertently entangle them in a crisis. In 1973 it was a tactical military situation on the west bank of the Suez Canal--a regional dispute between Egypt and Israel--that drew the U.S. and the Soviet Union into a head-to-head confrontation. Craig and George recount the events:

> The Russians apparently wished to avoid direct intervention, but they were determined to make the U.S. have its client live up to the 22 October agreement. Accordingly, Russian airborne forces were put on alert for possible movement to the Middle East, and that evening Brezhnev sent Nixon a note suggesting joint intervention and threatening to act unilaterally if necessary.
>
> ....Six hours after receiving the Brezhnev note, Nixon dispatched a reply warning against unilateral intervention and stating that such an action would violate the U.S.-Soviet agreement on the prevention of nuclear war. To signal the seriousness of the situation, the president placed American military forces in a precautionary alert status known as DEFCON 3.[24]

Not only did the Soviets quickly respond to the U.S. alert action, but once they responded with their own measures both nations found themselves in a difficult position of delicate deescalation. Bruce Blair writes:

> Within about twenty-four hours after the U.S. forces moved into DEFCON 3, Soviet surface action groups have formed and prepared for attack. For the next eight days they maintained continuous high readiness to engage U.S. forces in battle. As assessed by Admiral Worth Bagley, "Our forces were targeted for instant attack from multiple points."

[continued]

> The opposing forces were locked into a tense and mutually reinforcing battle formation for several days after the global DEFCON 3 alert had been cancelled.[25]

Other unpredictable or unrelated events also occur which complicate an already tense situation. In 1956, during the British and French attacks on Suez and at the same time as the Hungarian uprising, four coincidental but totally unrelated events occurred which prompted war warnings from Moscow to Washington. Unidentified jet aircraft were spotted over Turkey, reportedly 100 Soviet MIG-15s were over Syria, a British Canberra bomber was reported to have been shot down over Syria, and the Soviet fleet was supposedly moving through the Dardanelles. The U.S. Strategic Air Command was put on alert and tensions grew. But, as Paul Bracken clarifies,

> ...the "jets" over Turkey were actually a flock of swans picked up on radar and incorrectly identified, and the 100 Soviet MiGs over Syria were really a much smaller routine escort returning the president of Syria from a state visit to Moscow. The British Canberra bomber was downed by mechanical difficulty, and the Soviet fleet was engaging in long-scheduled exercises.[26]

During the October 1962 Cuban missile crisis a U.S. U-2 aircraft from Eielson Air Force Base in Alaska took off on a "routine air sampling mission" but strayed into Soviet airspace. A military historian recalls the incident:

> We had a U-2 flying over the Arctic, and the kid lost his navigational system, trying to get back into Alaska he came right smack over the middle of the Kola [sic] Peninsula....The word came into the 'tank' where McNamara and the Chiefs were meeting....He turned absolutely white, and yelled hysterically, 'This means war with the Soviet Union....'[27]

Although the U-2 escaped unharmed, the incident prompted Krushchev to send a note to President Kennedy the following day asking, "How should we regard this? What is this, a provocation?"[28] Such incidents reflect the consequences of accidental events which occur during a crisis. It should be remembered also that

these events occurred despite government attempts to tightly control military activities. And once again we see that the very systems designed to deter war and avert surprise wind up producing a few surprises of their own and contributing to the crisis situation.

Crisis Management. This subject is a world of study unto itself and is beyond the scope of our purpose here. But it is worth noting that the state of the U.S. crisis management system reflects one of the main reasons why the history of surprise is such a poor teacher. First, there are no formal rules or guidelines for crisis management since each crisis is unique and each government administration approaches problems differently. There is, in fact, no corporate memory of "lessons learned", despite the long history of crisis and surprise attack. As one former National Security Council staff member said, "There is no, and I repeat no, institutional memory available at the highest levels of government for crisis management."[29] And as Alexander George reflects, "It's a very serious problem--the fact that we do not have an institutionalized group of crisis managers who survive top level changes in the Administration."[30]

Second, despite the abundance of intelligence information, warning indicators, and other news sources, there is a tremendous amount of uncertainty during a crisis. The form NSC staffer said:

> Information uncertainty is the normal course of a crisis. I could give you a lot of examples where the problem was information running around in the crisis management structure that couldn't be verified, couldn't be validated, and nobody knew if it was really reliable....[during Grenada] there was a period of about 6 or 7 hours when we knew nothing.[31]

Clearly, we cannot look to the field of crisis management for any future guidance in solving the problems of surprise, warning, and policy response.

Chapter Summary. Virtually all surprise attacks in the twentieth century have sprung from a crisis situation. But although crises represent the logical application of intelligence and warning information, the problems cited in this chapter illustrate what one author described as "the immense difficulty of analyzing political alignments around the globe and of determining in these terms at what points of rising tension an alert should be called."[32]

Alerts and mobilizations are expensive, both politically and financially, and, if left to follow the natural up-and-down contours of a crisis, they could easily diminish the combat capability of the military forces which would have to respond to a surprise attack. Calibrating weapon systems to warning information is the central issue. But given the ambiguity of strategic warning data, the uncertain state of crisis management, and the complexity of modern weapons, it is doubtful whether our decision makers will ever have the necessary tools for averting surprise.

CHAPTER VII

RESEARCH FINDINGS

The intended purpose of this research was to distill the main characteristics of surprise, identify new areas for academic investigation, and to assess the implications for U.S. and Western nation defenses. Major findings and recommendations of this study are herewith provided.

Inherent Vulnerability of Democratic Nations. Democratic countries such as the U.S. and other Western nations are at a significant disadvantage in countering surprise attacks. Democracies represent the peaceful orientation of their people and, as such, they are not inclined to readily adopt armed conflict as a solution to international disputes. Negotiation, international adjudication, and coercive diplomacy are the tools of democracy. Part of this philosophy and tradition is a commitment to not fire the first shot. Preemptive attack, even in the face of a growing and ominous threat, is deemed to be incompatible with the spirit of intent of a democratic people. The classic expression of this ideal took place on December 6, 1941, when President Roosevelt read the first thirteen parts of Japan's final, fourteen part diplomatic message to the U.S. and declared, "This means war." A State Department official then expressed regret that "we could not strike the first blow and prevent any sort of surprise." Roosevelt responded, "No, we can't do that. We are a democracy and a peaceful people."[1]

The unfortunate implications with respect to surprise attack are that democratic nations will typically delay their response to warning signs until all attempts at diplomatic settlement have been exhausted. In addition, democratic nations frequently use their military alert forces to signal resolve and control the

tempo of a crisis. But a show of military force cannot always be fine tuned to a crisis and, since democracies are in a mode of responding to events, defense forces are often tied to the fluctuations of a crisis as dictated by the enemy. In short, aggressor nations will always have the advantage of choosing the time and place of attack while democratic nations must await the first shot before responding.

Western nations have worked hard over the past forty years to build credible deterrents to war, and effective fighting forces in the event deterrence fails. But defense planning in the West is predicated on the availability of warning and virtually all national military strategies (e.g. the U.S. Maritime Strategy) reflect that assumption. Advanced warning is essential for the numerically smaller, fiscally constrained forces of the West to successfully counter a surprise attack. As Richard Betts notes, "...surprise is among the principal threats, because US forces, while far from a comfortable margin of adequacy, could acquit themselves well if [emphasis added] they have all the time they need to cock their triggers and get to the right place, and if they face expected enemy tactics."[2] But as this study has demonstrated, conclusive warning is seldom available and warning alone does not preclude surprise.

Ambiguous Warning. In concluding her work on Pearl Harbor, Roberta Wohlstetter notes, "It is only human to want some unique and univocal signal, to want a guarantee from intelligence, an unambiguous substitute for a formal declaration of war."[3] Despite the variety and sophistication of modern intelligence gathering systems, warning information will continue to be (for all the reasons we have seen in this study) incomplete, ambiguous, and subject to hostile manipulation. Enemy war plans are subject to change and the final order for attack will be closely guarded and may never be detected. The intelligence puzzle will always be

missing a few pieces and uncertainty will be the rule rather than the exception. As Napoleon once said, "Uncertainty is the essence of war, surprise its rule."[4] The goal of warning, then, should be to surface the sources of ambiguity rather than striving to fit limited information into convenient patterns of analysis. Recognition should be given to the role of intuition and experienced foresight in issuing warning alerts. Although there was never a single, conclusive piece of evidence that would have confirmed a Japanese attack at Pearl Harbor on the morning of December 7th, Ariel Levite states that,

> ...ignorance of Japan's intentions was not complete. At least some evidence, however fragmentary and unreliable, existed in both Washington and Hawaii to suggest that Pearl Harbor was a possible target for a Japanese surprise air attack....intuition, foresight, or simply greater caution are in a sense a "functional equivalent" of conclusive warning. They could have conceivably substituted and partially compensated for lack of advance warning or explicit orders from Washington.[5]

Intuition and foresight were the primary reasons why the U.S. averted surprise at Midway Island in 1942. We should also remember that Midway is the only recorded case of an attack in which surprise was unsuccessful. Levite again explains,

> When the first explicit identification of Midway as a <u>possible</u> target for the operation emerged, it was based on no more than a rather elaborate series of inferences and shrewd guesses....the early inferences regarding the identity of the target, coupled with the awareness of the fragility of the evidence on which it was based and the importance of the issue at stake, nevertheless facilitated and prompted efforts to uncover positive confirmation of both critical inferences and gather additional details on the forthcoming campaign.[6]

Since there is no positive correlation between the amount of intelligence information received and the prevention of surprise, designing military forces around the assumption of assured strategic warning may be unwise. As William Van Cleave states,

> Frequently, when the term strategic warning is used it is merely assumed that it is correctly perceived and effectively acted upon. Neither may be the case. Indeed, historically the converse more generally has been true.
>
> A force that relies upon strategic warning becomes very vulnerable to surprise...7

Necessary improvements will continue to be made to our intelligence systems but the problem of surprise is one of knowing what to do with the warning once it is received and how to prepare for the contingencies of surprise once it occurs.

Basis of Defense Planning. When designing defenses against surprise attack it is often assumed that a bolt-from-the-blue scenario is the only possible form of surprise (warning, it is believed, precludes any other form of surprise). But since there have been no recorded instances of a bolt-from-the-blue attack in the twentieth century, plans to deter such an attack may leave defensive forces vulnerable to the more probable scenario of surprise springing from a prolonged crisis or a protracted conventional conflict. The West may be overshifting its defense to guard against the least probable threat.

Strategic thinking frequently focuses on a short, conventional conflict which quickly escalates to nuclear war. Defending against a bolt-from-the-blue attack is considered to be the worst case condition and, once that problem is solved, it is assumed that any other scenario would be far less stressing and much easier to counter. But the exigencies of crisis management and protracted conflict require a different approach to the survivability of forces. Whereas responsiveness is key to survival against a bolt-from-the-blue attack, responsiveness and resiliency are required against protracted scenarios. It is uncertain, however, to what extent these considerations are being factored into our current nuclear force planning.

Experience gained by this author in six years of duty with a major command headquarters indicates that theater commanders discount the likelihood of surprise attack (which they believe to be a bolt-from-the-blue scenario) because strategic warning should always be available. Indeed, it probably will. But surprise occurs despite warning and readiness on the 212th day of a protracted conflict is significantly different than daily alert operations. How strategic forces would respond to repeated recalls, frequent alerts, subsequent stand-downs, and then attack, is largely unknown and never practiced. The lessons of the Cuban missile crisis and the Yom Kippur alerts need to be factored into strategic force planning and exercises.

Shock Effect. The most profound military effect of surprise attack is shock. Overrun positions, severed communications, unexpected weapons and/or tactics, and the loss of combat unity and decision making control all have dramatic effects on the victim. While surprise may never be preventable, there is a possibility that its effects can be minimized through rapid acquisition and dissemination of information as the attack unfolds. Betts explains,

> Perhaps it is most vital to anticipate ways to facilitate quick learning once war starts: means for assimilating and disseminating the sorts of particular discoveries about effective combinations of tactics that only combat reveals. "If some Sergeant in the covering force finds out a new deadly way to engage tanks with his PGM [precision guide munition], we need mechanisms for dispersing this knowledge rapidly throughout the command."[8]

Studies of Surprise. To date, studies have focused on surprise as it occurs at the start of a war. Little attention has been paid to surprise attacks that occur during a war. Yet, as history demonstrates, strategic surprise can occur in the middle of a conflict, either to open a new theater of operation or to achieve rapid

war termination. Since surprise attacks are generated by periods of extended crisis or conflict--a time which also stresses the resiliency of alert forces--future research should address the role of warning in crisis management, escalation control, treaty monitoring, rules of engagement, and support for theater commanders.

Research has also centered on strategic warning in its information support role for principal decision makers. Very little analysis has been made of tactical warning systems and the activation of defense or retaliatory forces. Further study is required to determine the role of tactical warning in past surprise attacks and the proper level of interaction between strategic and tactical warning systems in extended or multi crisis situations.

Theories of surprise and warning may not help decision makers make better decisions. But they may assist military and political leaders in planning procedures and acquiring systems which may minimize the impact of surprise attack.

Future Technical and Doctrinal Surprise. Strategic deterrence has prevailed over the past forty years due in large part to the "unthinkable" nature of nuclear war. However, the introduction of conventional weapons with the destructive power of small nuclear weapons threatens to eliminate the traditional constraints against strategic attack. Fear of extensive collateral damage, radioactive contamination, and uncontrolled escalation could be overcome by highly accurate conventional weapons. In 1984, Marshal Orgarkov offered this vision of the future:

> ...rapid changes in the development of conventional means of destruction and the emergence in the developed countries of automated search and destroy complexes, long-range high-accuracy terminally guided combat systems, unmanned flying machines and qualitatively new electronic control systems make many types of weapons global and make it possible to sharply increase (by at least one order of magnitude) the destructive potential of conventional weapons, bringing them closer, so to speak, to weapons of mass destruction in terms of effectiveness....This qualitative leap in the development of conventional means of destruction will inevitably entail a change in the nature of the preparation and conduct of operations. This, in turn, predetermines the possibility of conducting military operations using conventional systems in qualitatively new, incomparably more destructive forms than before. There is a sharp expansion in the zone of possible combat operations and the role and significance of the initial period of the war and its first operations become incomparably greater.9

In addition to the prospect of new conventional weapons and doctrine, there is always the distinct possibility of a reversal in present doctrine should war erupt. The Soviets have developed a formidable blue water navy over the past ten years but it is used primarily in defense of home waters. But if the reversal in strategic doctrine by the Japanese navy in 1941 is any indication of untapped combat potential, the Soviets could certainly abandon their bastion defense strategy and forward deploy their navy to any part of the world.

Research Summary. Surprise attack is inevitable and the nations most prone to suffer surprise are democratic countries which seek diplomatic solutions up until the first shots of war. Intelligence indicators will remain ambiguous and future decision makers will need to suplement their judgement with intuition and foresight in order to hedge against surprise. Strategic planning presently stresses defense against a bolt-from-the-blue attack, but the most historically probable scenario is a war emerging from an extended conflict. Defense forces unfamiliar with the rigors of extended crisis run the risk of alert fatigue and unreadiness at the crucial moment. Surprise will remain an intrinsic part of warfare, but its effects

can be diminished through rapid communications and rapid adaptation to new weapons and doctrine. The emergence of new conventional weapons technologies, guidance systems, and operational doctrine will challenge us in the future by removing the previously "unthinkable" barriers to strategic surprise.

CHAPTER VIII

CONCLUSION

In the forty three years since the last atomic bomb was used in anger against another nation, Western confidence in its ability to deter all-out war and preserve the basic post-World War II geopolitical alignment has steadily grown. Fear of surprise attack has been replaced by the overarching issue of deterrence and the so-called "confidence building measures" (e.g. Hot Lines, on site inspections, etc.) between nations. These laudatory efforts have helped reduce the probability of war and replaced "blitzkrieg" in our vocabulary with terms like "treaty verification."

But the numbers associated with calculating the improbability of war (.99974 since 1949) overlook the fact that major wars still occur and that, at least in the twentieth century, virtually all wars began with a surprise attack. The surprise achieved was not a totally unexpected "bolt-from-the-blue", but rather what one author referred to as a bolt from the "rather murky gray."[1] Some form of warning was available in all cases but the indications--obvious only in hindsight--were often buried among conflicting or irrelevant signals.

While the West continues to confuse "bolt-from-the-blue" with "surprise attack," the Soviet Union remains quite clear on the distinction. The Soviets, too, have discounted the former, but they emphasize the latter in all aspects of military planning. And with good reason. Surprise and deception are an inherent part of all sound military planning and if there is any certainty in war it is the inevitability of surprise. As an old U.S. cavalry manual reads, "A commander may be excused for being defeated but never for being surprised."[2]

It is evident that surprise succeeds despite warning. The challenge for the future will be to design defenses that succeed despite surprise.

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