THE COUNTERMEASURES TO AN INITIAL SURPRISE ATTACK
THROUGH THE ANALYSIS OF HISTORICAL EXAMPLES

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree
MASTER OF MILITARY ART AND SCIENCE

by
Yoo, Je Hyun, Lt. Col., Korean Army
B.S., Korea Military Academy, 1967

Fort Leavenworth, Kansas
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This study attempts to deduce the countermeasures to an initial surprise attack through the analysis of historical examples.

The research reveals that the defender must eliminate vulnerable timing in his reaction capabilities and develop his own doctrine, organization, and material based on his national character, terrain, climate, and the enemy's doctrine. To cope with the attacker's main attack directed toward an unexpected place, the defender must secure flexibility which could cope with any enemy capabilities. Once the attacker has attacked, the defender's command structure should exactly identify the attacker's attempt as early as possible. To respond quickly to enemy's attempt, the defender should possess quick reaction capabilities and to respond effectively to the attacker's overpowering concentration of force and his speed of maneuver, the defender's maximum efforts must be focused on absorbing the attacker's attack momentum. Any countermeasure could not be accomplished without the soldiers' high morale.

Those deduced countermeasures could be considered conceptual guidance in preparing for a surprise attack. The actual, substantial, and precise countermeasures should be researched, developed, and actualized nationally within the specific environments involved.

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ABSTRACT

THE COUNTERMEASURES TO AN INITIAL SURPRISE ATTACK

THROUGH THE ANALYSIS OF HISTORICAL EXAMPLES

BY LTC YOO, JE HYUN, KOREAN ARMY

The possibility of local war is everywhere in the world today. It is most difficult to minimize the impact of an attacker's initial surprise attack, to seize the initiative, and conduct an effective counter-offensive. Here lies the problem in those free world countries threatened by aggressive war.

This study reveals that historically the attackers concealed their intention to attack, the timing of attack, and their manner of attack, then tried to secure local air and sea superiority by surprise. The main attack was directed toward the place where the defender least anticipated and during the most vulnerable time with the employment of new tactics, weapons, and equipment. The attacker's overpowering concentration of force at the decisive place and his speed of maneuver enhanced the chance of initial success and made it possible to achieve decisive results.

The defender must eliminate vulnerable timing in his reaction capabilities considering international, political, economic, and psychological factors and operational environment; he must develop his own doctrine, organization, and material based on his national character, terrain, climate, history, and the enemy's doctrine.

To cope with the attacker's main attack directed toward an unexpected place, the defender must secure flexibility which could cope with any
enemy capabilities

Once the attacker has attacked, the defender's command structure should exactly identify the attacker's attempt as early as possible. To respond quickly to enemy's attempt, the defender should possess quick reaction capabilities through securing local air superiority, protecting command and control systems, improving command capabilities, and sound officers' leadership.

To respond effectively to the attacker's overpowering concentration of force and his speed of maneuver, the defender's maximum efforts must be focused on absorbing the attacker's attack momentum. To absorb the attacker's attack momentum and finally to win the first battle, the appropriate mix of four measures: (1) to establish appropriate strategic depth; (2) to hold the shoulder of the attacker's breakthrough; (3) to hold the strategic key terrain; (4) to conduct counterattacks and counteroffensives should resolutely be conducted considering troops available, terrain, the attacker's doctrine, and political and psychological factors.

These countermeasures could not be accomplished without the soldiers' high morale. Soldiers should possess an iron will to fight and a climate of mutual confidence in the forces is absolutely necessary in minimizing the effects of an initial surprise attack.

Those deduced countermeasures could be considered conceptual guidance in preparing for a surprise attack. The actual, substantial, and precise countermeasures should be researched, developed, and actualized nationally within the specific environments involved. The generals should honestly analyze their forces' weaknesses and improve them prior to war.
ACKNOWLEDGEMENTS


Thanks are also extended to Dr. Jeffery J. Clarke, Ph. D. and Lt. Col. Jesse F. Jones III for their guidance and corrections.

Special thanks is extended to Major Archie D. Andrews, Jr. for his kind and incessant guidance, encouragement, and assistance.

The author is solely responsible for any mistakes and ideas in this thesis.
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CHAPTER I
INTRODUCTION

THE PURPOSE OF THE STUDY

War began at the same time as human history and almost always began by one side's surprise attack. The key to victory in war is to achieve surprise, and to secure and maintain the initiative by decisively shifting the balance of combat power favorably to friendly forces.

There are numerous historical examples of surprise attacks from ancient military history to that of the present time. In 1950, North Korea attacked the Republic Of Korea by surprise. United Nations forces, composed mainly of US army, air force, and navy elements intervened in the conflict and overcame the crisis in spite of the effects of the surprise attack and the initially overwhelming combat power of the North Koreans.

In the 1967 Six Day War of the Middle East, the complete surprise attack by the Israeli air forces smashed the Egyptian will to fight by destroying most of the Egyptian combat aircraft, on the ground within 2 hours. During the October War of 1973, the Egyptian forces, in turn, successfully achieved surprise by using various deceptions, unexpected employment of forces, and new weapons and equipment.

In the final attack by North Vietnam in 1975, North Vietnam began a general offensive starting with the attack in the Central Plateau in March. More than one million South Vietnamese forces were immediately demoralized.
and disintegrated themselves without any decisive battles. The South Vietnamese will-to-fight ended and they surrendered spiritlessly.

Thus, the effects of an initial surprise attack are often so fatal that success or failure of an entire campaign or war depends on the effectiveness of such an attack.

Since 1953, the Republic Of Korea has always faced the constant threat of a surprise attack by North Korea. If North Korea attacks again, the importance of the first battle can not be overemphasized. The first battle of the next war, namely the attacker's surprise attack and the defender's initial reactions, could well be the last battle, because of the modern weapons, high mobility, high tempo of operations, and the complexities of various international relations especially in local or limited war.

A traditional Korean saying warns that: "Though the armed forces have not been used for 100 years, its readiness should not be neglected for even a day." This underlines the importance of the armed forces in a country. The defender should not neglect its readiness against the possible surprise attack and should develop countermeasures by analyzing its vulnerabilities. To the defender, this is a fundamental problem and its solution is vital.

The purpose of this study is to examine this problem from a strictly military point of view through the analysis of historical examples of surprise attacks and reactions to those attacks.
SCOPE OF THE STUDY

This study will not focus on the countermeasures to a surprise attack in a general war, but only in a local and limited war. Additionally it will concentrate on the examination of historical examples and will deduce general countermeasures to surprise attacks rather than detailed tactical countermeasures.

RESEARCH METHODOLOGY

Field Manual 100 - 1 says this about surprise as a principle of war:

"Surprise results from striking an enemy at a time and/or place and in a manner for which he is unprepared. It is not essential that the enemy be taken unaware, but only that he become aware too late to react effectively. Factors contributing to surprise include speed, cover and deception, application of unexpected combat power, effective intelligence, variations of tactics and methods of operation, and operations security."

Based on this definition of surprise, this paper will analyze the historical examples to determine "when", "where", and "how" the attacker attempted to conduct a surprise attack, "why" he used this method and "what" he did to achieve surprise. Here, the element of "in a manner" includes speed, application of unexpected combat power, surprise by new tactics or methods of operation (tactical surprise), and surprise by new
weapons system or equipment (technical surprise). The contributing factors such as cover and deception, effective intelligence, and operations security will also be discussed.

After examining these historical examples of surprise attacks from the standpoint of the attacker, the countermeasures to cope with such attacks will be discussed through the synthesis of that analysis and the examination of historical examples in which the defenders were unprepared.

ORGANIZATION OF THE PAPER

The remainder of this paper is organized into four chapter.

Chapter II provides an overall view of the example of the Sinai Front of the October War in the Middle East. This is a good example of a recent surprise attack employing the latest weapons and equipment of both West and East. It also demonstrates the Israeli countermeasures by which they absorbed the impact of the Egyptian surprise attack, then counterattacked taking advantage of Egyptian error and weaknesses. The analysis of other examples will be discussed in Chapter III and IV.

Chapter III provides an analysis of how the attacker who conducted a surprise attack could succeed and concludes with a synthesis of the common characteristics of a surprise attack.

Chapter IV provides deduced countermeasures to cope with those characteristics examined in Chapter III. Chapter V provides a conclusion.
be an attack by the Egyptian Forces about 1800 hours, there seemed to be no unusual activity (Map I).  

But, at 1405 hours, 250 Egyptian planes took off over the depth of Sinai, headed for Israeli air bases, HAWK surface-to-air missile (SAM) sites, and major command posts. Then more than 2,000 Egyptian artillery pieces opened a fierce preparatory fire for 53 minutes.  

As the artillery fire shifted, Egyptian infantry and commandos rapidly began to cross the canal using rubber assault rafts under the cover of tank fire from higher ramparts than those on the Israeli side. A few minutes later, some of the 8,000 Egyptian soldiers started to climb, using rope and ladders, over the Israeli embankment. Some attacked the fortified positions with hand grenades and flame throwers, while others bypassed Israeli bunkers and moved inland to neutralize the counter-attacking Israeli tanks with the antitank guided missiles, Sagger and RPG-7. At the same time, amphibious battalions crossed the Bitter Lakes and Timsah Lake (Map II).  

While Egyptian infantry secured the initial objectives, Egyptian engineers began to bridge the canal with a new device, the pontoon bridge, PMP, which could be laid at about 21 feet a minute. This enabled them to bridge the canal in less than half an hour. Then the flow of tanks and heavy equipment started.  

Israeli planes approached at extremely low altitude to strafe the bridges, using the same type of attack they were accustomed to employing since the 1967 Six Day War to avoid the SAM-2. But this time the new SAM, SAM-6, which had never before been used in combat, was waiting for
Source: USACGSC, RB 100 - 2, Vol. I, Selected Readings In Tactics
The 1973 Middle East War, p C-11.
Source: USACGSC, RB 100 - 2, Vol. I, Selected Readings In Tactics
The 1973 Middle East War, p C-14.
them. Three among the first five-plane formation were soon downed. The Israeli pilots were amazed at this new missile which chased them continuously in spite of Radar interference and evasive flying. This new missile forced them to bomb at high altitude. The Israeli air force finally announced that the bridges were cut and the Egyptian forces were isolated in Sinai. But the Egyptian forces were not isolated. They could repair the bridges at once.

By early afternoon of October 7, 24 hours after they began to attack, 5 infantry divisions including 500 tanks and 80,000 soldiers had crossed the canal and they established a bridgehead 4–5 miles in depth around the three main crossing points.

Thus, the Egyptian forces achieved the great surprise attack which they so eagerly desired and wiped out the stain of a former shameful defeat.
EGYPTIAN PREPARATION FOR WAR

DECEPTION OPERATION

Egypt conducted strategic and tactical deception operations to deceive Israel:

(1) Egypt covered her real intention to break the war of atonement by declaring annually "This year is decisive to fight against Israel". By this time, all countries including Israel were lulled into believing the Egyptian threat as bravado.

(2) Egypt pretended to try to improve the relationship with the United States; i.e., Egypt made a contract with the Bether Company to install a pipeline between the Mediterranean Sea and the Red Sea, saying that there was no need to reopen the Suez Canal and they could sell oil through the pipeline. Egyptian President Sadat pretended to continue diplomatic negotiations and sent Hafez, his national security advisor, to Washington in February 1973.

(3) The fabrication of the May Crisis in 1973

Egypt and Syria reinforced their armaments in March and April of 1973. Egyptian Defense Secretary Ismail's visit to Syria, the savage fighting which broke out between the Lebanese army and Palestinian guerrillas, Sadat's jittery speeches prophesying war, and Egyptian preparations for crossing the canal, all made Israel feel a sense of crisis similar to that of the 20 days prior to the Six Day War.
The Israeli forces were put on alert; military parades conducted, and Israeli armored units maneuvered conspicuously on the Golan Heights. It was a false alarm. The mobilization of the reserves not only caused economic losses but, more importantly, the Israeli countermeasures to Arab challenges had become inflexible. Having erroneously mobilized their reserves in May, they did not want to react to another false alarm.9

(4) On September 28, two Palestinian guerrillas raided a train carrying Soviet Jews at the Austrian border, took five Jews and an Austrian customs official as hostage, and demanded that the Austrians close a transit center in Vienna, called Schonau Castle, which was used by Jews on their way from the Soviet Union to Israel. Austria's Chancellor, himself a Jew, agreed to the demand and let the guerrillas free.10

This Schonau raid made the Israeli government and its military and intelligence chiefs concentrate their attention far from the Suez and the Golan Heights.

The Egyptians made the most of this opportunity. They continued the preparations for attack under the pretext of the preparations for defense against an Israeli strike in retaliation, while carrying out a subtle psychological warfare, pretending "We are afraid of an Israeli strike in retaliation for the Schonau raid. But our defense is perfect. We want Israel to attack."

(5) The Egyptians concentrated their weapons, equipment, and forces along the Suez Canal by letting them remain after they had completed their annual autumn maneuver exercises.11
(6) The Egyptian forces could conceal their preparations under the cover of the high sand ramparts erected along the critical crossing points of the Suez Canal.

(7) The Egyptian forces kept their operation plan secret by thorough military security. They prohibited officers from contact with diplomats and limited the distribution of detailed plans to subordinate field commands.

SELECTING THE UNEXPECTED TIMING

The timing for attack is the principal factor to achieve an initial surprise attack. The reasons why the Egyptian forces chose the time 1400 hours October 6 were:

(1) The Israel's general election would be held on October 28.

(2) The United Nations' General Assembly was in session. This gave the Egyptians the opportunity to draw the attention of the world.

(3) It was Israeli Yom Kippur, the day of atonement; thus there would be a decrease of the command and control function and a delay of mobilization.

(4) It was the Moslem's holy month of Ramadan. An attack during this time would undoubtedly surprise the Israelis, who would not expect a war to be waged during the month of fasting.

(5) Meteorological, hydro-atmospheric, and hydro-graphic conditions were favorable. Temperate weather and atmospheric conditions were best on both the Egyptian and Syrian Fronts. There was a risk of snowing in the Golan Heights in November and December. The moonlight would be
adequate at that time and the speed of the Suez Canal current and tidal conditions would be best for crossing.

(6) The unusual 1400 hours for an initial attack was unexpected. This hour afforded the air force with enough time to attack in daylight, enabled the Syrian forces to accomplish the crossing of an antitank trench, provided efficient effects of artillery fires in the initial phase, and gave enough time for the cutting of passage into the bank by the use of the high pressure water pumps before dark. This hour also allowed for launching of ranger groups in the enemy rear area before dark.

EMPLOYMENT OF UNITS, NEW WEAPONS, AND EQUIPMENT

The concept of attack of the Egyptian forces was, in short, to conduct a surprise rivercrossing operation, to secure a bridgehead within 24 hours prior to an Israeli systematic counterattack, to enforce a war of attrition by destroying the Israeli counterattacking forces through the employment of antitank weapons and air defense missiles, and to secure favorable military situations in political negotiations which would be led by the United States and the Soviet Union or the United Nations. Namely, they were going to take advantage of the "dead space" before the full mobilization of reserve forces upon which the Israeli deterrent strategy was based.

Both Israeli and Egyptian military heads estimated that it should take at least 24 hours to cross the canal and to establish a bridgehead employing conventional rivercrossing equipment and 48 hours to consolidate
the bridgehead after tanks, field artillery, and other heavy equipment crossed the river. Accordingly, the Israeli believed that they could launch counterattacks before the Egyptians consolidated their bridgehead; the Israeli mobilization capability made this possible. In the Six Day War, Israel could mobilize their reserve forces at the rate of 80-percent within 24 hours, 100-percent within 48 hours.

For the Egyptians, it would be necessary for them to employ a new and innovative military operation to secure and consolidate a bridgehead within 24 hours.\(^{14}\)

**THE EMPLOYMENT OF UNITS**

The Egyptian forces had to overcome various difficulties to cross the canal rapidly. The first problem was how to make the breaches on the 10 - 20 meter high bank on both sides of the Suez Canal which would enable the construction of pontoon bridges. To overcome this difficulty, they employed underwater demolition teams, which lay TNT at night prior to attack in order to explode them at the same time of the attack.\(^ {15}\)

Next was to overcome the Israeli secret device. Beneath the main strongpoints of Bar-Lev were a series of underground oil tanks, pipes interconnecting them and finally leading to wide nozzles down by the water's edge, which could transform the canal into a moat of fire. To overcome this, they intended to employ commandos who slipped across the water at night and sabotaged the flame devices.\(^ {16}\)

They also made 40-meter-high sand ramparts along the critical crossing points to enable tanks to cover the crossings by direct fire.
THE EMPLOYMENT OF NEW EQUIPMENT

The rapid consolidation of bridgehead within 24 hours depended upon how quickly the Egyptians could remove the bulky sands from the exploded banks so as to be able to install ferries and build bridges for the crossing of tanks, heavy weapons, and equipment and how quickly they could build these bridges. They could solve those problems by using new equipment, the PMP pontoon bridge provided by the Soviet Union and the TST/7 high pressure water pump made in West Germany. By using this equipment they could speed up their rivercrossing operations and reinforce their bridgehead at a quicker pace.

THE EMPLOYMENT OF NEW WEAPON SYSTEMS

The Israeli forces were superior in three major areas of combat power: air power, tanks, and capabilities of maneuver warfare. To cope with those superiorities, the Egyptians relied on their initial surprise attack to paralyze Israeli mobile forces, their surface-to-air missile to nullify Israeli air superiority, and their antitank guided missile net to defeat Israeli armor.

In practice the Egyptian infantry established hidden antitank nets and let Israeli tanks approach near to them (within 300 meter) and fired a volley with various antitank weapons (Figure 1). The results were devastating. An Israeli armored brigade, oblivious to the Egyptian antitank net, tried a direct counterattack and was almost destroyed on the 9th of October. 18

The surface-to-air missile net was composed of SA-2's, SA-3's,
track-mounted SA-6's, man-portable SA-7's, antiaircraft gun ZSU-23-4's, and other conventional antiaircraft guns. With this net, the Egyptians could initially nullify Israeli air power(Figure 2).

INTENSIVE TRAINING UNDER REALISTIC SITUATION

In addition to those preparations for war, Ismail, the Egyptian War secretary, and Shazli, the Egyptian Army Chief of Staff, rebuilt the Egyptian forces through the indoctrination of the soldiers and intensive training under realistic situations. Their training was meticulous. They had practiced, on similar terrain and on a canal which has the same velocity as the currents in the Suez Canal, no fewer than 300 times.19
Figure 1 Egyptian Antitank Net
Source: USACGSC, RB 100 - 2, Vol. I, Selected Readings In Tactics
The 1973 Middle East War.

Figure 2 Egyptian Air Defense Net
ISRAELI FORCES PREPAREDNESS: THEIR MILITARY THOUGHT OF ACTIVE OFFENSE

The morale of any force is apt to be markedly lowered when they are forced to remain for a number of years on the static defense. Any force in the world would be exposed to what we in the military profession call 'trench disease' under those conditions. But the Israelis, who were well aware of the weaknesses of static defense, did not stick to the static defense. They estimated that the battlefield in the next war should be on the west side of the Suez Canal and that securing a more favorable military situation would be a decisive factor in political negotiation. They chose feasible rivercrossing points, where they had thinned the sand ramparts of the canal bank.\textsuperscript{20}

After the Israeli forces settled the situation of the Golan Heights Front, they secretly concentrated their amphibious tanks and bridge construction equipment in the central area by October 11, and were waiting for timing of the counter-rivercrossing operation to shift the situation of war in their favor. They thought that the opportunity was not ripe for conducting the operation.

ISRAELI FORCES COUNTER-RIVERCROSSING OPERATION\textsuperscript{21}

The Egyptian forces achieved a complete surprise, succeeded in
consolidating the bridgehead, and destroyed the Israeli hasty counterattack forces on the 9th of October. But they did not exploit their initial successes by continuing pressure, which would have enabled them to obtain decisive results. After they wasted time for three days reinforcing their forces, they launched on an all-out offensive along the entire front on the 14th of October, but failed. The Israeli forces had already shifted their main forces from the Golan Heights' Front to the Sinai Front and were waiting for the Egyptian forces attack. Thus the Egyptian forces lost their suitable timing for exploitation and had to pass initiative to the Israeli forces.

The Israeli forces started their counter-rivercrossing operation at night on the 15th of October and penetrated along the boundary between the Egyptian 2nd and 3rd Army. After they crossed the canal, they split their forces into tiny raiding parties and sent them to search for SAM sites and fuel dumps and destroyed them. Then they secured local air superiority, so the Israeli aircraft could attack enemy tanks. By repeating this cycle they expanded the bridgehead and earned time to reinforce. The Egyptian forces had only 2 divisions with 200 tanks as a reserve in the vicinity of Cairo at that time. The Israeli forces deprived the Egyptian inferior reserves of their countermeasures by threatening three alternative objectives: Cairo, Suez City, and Port Said; they then quickly enveloped the Egyptian 3rd Army (Map 3).

The important point is that these countermeasures were not conducted by chance. The Israeli generals anticipated the next war by their sound military thought, planned, and prepared prior to war.
MAP III
SINAI FRONT
18–24 OCTOBER 1973

Mediterranean Sea

USAGMC, RB 100 - 2, Vol. I, Selected Readings In Tactics
The 1973 Middle East War, p C-17.
NOTES FOR CHAPTER II

3. Ibid., p 61.
5. Hassan El Bardi, op. cit., pp 63 - 64.
8. Ibid., pp 101 - 102.
11. Ibid., p 110.
   Chaim Herzog, op. cit., p 49.
13. For more detailed informations, see ibid., pp 47 - 51.
14. The Insight Team, op. cit., p 139.
16. The Insight Team, op. cit., p 137.
17. Ibid., p 143.
   Kim Hee Sang, op. cit., p 565.
18. Ibid., p 585 - 590.
20. Ibid., pp 326 - 327.
21. The following statements were based on:
   Ibid., pp 229 - 232, 326 - 328, 337 - 346.
   Chaim Herzog, op. cit., pp 208 - 250.
CHAPTER III
COMMON CHARACTERISTICS OF THE INITIAL SURPRISE ATTACK

An analysis of modern historical examples occurring after World War I illustrates how attackers have succeeded in their initial surprise attacks by pointing out key factors in their successes: the "when", "where", and "in a manner" for which attackers could succeed.

DECEPTION AND SECURITY

To succeed in their initial surprise attacks the attackers, first of all, conducted various deceptions and used thorough security measures to deceive the enemy as to their intention to attack, the timing of attack, the direction of their main attack, and their manner of attack.

When the German Forces started to attack France in World War II, the German Army Group B had the mission of carrying out a supporting attack. They conducted, so to speak, an intensive offense as 'bait' to encourage the Allies to execute their operation plan "D" in which the reinforced left wing of the Allies was to rush into Belgium immediately following the German invasion, and push eastward to the line of the Dyle river. They had to make the Allies evaluate their supporting attack as the main attack, as anticipated.

Fifth column and espionage agents acting as traders, students, and policeman infiltrated the enemy rear prior to attack and caused disorder.
The Germans made an extensive bombing raid and employed airborne troops, which were believed to be normally employed in front of the main attack; this time they employed in front of the supporting attack conducted by the Army Group B. German newspapers conducted mass communications deception by writing in bold print only about the Army Group B's front situation, military achievements, and its advance rate. The German deceptions were consistent with the Allies estimation for the German forces in attack direction. The Allies at once executed the Plan D, with satisfaction, believing that they had guessed right for the German forces in attack direction in this war.1

The Allies Plan D:2

"proved as fatal as Plan XVII of the French in 1914. It played straight into the Germans' hand by giving their offensive the form and effect of a flank counter-stroke. The further the Allies pushed into Belgium the easier it became for the Germans' Ardennes drive to reach the Allies rear and cut off their left wing."

The German Army Group A—the main blow—rapidly advanced, reached the English Channel, and cut off the Allies' line of communication in 11 days after they began to attack.3 The Allies were forced to withdraw at Dunkirk and France surrendered four weeks after the beginning of the German attack (Map IV).

When the Germans attacked the Soviet Union in 1941,4 they deliberately launched a deception operation to mislead their enemy about the intention to invade, as well as to conceal the timing, direction, and strength of the blow. The Germans pretended to invade Britain. They pretended that their military buildup on the eastern frontier was merely a part of the preparations for the invasion of Britain. They reinforced
the deception by putting out false information through the German military attaches in Moscow, Berne, Tokyo, and six other embassies that some 8 German divisions would soon be withdrawn from the Russian border. The German Oberkommando der Wehrmacht (OKW), the High Command of the armed forces, often carried a preamble explaining their purpose as defensive in case of a possible Russian attack. This tale was believed at the German army group level, and so was very convincing to the Russian intelligence organization. To lull Russian suspicions, the Germans maintained normal economic and diplomatic ties according to the Nazi-Soviet Pact signed on August 1939. Even within a month of their attack, the German Foreign Ministry invented the cover story that German actions were determined by Russian conduct. By this deception the Germans completely achieved a surprise.

In the Normandy Campaigns of World War II, the Allies deceived the Germans into thinking that they were going to launch an amphibious landing operation at Calais by constructing dummy command post, equipment displays, and facilities. The Germans, who were prepossessed with an fixed idea that the Allied forces would certainly land at Calais, had held back as many as 19 divisions for 6 weeks after the Allied forces landed at Normandy. 5

In 1941, Japan continued diplomatic negotiations until just prior to the attack on Pearl Harbor.

In the middle of June 1950, just before their attack, the North Koreans proposed a negotiation with the Republic of Korea for the exchange of Mr. Cho Man Sik and his son for two espionage agents captured by the Republic of Korea: Kim Sam Ryong and Lee Joo Ha. 6 Thus the North Koreans tried to draw the Korean people’s attention in a false direction.
The UN forces conducted an open deception by reporting in newspapers that they were going to land on Inchon in October 1950 while making feints on other two ports.7

In the Sinai Front during the Six Day War, the Israeli forces employed an excellent deception operation on Kuntilla, where the Israeli forces' main attack was directed in the Suez War of 1956. The Israeli forces could not predict the results of the entire operation if the Egyptian reserve forces reinforced the northern and central axis of the Sinai Front. The Israelis had a great number of cadre personnel of the service schools in the rear area and Nahal members move to Kuntilla and disposed dummy tanks and vehicles to represent a larger than division-sized unit preparing attack. An aerial photograph taken by an Egyptian reconnaissance plane indicated that there were more than 3 brigades in that area. In reality there was one brigade which conducted an effective feint from an initial position and succeeded in containing the Egyptian 6th Infantry and Shazli division(Map V).8

In the October War, the Egyptians conducted strategic and tactical deceptions as discussed in Chapter II and thoroughly deceived the Israelis as to the timing of their attack.

Thus the attacker who tried to achieve a surprise attack could cover his attempts by various means and methods, thereby deceiving the defender. Even the excellent Israeli intelligence system, which had a good agent network composed of immigrants from more than 100 countries and the help of US reconnaissance satellites, could not properly read the Egyptian preparations for a surprise attack. Their failure underlines
the limitations of early warning systems. The attacker always has the initiative and will postpone his attack if he knows that the defender is in readiness. The selection of the timing and place of an attack is always in the hands of the attacker.
ATTACK AT THE MOST VULNERABLE TIME

The timing of a surprise attack is critical and planners must consider political, economic, psychological, and military factors in order to make a decisive surprise attack at a specific time when the defender's reaction capabilities are impaired. Table 1 shows the timing of representative historical examples of initial surprise attacks in the 20th century.

In ancient wars, an attacker usually conducted a surprise attack at night. But during World Wars I and II, the attackers generally conducted surprise attacks at dawn due to the requirements of combat support operations. Even today, an attack at dawn is usual because the attacker can take advantage of pre-dawn concealment, make the most of the combat support, and enhance command and control effectively throughout the first day of attack.

In addition to the attack at dawn, the attackers have often conducted an initial surprise attacks on Sunday, when the defender's reactions would be delayed. The Japan's attack at Pearl Harbor and the initial attack of the North Korea in 1950 are the examples.

But in the recent examples of the Middle East Wars, the Israeli initial attack came at 0745 hours (0845 hours in Egypt) in the Six Day War and the Egyptian initial attack in the October War came at 1400 hours. In both cases, the timing of attack was carefully planned.

The time 0745 hours of the Israeli air force attack in the Six Day
<table>
<thead>
<tr>
<th>Historical examples</th>
<th>Attacker</th>
<th>The day of the week</th>
<th>Timing</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWI Ludendorff Offensive</td>
<td>Germany</td>
<td>Thu</td>
<td>0400 Mar, 21, 1918</td>
<td>1. Fire support on D-day 2. Hutier offensive tactics</td>
</tr>
<tr>
<td>WWII The Campaign in Poland</td>
<td>Germany</td>
<td>Sat</td>
<td>0520 Sep, 1, 1939</td>
<td>1. Air forces' initial attack 2. Fire support and CAS on D-day</td>
</tr>
<tr>
<td>WWII The Campaign in the west</td>
<td>Germany</td>
<td>Thu</td>
<td>Dawn May, 10, 1940</td>
<td>1. Air forces' initial attack 2. Fire support and CAS on D-day</td>
</tr>
<tr>
<td>WWII The Campaign in the east</td>
<td>Germany</td>
<td>Sun</td>
<td>Dawn Jun, 22, 1941</td>
<td>1. Soviet's psychological, military professional, and economic unpreparedness</td>
</tr>
<tr>
<td>WWII Normandy Campaign</td>
<td>Allies</td>
<td>Mon</td>
<td>0630 Jun, 6, 1944</td>
<td>1. Postponed a day owing to storm 2. The German forces' security was slackened</td>
</tr>
<tr>
<td>WWII Pearl Harbor Surprise</td>
<td>Japan</td>
<td>Sun</td>
<td>0755 Dec, 7, 1941</td>
<td>1. Access from northern route 2. Security on holiday was slackened 3. Many ships anchoring on holiday</td>
</tr>
<tr>
<td>Korean War</td>
<td>North Korea</td>
<td>Sun</td>
<td>0400 Jun, 25, 1950</td>
<td>1. Acheson's speech: Korea was not within US security cordon 2. Security on holiday was slackened 3. 1/3 strength was in camp</td>
</tr>
<tr>
<td>Six Day War</td>
<td>Israel</td>
<td>Mon</td>
<td>0845 Jun, 5, 1967</td>
<td>1. Egyptian air forces's security 2. Fog and the angle of sun 3. The hour for going to work 4. Israeli pilots were well-rested</td>
</tr>
</tbody>
</table>

Table 1
The Analysis of Surprise Attack Timing
War was shrewdly chosen at the moment when the Egyptian air force would be least on their guard and most pilots and ground crews were breakfasting. The ground mist was dense until about 0730 hours but began to clear at about 0745 hours and by 0800 hours the mist had completely cleared. The angle of the sun was also best for air attack. The time 0845 hours of Egyptian time was the hour for going to work. Senior Egyptian commanders and other key personnel who could make decisions to react to the enemy’s attack had not reached their offices. On the other hand, the Israeli pilots who had to fly missions all day long on D-day could have a good night’s sleep. Moreover, the Israelis gained another advantage, although one that was not anticipated. Egyptian Field-marshal Amer with the commander of the air force was going to start a tour of inspection of Egyptian air-bases. To insure his safety, instructions had been given not to open fire on any aircraft over the Sinai. The time 1400 hours, the Egyptian attack time in the October War, was strictly calculated as discussed in Chapter II.

The precise determination of the time launching an initial attack shows how important the time factor is, especially in modern warfare where the most highly developed weapon systems, equipment, and tactics are available. In a word, the attacker who conducts an initial surprise attack chooses a time when the defender’s reaction capabilities are most vulnerable and thus, the attacker decisively turns the war situations in his favor within a matter of hours by timely and effective employment of modern weapon systems, equipment, and tactics.
It is not an overstatement that air and sea superiority are the key to victory in modern warfare. Accordingly, the attacker who conducts a surprise attack puts the highest priority on securing at least local air and sea superiority by destroying the enemy's aircraft on the ground and ships in the ports prior to or at the same time as the ground attack.

In the early campaigns of World War II, the German air force commenced widespread bombing attacks over Poland, Belgium, and Holland to destroy most of the enemy's aircraft on the ground and, with the accurate intelligence provided by espionage agents, bombed the enemy's command headquarters and communication centers as it moved from place to place.10

In the Japanese offensive against Pearl Harbor in 1941, the Japanese navy tried to neutralize the US Pacific Fleet by its first strike and then, occupy Southeast Asia prior to the US Navy's recovery of its combat power.

In the Korean War, US air and sea superiority were the key to victory and made it possible for the UN forces to land on Inchon, which influenced the situation at once in favor of the UN forces.

In the Six Day War, the Israeli air force conducted a miraculous initial surprise attack and destroyed more than 400 aircraft on D-day—most of them on the ground.11 The complete surprise of this successful attack may seem impossible to repeat again. However, a repeat success can never be ruled out since there will always be blind spots in human
activity which make the forces vulnerable to surprise.

In the October War, the effectiveness of the Egyptian forces' precise air defense missile net against the superior Israeli air force demonstrated the importance of the correct employment of this net in future wars. The Egyptian forces' accurate air defense missile net decisively limited the Israeli air force's operations and enabled them to secure local air superiority.

Here, from the examples of World War II and the Middle East Wars, it can be deduced that the attacker's air force when conducting an initial surprise attack will, during the first phase, try to neutralize the enemy's air power on the ground; during the second phase, to disintegrate the enemy's command and control systems and isolate the battlefield from enemy's reinforcement; in the last phase, to support the ground forces.
MAIN ATTACK DIRECTED TOWARD AN UNEXPECTED PLACE

The attacker who conducts an initial surprise attack naturally tries to direct his main attack toward an unexpected place in order to guarantee victory. To direct a main attack against the enemy's main forces risks incurring reckless losses with a reduced chance of defeating the enemy. Accordingly, for the main attack the attacker should, as Liddell Hart said, "choose the line of least expectation and exploit the line of least resistance" because "to move along the line of natural expectation consolidates the opponent's balance and thus increases his resisting power." Therefore, the attacker:

"will take the most hazardous indirect approach - if necessary over mountains, deserts, or swamps, with only a fraction of force, even cutting himself loose from his communication. Natural hazards, however formidable, are inherently less dangerous and less uncertain than fighting hazards. All conditions are more calculable, all obstacles more surmountable, than those of human resistance. By reasoned calculation and preparation they can be overcome almost to time table."

To make an accurate estimation of the enemy's direction of main attack is difficult and might be limited for the defender, since the selection of the place of attack is in the hands of the attacker and the attacker can avoid the defender's main forces.

Table 2 provides an analysis and estimation of the attack direction vs. the actual direction of attack. In those four campaigns, French, Allied, and Egyptian estimations were behind exactly one generation and would have been better if they had been applied in the last war.
When Japan attacked Pearl Harbor, the Japanese navy achieved surprise by taking the unexpected northern route. In the Malay 1942, the Japanese forces did not try to conduct a direct landing operation against Singapore, which had been considered impregnable, but attacked through the Jungle along the route which the British forces thought that it was impossible to pass. Over 70,000 British troops surrendered without any decisive battles because of the Japanese attack from their rear. 15 In the Normandy Campaign and the Pacific Campaign of World War II, and the Inchon Landing Operation in the Korean War, it can be deduced that amphibious assaults made the prediction of the attacker's main attack direction far more difficult.

<table>
<thead>
<tr>
<th>Campaign</th>
<th>Estimation of the defender</th>
<th>Real direction of the main attack</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWI Battle of the Marne</td>
<td>Central axis (Ardennes)</td>
<td>Northern axis (Belgium)</td>
<td>Germany: Schlieffen plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>France: Joffre plan XVII</td>
</tr>
<tr>
<td>WWII The Campaign in the west 1940</td>
<td>Northern axis (Netherlands and Belgium)</td>
<td>Central axis (Ardennes)</td>
<td>Germany Manstein plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intensive supporting attack</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Allies' plan &quot;D&quot;</td>
</tr>
<tr>
<td>Suez War 1956</td>
<td>Northern and central axis</td>
<td>Southern axis</td>
<td>Egypt screened along the southern axis</td>
</tr>
<tr>
<td>Six Day War 1967</td>
<td>Southern axis</td>
<td>Central axis</td>
<td>Israeli Kuntilla deception and feint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Egypt's disposition for counterattack</td>
</tr>
</tbody>
</table>

Table 2
The Analysis of the Defender's Estimation vs. Actual Attack
Thus the attacker who conducted an initial surprise attack always tried to avoid the enemy's main forces. The defender would be well advised to the difficulty of predicting the direction of the enemy's main attack. Instead of attempting to deduce the enemy's main attack direction and try to cope only with that perceived main attack, the defender should try to estimate the enemy's total capabilities and prepare to cope with those capabilities.
THE EMPLOYMENT OF NEW TACTICS, WEAPON SYSTEMS, AND EQUIPMENT

The situation and means of war have continuously changed and new tactics to respond to those changes have been developed. When the attacker who conducted an initial surprise attack developed new tactics, weapon systems, and equipment, the effect of the surprise attack was often decisive.

In preparation for the Ludendorff's 1918 Offensive of World War I, the German forces had developed new tactics, the Hutier Offensive Tactics, and could achieve surprise by employing these new tactics. The German forces were thus able to penetrate 40 miles in their first drive. As a result, the French forces developed new tactics, defense-in-depth, to cope with the German Hutier Offensive Tactics.

After World War I, the German military leaders researched and analyzed why the Hutier Offensive Tactics failed in spite of the success in the initial breakthrough. They found out that because of the attacking forces' lack of firepower, maneuverability, and transport capacity, the initial breakthrough could not be exploited. After much experimentation, they developed techniques to exploit a breakthrough by employing armored divisions, tactical aircraft, and motor vehicles; tanks were employed in mass and could maneuver at high speed. The motor vehicles enabled the infantry to keep up with tanks and enabled support units to bring supplies forward rapidly. Artillery had the necessary mobility and tactical aircraft supplemented and at times replaced the
artillery fire. The strong armored forces and combat support elements rammed through a weak spot, advanced rapidly deep in the enemy's rear area, and paralyzed the enemy. In this way, the new tactics, Blitzkrieg (lightning war) marked the beginning of a new era in warfare. 20

The world was surprised when the German forces, by employing the new Blitzkrieg tactics, occupied Poland within 4 weeks and France within 6 weeks in the early campaigns of World War II.

Now the tanks and aircraft became king of the battlefield. But in October War, the Egyptian forces achieved a complete surprise attack by employing a precise antitank guided missile net and air defense missile net as discussed in Chapter II. Those missile nets not only restricted the employment of the tank and aircraft but also showed that, although the nature of those weapons is basically defensive, those weapons could also be employed as an offensive weapons.

Here it should not be overlooked that the infiltration units or guerrilla forces, which previously had no available countermeasures against enemy tanks and aircraft, will become decisive when they are armed with man-portable antitank and air defense missiles.

Thus the attacker who conducted a surprise attack tried to develop new tactics, weapons, and equipment. When those means were employed with other factors, "time" and "place", where the defender was unprepared and the attack unexpected, the attacker could achieve decisive results such as the Germans in the early campaign of World War II, the Israelis in the Six Day War, and the Egyptians in the initial phase of the October War.
MASS AND SPEED OF MANEUVER

The other key factors necessary to achieve surprise are mass and speed of maneuver. A military force can not maneuver at high speed just because it has a numerical superiority in troops and in maneuver equipment such as tanks, armored personnel carriers, and aircraft. The Allies in the early campaigns of World War II had more tanks than Germany\(^{21}\) and the Arab forces were overwhelmingly superior in numbers of tanks and aircraft.\(^{22}\) Speed of maneuver is, in fact, a combined product of equipment, organization, tactics, and the direction of attack.

In the 1940 Battle of France, 45 divisions of the German army, nearly 50-percent of the committed divisions including 7 Panzer divisions out of ten, were concentrated on the narrow front of the Army Group A, approximately 140 kilometers long.\(^{23}\) With overwhelming superiority in the relative combat power at the decisive point, the German Army Group A advanced with all speed. General von Kleist's order issued before the beginning of operations, reads as follows:\(^{24}\)

"This side of the Meuse River there can be no rest or halt for a man of this column. The organization must advance day and night without stopping, without looking right or left, and without yielding for a moment its calm control. The only way for us to carry out our orders is to take of full advantage of the enemy's surprise and the dis-order of his positions for the purpose of putting some of our detachments across the Meuse quickly. Our losses will be smaller if we do not allow the enemy time to get his bearings and make plans for the defense."

To guarantee high speed of advance, mobile artillery provided fire support. At times tactical aircraft replaced artillery fire when
artillery could not follow. Combat service support units were attached
to the Panzer divisions and German transport aircraft went on with the
more sober work of flying bombs, fuel, spares, equipment, and ground staffs
to the advanced airfields, and evacuated wounded soldiers.25 With this
combat support and combat service support, the Panzer divisions could
maintain attack momentum.

General Guderian's high speed of advance repeatedly threw French
countermeasures out of gear because they were too slow to catch up with
the German forces' speed of advance. On the German side, Hitler and
General von Kleist fretted over the risks of such a deep strategic pene-
tration by a handful of the Panzer division. They often ordered Guderian
to halt and consolidate. But Guderian, who believed that only high speed
of advance could foil the enemy's countermeasures, paralyze and disin-
tegrate the enemy, kept advancing. Faced with Kleist's order to halt,
he advanced under the pretext of widening the bridgehead. His response
to Hitler's order to halt was to ask to be relieved of his command(Map IV).26

In the Sinai Front of the Six Day War, the Israeli forces
blockaded the Mitla Pass, the Egyptian forces' key withdrawal route,
approximately 180 kilometers from the border, in less than 3 days.27
The Israeli forces also concentrated their forces at the critical point
(2 divisions on the central axis) and made desperate efforts to catch up
with the combat service support demand by the employment of helicopters
and mobile support teams. Of course, this high speed of maneuver was
made possible only by the support of the Israeli air force(Map V).28

These campaigns show that various factors are necessary to
Map IV Guderian - The 'Panzer Corridor'

Map V  The Sinai Front In The Six Day War

Source: Nadav Sahran, From War To War, Pegasus, New York, 1969, p 541.
guarantee the speed of maneuver:

(1) Concentration of combat power in order to maintain overwhelming superiority at the point of attack.

(2) Local air superiority.

(3) Adequate combat support and combat service support to maintain attack momentum.

(4) Directing the attack against the enemy's weak point, avoiding the enemy's strengths, as the water always flows from the upper place to the lower place.

(6) Advance, even at the risk of jeopardizing flank and rear security.

Thus, for the attacker, the surprise nature of an initial attack reduces the defender's flexibility and, if successful, locks the defender's forces in place. This enhances the attacker's speed of maneuver and reduces that of the defender. The reverse is also true - high speed of maneuver enhances the attacker's chance of initial success.

Accordingly, the defender should prepare various countermeasures to absorb the attacker's attack momentum and make the enemy halt. The defender should also pay close attention to the flank and rear of the attacker which are most vulnerable.
NOTES FOR CHAPTER III

3. Ibid., p 248.
4. Following statements were based upon Barton Whaley, Codeword Barbarossa, The MIT Press Cambridge, Massachusetts, 1973, pp 172 - 185.
6. Kim and Lee were leading figure among the North Korean underground espionage agents. They were arrested at that time. Mr. Cho was a famous independent revolutionist who was respected by all Koreans. He was retained in the North Korea at that time.
16. Ibid., p 368.
17. Ibid., p 372.
18. Ibid., p 376.

42


28. Ibid., pp 335 - 339.
CHAPTER IV
COUNTERMEASURES

To this point, the successful surprise attacks have been discussed. Historical examples reveal that most of the attackers who conducted surprise attacks succeeded in the first phase. The attackers achieved decisive advantages in the initial phase because they could concentrate their forces at the time and place of their choosing and attack in a manner as they wished. In a word, the attacker has the initiative.

Democratic countries disapprove of aggression. This means that the democratic country which faces a constant threat from various communist powers will always be vulnerable to an initial surprise attack. Accordingly, the best way to win the battle is to minimize the impact of the attacker's initial surprise, to secure initiative, and to conduct an effective counter-offensive.

The problem is how and what to do. Countermeasures against an initial surprise attack, from the military point of view, could be deduced by various methods and will be different according to the command levels concerned. This Chapter will discuss the countermeasures deduced by the examination of historical examples in which the defender was unprepared and failed to meet the surprise attack as they apply to the high command levels. The lessons of military history are precious, for the weaknesses and blind spots of any armed forces are not exposed in peace time but only in war.
VULNERABLE TIMING

First of all, the time factor which contributes to the achievement of surprise must be considered. The ideal situation for the defender is to be on the alert when the attacker conducts his initial attack. But, as discussed in Chapter III, the attacker will always seek a time when the defender's reaction capabilities are most vulnerable and will attempt to cover his intentions with deceptions. The defender's ability to estimate the time of the attack is limited.

Even though a formal condition of war existed between France and Germany in 1940, the French force was caught napping. On the morning of May 10 when the German forces attacked, ten to fifteen percent of the French troops assigned to front-line units were away on leave. The Germans continuously conducted deceptive psychological warfare against France during the "Phony War". The Germans pretended they had no intention of attacking France. The French soldiers were so bored with monotonous life at the front that, not being indoctrinated with the purpose of this war, they were eminently susceptible to propaganda. The security of France was slackened day by day.

The Soviet Union assumed that war might break out at any moment between her and Germany but she could not estimate the exact timing. On June 21, 1941, a German soldier, stationed on the Russo-German border, defected to the Soviet forces to reveal that the German invasion of Russia was due within a few hours. A startled Moscow sent a midnight alert to its border troops but it was too late.
South Vietnam, during the North Vietnamese final attack from March to April 1975, made a decisive error in estimating the timing of the enemy's large-scale offensive. They seemed to estimate that such an offensive would be in 1976 when there would be the presidential election in the United States. This estimation was based on the pattern of previous Communists' offensives such as those of 1968 and 1972. North Vietnam, this time, did not need to wait until 1976. They suspected that the United States had no intention of intervening and that President Ford, a non-elected president, faced difficulties at home.4

As for the time factor, the vulnerable timing in a local war as in Korea will be when conditions overlap in the following situations.

ELECTION YEAR

The most vulnerable timing in democratic countries is the presidential election seasons of both the United States and the defender, especially where US intervention is absolutely required. The more vulnerable period in this election year is the time before the new US President is inaugurated. This is of particular concern in Korea, since the pre-inaugural period is in December - January and it is well known that the North Korean forces believe that they have superior capabilities for winter operations.

DEFENDER'S INTERNAL SITUATION

When the defender's internal civil situation is chaotic, the Communists believe that they have definite advantages. They are always
ready to attack whenever they estimate that there are definite advantages to win. The time when the defender's internal situation is chaotic could be the time of greatest vulnerability and the greatest possibility of Communist exploitation. The defender should always keep in mind that his internal confusion is exploitable and should be ready for a possible attack.

POSSIBILITY OF SUPPORT OF THE SOVIET UNION OR THE PEOPLE'S REPUBLIC OF CHINA

One of the characteristics of modern warfare is the high attrition rates and heavy expenditures of supplies. In the October War, Israel spent 300 million dollars a day on an average and the war stocks of both Israel and Egypt were exhausted in 9 days. Afterwards, the supplies of both the United States and the Soviet Union, transferred by strategic airlift, sustained the war capabilities of both Israel and Egypt. From this it may be expected that a communist nation could begin a war only if she could be sure of the support of the Soviet Union or the People's Republic of China. When a communist nation is guaranteed support, it could be the very time for the communist nation to attack.

ATTACKER'S INTERNAL CONFUSION

The attacker's internal confusion might also lead to war. When a communist nation is in the midst of an internal power conflict, there could be a possibility for the present ruling class recklessly to use a foreign war to stabilize their power and to distract the people's attention.
Therefore, the defender should constantly analyze the internal and external situations of a potential enemy as well as scrutinize specific vulnerable days and times of the day. The defender must be alert on such vulnerable days as national days, holidays, and election days especially during the vulnerable times as mentioned above.
As discussed in Chapter III, when the attackers who conducted an initial surprise attacks developed new tactics, weapons, and equipment and these means were employed, they could achieve decisive results. When the defender did not develop appropriate countermeasures to the enemy's new tactics, weapons, and equipment, there were confusion, embarrassment, and defeat. As Napoleon pointed out "An army is not of good quality unless it changes its tactics every ten years." Accordingly, any force in the world should continuously research and develop how to fight (doctrine), how to organize (organization), and how to equip (material) for the next war. These efforts should definitely be based on its national character, terrain, climate, history, and the enemy doctrine.

The Soviet-Finnish War, 1939 to 1940, is one of the outstanding examples in history of a small but courageous and determined country fighting successfully and winning the first battle against overwhelming odds, by the employment of appropriate tactics based on their own terrain climate, and resources.

The Soviets invaded Finland with five armies numbering about one million troops comprising 30 divisions and six tank brigades well-armed and backed by 800 aircraft. The Finnish regular army consisted of approximately 33,000 officers and men. Upon mobilization this force expanded to six active divisions totalling 127,000 men including supporting troops. There were about 100,000 men in six reserve divisions and other 100,000 were
organized into a territorial militia. In addition, there were 100,000 women of the Lotta Svart organization. The women were trained as military clerks, cooks, laundry workers, as well as nurses. They were assigned to regimental headquarters and above. Thus, by leaving the administrative and housekeeping functions to the women, the Finns were able to put most of their manpower into fighting units. The Finns' air force had only about 100 aircraft and many of these were not battle-worthy.

Notwithstanding the overwhelming superiority of Soviet combat power, the Finnish forces took advantage of the operational environment: terrain and winter cold. Finland's vast forests gave ample cover and allowed the small detachments in which the Finnish forces operated to launch ambushes on the few roads that penetrated their forests. The severe winter cold froze the 35,000 lakes which would otherwise have helped the defender in maneuver and the minus 30 to 40 degrees F. cold hit the Russians far harder than the Finns. The most important difference between the Russians and the Finns was the mobility of their troops, particularly in their ability to make cross-country movements during winter. The Finns were trained and equipped to operate on skis. They made "ahklos" (snowboats) drawn by troops on skis. These "ahklos" were used to evacuate the wounded as well as to move machine guns, mortars, and ammunition. Artillery pieces, field kitchens, and other heavy equipment were moved on horse-drawn sleds. They also made a special stove which could be used both in heating and cooking.

On the other hand, the Russians lacked skis and sleds and depended on a large amount of heavy motorized equipment in addition to tanks and
artillery. These equipment made the Russian division practically road-bound, which was a great handicap in a country like Finland where so few roads existed.

The Finnish forces developed a new winter-warfare tactic of "motti" (which can be translated as wood piled up for chopping). This tactic emphasized mobility and hit-and-run operations. It had three successive phases: first, reconnaissance and blocking; second, attack and isolation; third, annihilation. The Finns, relying on a road block and fast-moving ski detachments, halted the road-bound Russian divisions. The small Finnish detachments continued to attack the Russian columns, dividing the Russian divisions into successively smaller groups. At selected points of attack, the Finns cut the road, felled trees, and constructed abatis, then mined the abatis and placed weapons in position for their defence. The Russian forces had been divided into a number of small isolated groups incapable of mutual support. Exposure to the severe cold, incessant Finnish attacks, and lack of means of resupply soon weakened the Russian will to fight. The Russian troops died of cold and starvation. At last the Soviets had to stop the offensive with a loss of about 200,000 casualties.

Though The Finns surrendered in March 1940 after the second Soviet attack, they had known that war was inevitable and made proper preparation to fight, using all their resources and adopting peculiar winter-warfare tactics of motti based on their own terrain and climate.

In the 1940 Battle of France, the vital weakness of France lay, not in quantity nor in quality of equipment, but in their theory.
"The issue turned on the time-factor at stage after stage. French counter-movements were repeatedly thrown out of gear because their timing was too slow to catch up with the changing situations, and that was due to the fact that the German van kept on moving faster than the French. The French, trained in the slow-motion methods of World War I, were mentally unfitted to cope with the new tempo, and it caused a spreading paralysis among them. Their ideas had advanced less than their opponents beyond the methods of World War I. As has happened so often in history, victory had bred a complacency and fostered an orthodoxy which led to defeat in the next war." 8

The French military doctrine was based on the magic word "fire power" and on defensive theory. The origin of this theory in fire power and defense was to be found partly in the first great battle in 1914 and partly in the Verdun legend.

"Fire power became a fetish, to which every perspective innovation was automatically subordinated. Army aircraft merely became an adjunct of artillery, tanks could not operate outside the visible range of fire power, and improved means of transportation were good only for bringing more and more ammunition and other material to feed the Moloch of fire. 9

The French dissipated their tanks in separate battalions to support the infantry. Though they had three armored and light mechanized divisions, they had no doctrinal concept to employ those divisions. 10 The French built up the Maginot Line. They probably thought that they would let the enemy pile up his dead in front of the Maginot Line and when time for counterattack came they would reap an easy harvest. 11

On the other hand, the Germans, even under the limitation of the Treaty of Versailles which prohibited strategic weapons such as tanks and aircraft, continued to research and develop the new Blitzkrieg tactics for the next war as discussed in Chapter III.

The French generals, who were proud of their experience of participation in World War I as flag officers ignored the German generals who were engaged in World War I as company grade officers. But the war
experiences in the last war could not cope with the initiatives and new methods of the German generals.

Here, one should not overlook the fact that there could be a tendency of obstinacy and conservatism in any forces in the world. In the French forces, there were a few who anticipated the next war. The most outspoken and best known critic was General Charles de Gaulle. He predicted that the Germans might break through the French defenses and conduct strategic penetration. To cope with this, he insisted that they should organize 6 armored divisions with 500 tanks. But he was not able to influence the High Command. Their attitudes were conservative to the end and they wanted to maintain the status quo. They wanted to secure their positions by avoiding disputes with the heads of the government.\(^\text{12}\)

In the Six Day War, the Israelis renovated almost all weapons and equipment from the small arms to tanks to suit desert-warfare. For example, they made a new sub-machinegun, the UZI, which is most effective in operations in built-up areas and in close combat. The 83.4 MM or 90 MM gun of the old model tanks such as Centurion, Patton, and Sherman which were used in World War II and 1950's were changed to 105 MM guns and the fire control systems were remarkably improved.\(^\text{13}\) The Israeli military doctrine was based on the indirect approach theory of Liddell Hart and Blitzkrieg, but they developed appropriate adaptations of the theory for desert-warfare.

The Egyptians, in contrast to the Israelis, had the same organization of armored divisions as the Soviet forces' TOE from combat boots to tanks. The tanks which would be employed in the desert were equipped
with no airconditioning but with heating systems and with no dozer blades
which are most necessary in the desert but with snow plough, and so on.14
They thoroughly followed the Soviet's static defense concept by fortified
strong point, which could easily be bypassed in desert-warfare.15

In the beginning of the Communists' large scale 1975 offensive
in the Vietnamese War, Vo Nguyen Giap and Dung - the North Vietnamese
defense minister and armed forces commander - were trying out new tactics.
They cut a province into little pieces with offensive thrusts, then
overwhelmed the cut-off defenders of each piece with mass attacks backed
by artillery and tanks.16

The South Vietnamese depended upon the US tactics and did not try
to develop their own doctrine. After the US forces withdrew, the South
Vietnamese continued to try to apply US doctrine. The nation without its
own military thought, in general, can not preserve its independence.

The doctrine of even the most highly developed and strongest coun-
tries which possess the most modern weapons system is based only on their
operational environment and is suitable to their own national character.
It is not necessarily the best doctrine for other countries. The basis
of doctrinal development should not be originated from the developed
countries' field manuals but from the initiative of each country's own
officers' creative brains. The excellent German General Staff system and
the Israeli and the US doctrinal development system are well known. These
imply that the standing doctrinal research and development system composed
of excellent officers and specialists in science, geography, history,
economy, and psychology is absolutely necessary.
FLEXIBILITY

As discussed in Chapter III, the attacker who tries to achieve a surprise attack can cover his attempts by various means and methods, thereby deceiving the defender, and the selection of the timing and place of an initial attack is always in the hands of the attacker. The defender must consider the difficulty of predicting the direction of the enemy's main attack. Accordingly, the defender, instead of attempting to estimate the enemy's main attack direction and trying to cope only with that perceived main attack, should try to estimate the enemy's total capabilities and prepare to cope with those capabilities.

The way to cope with the enemy's various capabilities is to secure flexibility through the appropriate combat power distribution, that is to maintain strong strategic reserve forces. These strategic reserves could be the defender's final cards that could decide the final consequence of war. Nothing is more dangerous than the fixed idea that the defender tries to estimate the enemy's main attack direction considering the various elements such as military doctrinal, political, economical, and psychological elements; jumps to a conclusion; and then allocates combat power only to cope with the estimated enemy's main attack direction. Examples of such attempts are the French "Plan XVII" in World War I and "Plan D" in World War II.

In World War I, General Joffre, commander in chief of the French Army, erroneously considered German available strength to be insufficient
to reach west of the Meuse and was prepossessed with the fixed idea that the German offensive could not come through Belgium. At that time, there were 1,000,000 regular and 1,000,000 reserve forces in the German Army. The French general staff considered that the combat power of the German reserves was not sufficient to commit to the front.\(^1\)

The Allies' Plan D has been discussed in Chapter III. According to this plan, the French Army had a total of 100 divisions, their reserves were comprised 22 divisions, of which they allocated 5 divisions against an outflanking attack on the Swiss border, 7 divisions for the First Army Group, and only 10 divisions for general reserves (Map VI). On the front where the Germans' main attack was directed, there were only 12 divisions, to make things worse most of those divisions were "B" grade divisions. On the Maginot Line, they allocated as many as 54 divisions including 5 reserve divisions. This allocation of combat power is a representative example of a country who did not conduct economy of force operation taking advantage of the fortified positions. The numerical divisional ratio between Germany and France, 20 : 54 on the Maginot Line and 44 : 12 on the Germans' main attack direction, presents definite contrast.

In contrast to France in World War II, the Israelis disposed only one brigade on the Burev Line of the Sinai Front which had approximately 160 Km frontage in the October War\(^2\) (Map I). The Israelis understood the weaknesses of the static defense, and moreover, they had strategic depth at this time since they occupied the Sinai. Their defense concept was a mobile defense with strong counterattacking forces, which would be available after they had mobilized their reserves.
Map VI Disposition of the German and French forces

If the defender places his available forces only along the main battle area for political and psychological reasons, the potentially unemployed forces will be increased and the defender will lose the flexibility to cope with deep enemy penetrations after the attacker has concentrated his forces on a specific weak point. It is not enough only to secure flexibility. The defender must be able to guarantee the commitment of the reserves to the main battle area, that is, to secure the maneuver capabilities and make the reserves maneuver timely through securing local air superiority, appropriate maneuver equipment, refugee control, and so on.
IMMEDIATE IDENTIFICATION OF THE DIRECTION OF THE ENEMY'S MAIN ATTACK

Difficulties and limitations of the defender's predicting the main attack direction were discussed in Chapter III, but, once the attacker has launched a surprise attack, the main attack direction must be determined. Immediate identification of the direction of the enemy's main attack will determine the success or failure for the defender. The sooner and the more exact this direction is, the more successful will be the defense.

In World War I, General Joffre would not believe that the Germans' main attack would come through Belgium, since he was sure that the German forces' combat power was not sufficient for conducting a wide turning movement, even though French intelligence presented to him clear and accurate information of the enemy maneuver. But he was able to halt the German advance because of sound and quick reactions after identification of main attack.19

In World War II, 1940, the French command was surprised when all three of Guderian's panzer divisions quickly crossed the Meuse in just one day and then expanded the bridgehead to a sixty-mile width in 5 to 6 days after launching the attack. Because of the slow speed of maneuver in World War I, Joffre could appropriately react, this time General Gamelin, commander in chief of the French forces, could not emulate Joffre for the time-factors inherent in a German Blitzkrieg.20

Modern local warfare is likely to be short in duration. That is, success or failure in the next war will be determined in a few hours or
days similar to the Israeli air force's 80 minutes first attack in the Six
Day War and the lightning quickness of the river-crossing and counter-
river-crossing in the October.

Under such time-pressures, the momentary erroneous estimation of
the enemy's main attack direction by the high command will be so fatal
that it can never be recovered by any tactical successes on the battle-
field. It is really an overriding key-factor in winning the first battle
that the defender should identify the enemy main attack direction in time
to initiate appropriate.
QUICK REACTION CAPABILITIES AND LEADERSHIP

The defender's reactions to a first strike by an attacker should be quick, timely, and sound to win the first battle. In this section, the discussion will be focused on the extent to which the defender was unprepared and erroneously reacted to an enemy attack. Examples of the French forces in World War II, Egyptian and Israeli forces in the Middle East War, and the South Vietnamese forces in 1975 from the point of view of securing local air superiority, protecting command and control systems, improving command capabilities, and military leadership will be examined.

SECURE LOCAL AIR SUPERIORITY

As discussed in Chapter III, an important target for an attacker conducting a surprise attack is to destroy the defender's aircraft on the ground and secure at least local air superiority. Air superiority is a must in modern warfare. Without being able to achieve local air superiority, quick reactions are impossible for the defender.

The ways for the defender to secure local air superiority in the first phase of war are as follows:

First, maximum efforts should be focused on minimizing the effects of the attacker's first air attack. How to minimize is most significant and difficult especially in such a country as Korea where the main airfields are within a few minutes' flight range. As mentioned earlier,
vulnerable times should be identified and eliminated through alerts and scheduling of operations and training. In the Six Day War, the Israeli air forces' choice of time of attack caught the Egyptians unprepared as discussed in Chapter III. Only a few but not many, Egyptians' dummy aircraft would be hit by Israeli cannon fire. The Israelis got exact information. The success of the Israeli attack has been called a miracle of modern war. No one, however, could assure that such a miracle would never happen again in the next war. In addition, passive countermeasures such as dispersal, camouflage, underground bomb-proof hangars, and dummy aircraft are also necessary.

Second, a precise air defense missile net should be developed similar to that of the Egyptian forces in the October War.

Third, the capabilities of both pilots and ground crews must be maximized. Air superiority is not determined only by a number of aircraft. In the Six Day War, Israel had 216 fighter-bombers, while Egypt had 350. One young pilot shot down four enemy planes. In between number two and three he was hospitalized for a wound, but ducked back without permission. Israeli pilot's marksmanship was remarkably accurate. Only one or two 30-MM cannon shells were enough to shoot up one plane on the ground. The Israelis accomplished the very rapid rotation of the planes participating in the raids. They had expected three to four sorties a day from the average pilot; they got an average of seven, and some went as high as ten. They say that the standard of gunnery established in peacetime training would drop during combat; instead it rose for the Israelis. The normal number of sorties of American aircraft in Vietnam was on the
order of two. Nasser, the President of Egypt, who did not know of this miraculous Israeli capabilities alleged that America and Britain were participating in the war against the Arabs.

PROTECT COMMAND AND CONTROL SYSTEMS

As discussed in Chapter III, the attacker's air force will, during the second phase, attack the defender's command and control systems. Poland and France could not effectively react because the German air force struck their command headquarters and communication centers as they moved from place to place.

In addition to air attacks against command and control systems, the attacker will attempt to disrupt the ability of the defender to communicate effectively. The success of a defense may depend on the ability of a force to react rapidly and in coordination. The command and control systems will be vital to direct this effort. For the command and control systems to survive an attack, they must be mobile, small, and redundant. It must be mobile to survive enemy detection and targeting. It must be small to keep its electronic signature small and retain its mobility. It must retain alternative systems to continue to direct the battle in case of any system failure or successful enemy targeting.

In the Six Day War, the communications of the Egyptian forces had so completely broken down by the third day of the war that orders to units had to be issued through radio Cairo. The Egyptians argued that jamming of their communications was responsible for the failure of orders
to hold on the Mitla Pass to reach the unit concerned after they had been mistakenly ordered to withdraw. 29

The vital weakness of any modern command and control systems is its dependence on electronic communications. Not only can modern communications means be disrupted by jamming and deception, but they may be a prime source for enemy intelligence to determine location, size, operations, and intentions of a command. On a modern battlefield, electronic warfare will be a major contributor. Its effects and possibilities must be considered.

IMPROVE COMMAND CAPABILITIES

To improve quick command reaction capabilities three issues in terms of command will be examined.

The first issue is the command structure. The command structure should be unified under a single commander in chief. The Israeli forces are unified under the Chief of Staff, who is also commander of the Armed Forces. 30 The commander integrates and coordinates all combat power toward a common goal, unity of command is one of the principles of war. The command structure in which the three services are independent definitely vitiates this principle. In the United States, the three services are independent but operations are conducted by a unified commander in a specific theater of command. While the independent services could conduct joint operations by cooperation, integration by a single commander will provide a far more efficient and quicker reaction to a surprise
attack than cooperation.

The second issue is the complex intermediate chains of command. The intermediate chains of command above division level should be minimized for more efficient reactions. Too many intermediate chains of command will only delay the dissemination of orders and reports. It is worth while to examine the necessity of the field army headquarters.

The third issue is decentralization of command to the subordinate commanders.

"Even the best plan of operations could not anticipate the vicissitudes of war, and individual tactical decisions which must be made on the spot. A dogmatic enforcement of the plan of operations was a deadly sin and great care was taken to encourage initiative on the part of all commanders, high or low. An order shall contain everything that a commander cannot do by himself, but nothing else."

MILITARY LEADERSHIP

No matter how much strength and superior weapons and equipment any force in the world has, they cannot win a war without appropriate military leadership. Since antiquity, military leadership has been a basic factor, the more complex a war becomes, the more modern weapons and equipment developed, the quicker a war tempo becomes, the more important military leadership becomes. It is particularly important that a senior commander be able to show the leadership dictated by a rapidly changing situation.

While the German generals were devoted to preparations for the next war in researching and testing the new Blitzkrieg tactics, the French high
commands competed in acquisition of a chef who had served in a first-class restaurant in Paris and its liaison vehicles were busy in preparations for their parties. While the German generals such as Guderian and Rommel had always been in the foremost to command their units and could promptly react to a rapidly changing situation, the French generals thought that the generals should be in the rear because the front situation could influence a general's emotion. At Sedan where the Germans' main attack was directed, one of the first reports was: "The Meuse has been crossed by some 40 men." For this report, General Huntziger, the commanding general of the French Second Army, commented: "There will be just that number of prisoners." General Gamelin spent his time exclusively with staff officers and he was not in sufficiently close touch with the spirit of the troops.

The French forces analyzed the Campaign in Poland 1939 and exactly pointed out all the lessons such as deep penetration by panzer divisions, air force's activities, immobility by the refugees, and that the Germans had not aimed at capturing Warsaw, but had sought to destroy the Polish forces. But the French High Command attitude to this was: "We are not Poles, it could not happen here."

In the Six Day War, the Israeli brilliant victory was mainly due to the dash and fierce will to win of the Israelis, particularly the officers. The command phrase of the Israeli officers is "follow me" rather than the usual "forward". Commanders always fought at the head of the troops. Almost half the total Israelis killed, both in the Sinai Campaign of 1956 and in the Six Day War, were officers. Among the 781 fatal casualties in
the Six Day War there were 8 high-ranking officers. Of the 10 brigade and regimental commanders who sustained injuries, 8 went on fighting, either refusing hospitalization or returning immediately after being treated for bullet or shrapnel wounds. General Rabin, the Israeli Chief of Staff during the Six Day War, said:

"Our commanders consider it a great personal responsibility to be with their men at the place where the mission is to be carried out, the place where they can have the maximum personal influence on the outcome. The more senior a commander is, the more frequently he is called upon to decide to send men out on dangerous missions, and the readiness of our commanders always to go in the van gives them the moral fortitude they need in order to take such decisions. Here lies the secret of our Army's success in the Six Day War. I do not know of any single factor to which so much of historic achievement can be attributed as the human and moral quality of our commanders; of which the readiness to go in the van, their personal valour, their audacity, their readiness to risk their lives are direct product."

In the October War, the difference in the Israeli and Egyptian generals' capabilities to lead a war was clear. Success of the Egyptian initial phase of war was mainly due to their precise planning and rehearsal, achievement of surprise, and effective employment of the modern weapons and equipment such as SAM, antitank guided missile, and the pontoon bridge PMP. After their initial success, they could not exploit their enemy's weaknesses by continuing the attack. The Israeli generals concentrated their efforts on the Golan Heights first, since the Golan Heights was more critical to their national security and they could permit the strategic depth on the Sinai Front. After they eliminated the threat from the Golan Heights, they swiftly shifted their main forces to the Sinai, where they repelled the Egyptians' all-out offensive on the 14th of October. Thus, they could recapture the initiative and they could read the time for the counterriver-
crossing operation. They penetrated along the boundary between the Egyptian 2nd and 3rd Army. While conducting the counter-rivercrossing operation, they anticipated an Egyptian counterattack to blockade their rear, prepared for it, and repelled it. Thus, they quickly enveloped the Egyptian 3rd Army. 39

In the North Vietnamese final attack of 1975, North Vietnam began their attacks against governmental outpost and province town in order to test American reactions. 40 In this situation, corruption in the South Vietnamese forces was rampant. A two star general in the 1st Corps was involved in a massive "rice scandal". Positions of command from district to province levels - even those of regimental commanders - were purchasable. This is only an example of the South Vietnamese official behavior. One congressman reported that of 60 generals and 200 full colonels, fewer than one-third were clean. 41 So long as the subordinates know of the corruption of their superiors, they will never respect, confide in, or obey those superiors. The results were that, subjected to an attack, officers and men fled leaving their unit.

The host in a war is human and the flow of war and the outcome of a war are determined only by humans. In a word, no matter how much guided weapons and modern equipment are developed, it can not take the place of the officers' capabilities to lead in war, particularly the generals, who are able to see and read the battlefield, then grasp the time for attack which unexpectedly happens in the rapidly changing situations of modern warfare.
ABSORBING THE ENEMY'S ATTACK MOMENTUM AND COUNTEROFFENSIVE

History shows us that there is no defense line, however well fortified, which can not be penetrated by the attacker's concentration. Even along the fortified defense line, there is always a gap or vulnerable point. Once the defender has identified the enemy's main attack direction, then the defender's first reaction should be focused on absorbing the enemy's attack momentum in the direction of the enemy's main attack.

In the Ardennes Campaign of World War II from 16 December 1944 to 7 February 1945, the Germans launched an offensive, the ultimate goal of their offensive was to capture Antwerp, sever the major Allied supply lines emanating from that port, and destroy the enemy forces north of the line Antwerp - Brussels - Bastogne. The Germans' initial attack achieved complete tactical surprise and to some extent strategic surprise. But St. Vith and Bastogne became islands of American forces' resistance which split and canalized the German forces' attack wave. St. Vith was held long enough to disrupt the German forces' timetable; resistance in Bastogne was never reduced. North and South of these two centers the shoulders of the break-through resisted dislodgment against fierce attack. Though the US 7th armored division withdrew from St. Vith on the 8th day of the Germans' attack, the 101st airborne division held the strategic point until they were relieved by the 3rd Army's link-up operation. As a result, the German offensive was compressed into a sort of cone whose tip, reaching inside the original line of battle almost to the Meuse near
Dinant, was there blunted. Once the German attack momentum was blunted and their attack was halted, the First Army from the north and Third Army from the south counterattacked and linked up at Houffalize, thereby they recovered their former front line.

When the German forces conducted their strategic penetration in 1940, the Allies conducted only two counterattacks. General de Gaulle, the commander of the French 4th Armored division, who thought that the longer he waited, the more unfavorable the situation would become considering the enemy's reinforcement, counterattacked in the vicinity of Loan on the 17th and 19th of May. Despite some limited successes on both counterattacks, the complete disintegration of the French 9th Army and the violent German air attacks rendered them futile. The British forces counterattacked at Arras on the 21st of May with 2 tank battalions against the flank of the German drive to the sea. Liddell Hart argued that this counterattack imposed psychological impact on fears that Hitler had felt during this audaciously deep strategic penetration, this was one of the reasons why Hitler later ordered a stop to the drive against Dunkirk, the last escape port left for the Allies.

Israeli military thought is based on the positive offensive theory and a short war. In the Six Day War, as the war crisis grew, they conducted an initial surprise attack; since they knew well the disadvantages of the static defense, they were enveloped by Arab countries, they had no strategic depth, and they were within a 10 minute air attack range. They estimated that they could not attain their purpose of a war by defense under those operational conditions.
In the October War, the Israelis could permit the enemy’s initial attack because they secured strategic depth this time by occupying the Sinai and the Golan Heights. They thought that they could launch counterattacks in both the Sinai and the Golan Heights Front after mobilization of their reserves while the active forces traded space for time. At the Sinai Front, they planned to conduct counter-rivercrossing operations, that is they were going to extend operation to the west side of the Suez Canal. They well knew how important military victory is in truce negotiations in local wars.\(^5\)

Four means of absorbing the enemy’s attack momentum could be deduced from above representative examples.

The first is to establish appropriate strategic depth. It is necessary for a defender to exchange space for time as well as maximize attrition of the attacker’s combat power by the overpowering concentration of force against the attacker. There could be an exception. In such a country as Korea, of which capital, Seoul, is only about 30 miles distance from the Demilitarized Zone. This causes an extremely difficult situation for the defender. The defender, under such situation, should devise other measures to absorb the enemy’s attack momentum.

The second is to hold the shoulders of the breakthrough. By holding the shoulders of the attacker’s breakthrough, the capability of the enemy to enlarge the breakthrough or to reinforce his successes will be limited. Accordingly, the shoulders of an enemy’s salient threaten his flank and rear and serve as basis for counterattacks.

The third is to hold the strategic key terrain, which make it
possible for the defender to control the enemy's maneuver, to absorb the
effort's reserves, to provide information about the enemy, and to provide
a base for a counteroffensive.

The fourth is to conduct a counterattack and/or counteroffensive. The defender, either while absorbing the attacker's attack momentum or after absorbing the attacker's attack momentum and making the enemy halt, should continuously conduct counterattacks and counteroffensives toward the attacker's vulnerable flank or rear, since these offensive actions could imposed physical and psychological impact on the attacker and only the offensive action could achieve decisive results or ultimate victory as discussed in the historical examples.\textsuperscript{51} It should be remembered that the French forces halted the Germans' advance by offensive actions in 1914.\textsuperscript{52} It is worth while to appreciate the dictums of French Marshal Foch and Du Picq.

"My right has been rolled up; my left has been driven back; my center has been smashed. I have ordered an advance on all fronts."\textsuperscript{53}

"He will win who has the resolution to advance."\textsuperscript{54}

In conclusion, the best way to absorb the enemy's attack momentum and to win the first battle is appropriate mix of those four countermeasures; to establish appropriate strategic depth, to hold the shoulders of the breakthrough, to hold the strategic key terrain, and to conduct counterattacks and counteroffensives, considering the specific factors such as troops available, the time for mobilization, terrain, enemy doctrine, and individual political and psychological considerations.
MORALE

To win the first battle, nothing is more important than the morale of the soldiers. The importance of morale is well expressed in the dictums of well-known generals.\(^5\)

"Supreme excellence consists in breaking the enemy’s resistance without fighting." - Sun Tzu

"In war morale counts for three quarters, the balance of man-power counts for only one quarter." - Napoleon

"A lost battle is a battle one thinks one has lost." - Foch

"Morale, the greatest single factor in successful wars." - Eisenhower

"Men will not fight and die without knowing what they are fighting and dying for." - MacArthur

If soldiers of any force in the world were devoid of morale, will to fight, all the countermasures to an initial surprise attack could be the same as building a house on sand. Historical examples reveal that in most cases demoralization of the soldiers caused defeat, not inferiority in strengths or weapons and equipment.

In the 1940 Battle of France, some of the French soldiers often used their 10 days leave to drive taxicabs in Paris, or run errands to make a little money for their dependents. Some officers had to run civilian businesses even illegally.\(^5\) They were seized with a sense of defeatism; Frenchmen attached to the 9th Army came out from cellars and surrendered of their own accord, some gave themselves up without having fired a single shot.\(^5\) In the battle of Sedan, only by rumor that German tanks
were at Bulson, two infantry and two artillery regiments of the 55th Division were soon running down the Bulson road in the wildest disorder. Their officers made no attempt to stop them.58

In the Six Day War, the rumors that the Mitla Pass was blocked by the Israelis was enough for the Egyptian forces to disintegrate. The Egyptian soldiers were wandering in the desert abandoning their units as well as throwing away their rifles. The Egyptians of the separate armored brigade abandoned vehicles which included 18 Stalin tanks, 30 T-34's, 6 Centurions and some SU-100s and scattered in all directions. General Navy, the brigade commander of this unit, was arrested and said that his men, informed that their withdrawal route was blocked and they were enveloped, had fled away disregarding his order.59 One of the deep-seated troubles in the Egyptian forces was discord between officers and enlisted men. Officers looked upon themselves as elite, drove their men hard, and showed complete disinterest in their men. Most of the enlisted men were from rural areas, illiterate, and seemed to obey orders externally but not internally. These weak ties in peace time would naturally break down under the pressure of battle.60

In the final attack by North Vietnam in 1975, the South Vietnamese forces had better weapons than any Asian nation and was three times the size and possessed more than five times the equipment of the enemy. It lacked only one thing, morale.61

"The average South Vietnamese soldier asked himself unconsciously, for what am I fighting? The answer was: a continuation of the present system - growing corruption and growing differences between the rich and poor, with the middle class growing ever poorer in the squeeze between the richer and inflation. A relative few were fighting
for a better life. Those who had a better life to look forward to were not fighting. Thieu's son, daughter, and son-in-law all were abroad studying. If any South Vietnamese general had a son in the armed forces, it never became publicly known. Generals actually involved in combat were a pathetic percentage of those wearing stars. When this forces' low morale led to the final collapse, large groups of soldiers turned into hordes of plunderers, murderers, and rapists.

The North Vietnamese leaders estimated that it would take two years to win a war. Large surprise attacks would be launched in 1975, creating conditions for the general offensive and uprising in 1976. But the South Vietnamese forces were so demoralized that they readily collapsed by themselves during the North Vietnamese first surprise attack in the Central High Plateau. The south Vietnamese 1st Corps disintegrated at Danang before the arrival of the North Vietnamese troops, leaving heavy weapons, equipment, food for months, and ammunition for 60 days. Danang fell to the enemy without a single shot having been fired by its defenders.

Why were the troops preposterously disintegrated by the fact that their rear was blocked by the enemy? There could be many reasons but the main reason is lack of mutual confidence. Mutual confidence is to trust one another; the higher commander trusts the lower commander, and vice versa, the commander trusts his subordinates, and vice versa, the soldiers trust their comrades. This mutual confidence also includes such confidence as their beliefs that their forces are superior in every respect and will win.

Discipline has the same role as that of cement, it makes military organizations solidified and it is the invisible basic framework holding the unit together. But discipline without mutual confidence is just like
a building on sand. It looks well disciplined externally in peace time, but on the battlefields where life and death is concerned, this external discipline fails. Then, the unit disintegrates into a disorderly crowd.

The forces which possess mutual confidence will hold a position and fight at all cost even if bypassed and cutoff, since they believe that their higher commander and their comrades will surely try to relieve them and they will soon be relieved.

The force which lacks mutual confidence will soon disintegrate if they know that their rear is blocked by the enemy. This blockade means death to them, they will scatter in all directions to save their lives. Soldiers with ill-shaped individualism in developing countries might think: "Why should only I be killed?" "I, alone, should live if all are dead." They well know that they could enjoy every aspect of life only with much money.

Israeli forces are a typical model of forces with mutual confidence in each other. An example of the Israeli officers basic confidence in their army after the Six Day War was that 98% thought that their army was in some or in many ways better than other armies, while 2% better in every respect. No one thought it was in many ways or in every way less effective than other armies.

After the Six Day War, the wounded soldiers in hospitals were asked what sustained them in moments of peril and what had driven them on. Only a minority of answers gave hatred for the Arab as a motivating factor. Most of answers stressed the need to fulfill their obligation toward their fellow soldiers. On the battle-field they risked their lives in rescuing comrades from burning tanks, penetrated deep into enemy territory to find
and bring back a bailed-out pilot, and brought wounded soldiers to safety.68

Most commanders in Israel are known by their first names or by nicknames. When General Rabin, the Chief of Staff during the Six Day War, arrived at a unit, he was surrounded by a crowd of embracing and kissing soldiers. The commander of the Israeli air force would be present at almost all the weddings of his pilots.69 This may seem to reflect slack discipline in peace time but this builds mutual confidence in war.

On the Syrian Front in the Six Day War, the Israelis continued advancing and occupied the final objectives led by a second lieutenant with no channel to higher command, their battalion commander, executive commander, and company commander having been killed in action. They believed that their other comrades kept advancing to their objectives, so they also advanced.70 The Israeli General Tal commented on the Israeli soldiers' will to fight:71

"A people's destiny shapes its conduct, and destiny has made us a nation of warriors. Our tank crews, condemned to be courageous, fought with extraordinary courage. Wounded soldiers continued to fight until the moment they died. Burning tanks continued to fire. They could not retreat: Where was there to retreat to? They could not lose without condemning their wives and children to death."

In the October War, the one Israeli platoon in strong point A-10 along the Golan Heights Front held their positions without any support for 4 days until they were relieved by counteroffensive; 42 Israelis on the opposite side of Suez Canal along the Barev Line defended desperately for 7 days until only ten remained. They, at last, could not help surrendering though their higher commander assured that they could be relieved in 24 hours, since they were short of ammunition.72
This climate of mutual confidence could never be shaped by order, not in a few months or years. It could gradually be shaped and invisibly accumulated over a long time as one of the forces' traditions. It could be originated from the mutual confidence of the existing society. But, even if a climate of distrust dominates society, the forces, alone, could produce this climate of mutual confidence, by concentrated efforts. Any force in the world should keep in mind that a climate of mutual confidence is a basic morale factor that could minimize the effects of the initial surprise attack and they should do their best in shaping such a climate of mutual confidence.
NOTES FOR CHAPTER IV

7. The Following statement are based on:
11. E. M. Earle (ed), op. cit., p 375
15. Ibid., p 432.
   Liddell Hart, op. cit., pp 172 - 177.
20. Ibid., pp 245 - 247.
21. See Chapter III


35. Ibid., p 133.


38. Ibid., pp 177 - 178.

39. Refer Chapter II


41. Ibid., p 236.


47. Dupuy & Dupuy, op. cit., p 442.

50. Ibid., p 473.
55. George Seldes, op. cit., p 668, p 519, p 252, p 228, p 450.
57. Ibid., p 356.
60. Samuel Rolbant, op. cit., p 162.
64. Alan Dawson, op. cit., p 29.
67. Ibid., p 161.
68. Ibid., p 159.
69. Ibid., p 183.
70. Ibid., p 158.
CHAPTER V
CONCLUSION

To this point, the countermeasures to an initial surprise attack through the analysis of historical examples during and after World War I have been discussed.

In Chapter II, the example of the Sinai Front of the October War was examined as a typical model in modern warfare. At the initial phase, the Egyptian forces achieved complete surprise. But they could not exploit Israeli weaknesses after wasting time for three days in preparing their offensive. The Israeli forces, after permitting the initial surprise attack and absorbing the Egyptian attack momentum by repelling the Egyptian general attack, secured the initiative and counterattacked by taking advantage of Egyptian errors and weaknesses.

In Chapter III, how the attackers could succeeded in their initial surprise attacks was analyzed. The attackers concealed their intentions to attack, the direction of their main attack, and their manner of attack, then tried to secure local air and sea superiority. Their main attacks were directed toward the place where the defenders least anticipated and at the most vulnerable time, with the employment of new tactics, weapons, and equipment. The attackers' mass of combat power at the decisive place and speed of maneuver enhanced the chance of initial success and made them achieve decisive results.

In Chapter IV, the countermeasures required to cope with a surprise
attack were discussed (Figure 3). The defender should eliminate vulnerable timing through analyzing his vulnerable times in reaction capabilities considering international, political, economic, and psychological factors and the operational environment. In response to the attacker's new tactics, weapons, and equipment, the defender should develop his own doctrine, organization, and material based on his national character, terrain, climate, history, and the enemy's doctrine. In response to the attacker's main attack directed toward an unexpected place, the defender should secure flexibility which could cope with the enemy's capabilities, wherever his main attack is directed.

Once the attack has begun, the defender's command should exactly identify the attacker's main attack direction as early as possible. To respond quickly to this, the defender must possess quick reaction capabilities and good officers' leadership. To cope with the attacker's mass of combat power at the decisive place and his speed of maneuver, the defender's maximum efforts should be focused on absorbing the attacker's attack momentum. To absorb the attacker's attack momentum, and to win the first battle, the appropriate mix of four measures: (1) to establish appropriate strategic depth; (2) to hold the shoulders of the attacker's breakthrough; (3) to hold the strategic key terrain; (4) to conduct counterattacks and counteroffensives, should resolutely be conducted considering troops available, terrain, the attacker's doctrine, and political and psychological factors.

These countermeasures could not be accomplished without the morale of the soldiers. The soldiers should possess an iron will to fight and
WIN THE FIRST BATTLE

ABSORBING ENEMY ATTACK MOMENTUM & COUNTEROFFENSIVE

QUICK REACTION CAPABILITIES AND LEADERSHIP

FLEXIBILITY

IMMEDIATE IDENTIFICATION OF THE ENEMY'S MAIN ATTACK DIRECTION

PREPAREDNESS FOR VULNERABLE TIMING

DOCTRINE ORGANIZATION EQUIPMENT

MORALE

Figure 3  Countermeasures
a climate of mutual confidence within the force is absolutely necessary in minimizing the effects of an initial surprise attack.

The deduced countermeasures here are not doctrinal principles and could not be. They represent conceptual guidance in preparing for a possible surprise attack. The actual, substantial, and precise countermeasures will be, and should be, researched, examined, synthesized, and actualized by the experts of the various fields and by the national commanders of every unit.

The defender, once attacked by surprise, should counterattack by surprise. Surprise is a creative result. To achieve surprise, one must continuously research and appreciate military history, since only by studying military history can he overcome the limitation of his experiences. But it is not enough only to know military history. One should not make the error of trying to apply a certain historical lesson to apparently similar situations, since history itself only provides trends of the future, the various environments have already changed. From the continuous study of military history, one could form a strategic point of view. The capability of creative thinking, in other words the capability to anticipate the next war and to meet it appropriately based upon firm beliefs stemming from one's own strategic view, will determine the results of the next war.

Nothing is more precious than national security. Adam Smith, who believed the national prosperity of the nation to be founded upon a minimum of government interference with the freedom of the individual, was willing to concede that this general principle must be compromised when national security is involved, for "defense is of much more importance than opulence."
The generals who are in charge of national security should not be stingy with their forces' weaknesses in peace time. They should always analyze their forces weaknesses and should be ready to admit them and attempt to correct the weaknesses prior to war.

What is left for the loser?
BIBLIOGRAPHY


