Intelligence in War: It Can Be Decisive

Winning with Intelligence

Gregory Elder

Now the reason the enlightened prince and the wise general conquer the enemy whenever they move and their achievements surpass those of ordinary men is foreknowledge. —Sun Tzu, The Art of War[1]

Ever present in military discussions are questions of force composition and force employment in winning battles. Several notable works, such as Stephen Biddle's *Military Power: Explaining Victory and Defeat in Modern Battle*,

> History repeatedly has demonstrated that inferior forces can win when leaders are armed with accurate intelligence.

have addressed such controversial force employment questions as: What weight should be given to employment vice that of technology or mass? Can mass win in technology-heavy environments? How effective can doctrine and tactics be in preparing forces to be used?[2] Other works, such as John Keegan's *Intelligence in War*, argue that blunt force is the primary variable in achieving victory: "Willpower always counts for more than foreknowledge."[3]

Force and its employment are significant in driving outcomes in combat. However, it is operational and tactical intelligence, not necessarily numbers, technology, or tactics, that can have the most decisive impact on how forces are employed and how success is achieved in wartime operations. History repeatedly has demonstrated that numerically inferior forces, armed with less capable technologies, can win when leaders are armed with accurate intelligence they believe they can act upon. Such intelligence can be a force multiplier. Therefore, considering the value of force employment, technology, and mass without placing a corresponding value on intelligence is a mistake.
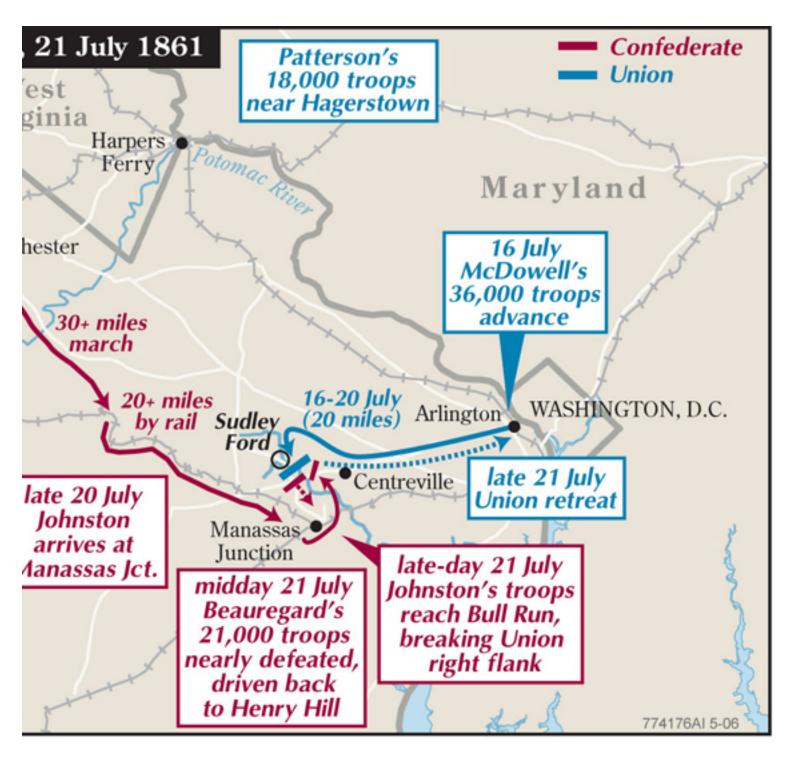
In this article I explore the role of tactical and operational intelligence in dictating force employment schemes and as a decisive element in five strategically significant battles— the First Battle of Bull Run (1861), Tannenberg (1914), Midway (1942), Inchon (1950), and the Israeli air strike initiating the Six-Day War in 1967—and I will demonstrate that it was neither technology nor material superiority that won the day, but accurate, timely, actionable intelligence, combined with leaders willing to treat intelligence as a primary factor in deciding outcomes. In each case, intelligence gave commanders the knowledge of the battlefield (battlespace awareness) and the understanding of their foe to focus their forces at the right place and time to win when, in all probability, they should have been defeated. Certainly ADM Chester Nimitz, faced with the job of reversing the losses at Pearl Harbor, would have disputed RADM Thomas A. Brooks' assertion that intelligence is a secondary factor in war, as would General P. T. Beauregard, who, in 1861, faced the grim possibility of losing the first major battle of the Civil War.[4]

The Battle of Bull Run: 21 July 1861

The battle may be most renowned for the last minute heroics of General "Stonewall" Jackson on Henry House Hill, which led to the rout of the Union army, but the Confederates were able to employ the forces needed to win at Bull Run because they had created, months earlier, an intricate spy network in Washington, DC. By the time the fledgling Union Army had organized itself for its first major campaign into Virginia, its troop strengths, dispositions, and plans had long been compromised. Said Beauregard, commanding Confederate forces in northern Virginia, "I was almost as well advised of the strength of the hostile army in my front as its commander."[5]

In May 1861, just weeks after the announcement of the fall of Fort Sumter, a spy in the quartermaster office of the US War Department had begun recruiting a ring of Confederate sympathizers in the nation's capital. Among these were bankers, clerks, couriers, housewives, and Rose Greenhow, proprietor of a respectable salon frequented by senior government and military officials. While the network mobilized, a Union force of nearly 36,000 was organizing and training just across the Potomac River. Its commander, General Irvin McDowell, was under pressure from Lincoln to strike the Confederates at the earliest possible date.

While the Union Army was concentrated, Confederate forces were split, with 21,000 stationed at Manassas Junction under Beauregard, and 12,800 under General Joseph E. Johnston near Harper's Ferry. Combined, the Confederate troops still numbered fewer than the Federals, and divided, they stood little chance against a concerted Union offensive. Yet, authorities in Richmond, worried about a Federal incursion down the Shenandoah Valley by a force of 18,000 at Harpers Ferry, had told Beauregard he could unite the two armies only if an attack was imminent. Thus, a McDowell move toward Manassas would spark a race in which Johnston would have to rush to Beauregrad's aid across piedmont terrain and with limited railroad access. His ability to win this race was possible only if he received timely, detailed, and believable intelligence indicating when, where, and with what forces McDowell would strike. Beauregard's fate rested in the hands of a few neophyte clandestine agents.

On 10 July the network demonstrated its worth, as Rose Greenhow sent word that "McDowell has certainly been ordered to advance on the sixteenth."[6] This intelligence, however, proved insufficient to start the race. President Davis denied requests to authorize relocation of Johnston's army. Beauregard, fearing the worst, sent a plea to Greenhow for intelligence reconfirming the date and planned movement of Union forces. On 16 July, she sent word that the Federal forces would move out that very day, marching from Arlington to Manassas, via Centreville, a distance of only 20 miles. This information immediately made its way to Richmond. Consequently, orders were dispatched that night directing Johnston to move south in haste and unite with Beauregard's forces on the Bull Run.

21 July 1861

Patterson's
18,000 troops
near Hagerstown

West
Virginia

Harpers
Ferry

Potomac River

Maryland

hester

16 July
McDowell's
36,000 troops
advance

30+ miles
march

20+ miles
by rail

16-20 July
(20 miles)

Arlington

WASHINGTON, D.C.

Sudley
Ford

Centreville

late 21 July
Union retreat

late 20 July
Johnston
arrives at
Manassas Jct.

Manassas
Junction

midday 21 July
Beauregard's
21,000 troops
nearly defeated,
driven back
to Henry Hill

late-day 21 July
Johnston's troops
reach Bull Run,
breaking Union
right flank

774176AI 5-06

McDowell began his march on the 16th, as Greenhow had reported, crossed the Bull Run at Sudley Ford on the 21st, and attacked the Confederate left flank on Matthews Hill. Fighting raged throughout the day, and Beauregard's forces were driven back to Henry Hill. Defeat seemed imminent. Late in the afternoon, however, Johnston's reinforcements, having arrived via rail at Manassas Junction the night before, made their way to the battle and broke the Union right flank. What

seemed a victory for the Federals rapidly deteriorated into a disorganized retreat. And while it was Jackson's brigade under Johnston's command that turned the tide of a hard fought battle, it was espionage that provided alternatives to Confederate political and military decisionmakers, allowing them to concentrate their forces and demonstrate that they could defeat the Union in a major engagement. Victory was not certain—defeat was avoided only as a result of the decision to reinforce Beauregard. In *What If?*, Stephen Sears suggests that without a geographic point at which to regroup, the Confederate Army might have dissolved and the rebellion ended in its first year if the Union had won that day.[7]

Intelligence in this case gave the Confederates several advantages. First, with reliable information on the Union order of battle and strategy, they were able to split their smaller forces to defend the Shenandoah Valley and to maintain a check on McDowell's army. Second, because of the existence of timely indicators and warning, it was inconceivable that the Federals could execute a surprise attack against the Confederates; agents were able to provide fresh, corroborated information on everything the Federals did. Finally, Beauregard knew the strength of his opponent and the route of attack and, therefore, had the ability to consolidate and position his forces on the most advantageous ground. This was all the more important as McDowell had a well-developed concept of operations and superior numbers. Yet force alone cannot win the day.
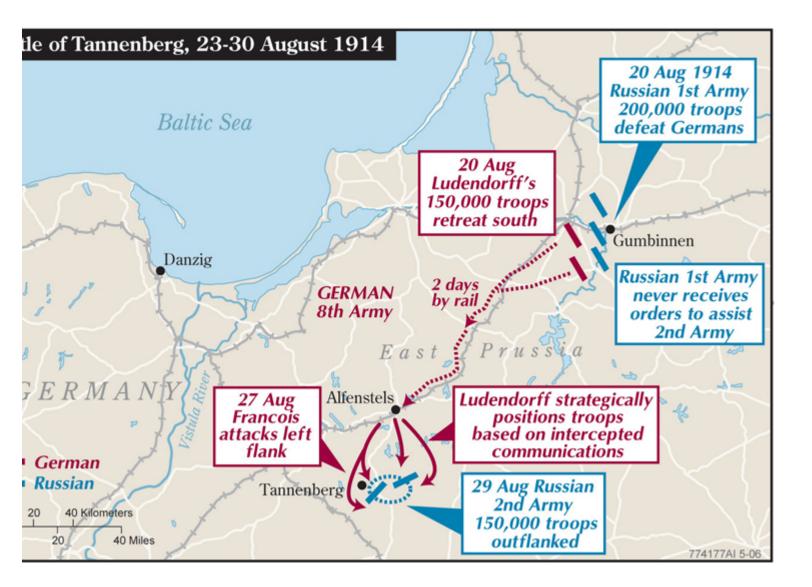
Battle of Tannenberg: 23–30 August 1914

The Battle of Tannenberg was one of the largest, yet least known, strategically decisive victories in modern warfare. Its outcome allowed the Germans to recover momentum after their loss at the Battle of the Marne on the Western Front, to save Prussia from the Russians, to defeat three successive Russian armies, and to deal the first of several blows leading to the Treaty of Brest Litovsk and the Russian Revolution in 1917. Of the roughly 150,000 Russian soldiers who fought in the battle of Tannenberg, some 30,000 were killed or wounded and another 95,000 captured. The Germans suffered fewer than 20,000 casualties, captured more than 500 guns, and filled dozens of trains with captured equipment for transport to Germany.

After losing at Tannenberg, the Russian army could not muster enough offensive strength to re-enter Germany again until World War II. It was

nothing short of a complete victory for Germany, and it came in large part because of the German Army's successful use of intelligence.

Modifying the Schlieffen Plan at the outset of the war, Germany sent only one army, the Eighth, to the Eastern Front to face the presumed, slow-to-mobilize Russian armies. Misperceiving how quickly the Russians could bring their forces to bear, the Eighth quickly found itself facing two Russian armies—the First moving west into Prussia, and the Second driving northwest from southern Prussia. While the German Eighth Army was comparable in size to each of the Russian armies, it could not face a combined assault.

le of Tannenberg, 23-30 August 1914

Baltic Sea

**20 Aug 1914
Russian 1st Army
200,000 troops
defeat Germans**

**20 Aug
Ludendorff's
150,000 troops
retreat south**

Gumbinnen

Danzig

GERMAN
8th Army

*2 days
by rail*

**Russian 1st Army
never receives
orders to assist
2nd Army**

E a s t   P r u s s i a

G E R M A N Y

Vistula River

**27 Aug
Francois
attacks left
flank**

Alfenstels

**Ludendorff strategically
positions troops
based on intercepted
communications**

German
Russian

Tannenberg

**29 Aug Russian
2nd Army
150,000 troops
outflanked**

20   40 Kilometers

20   40 Miles

774177AI 5-06

The Russian First Army struck first and won a victory at the Battle of Gumbinnen on 20 August 1914. It did not seize the initiative, however, choosing instead to wait until the Second Army could move north to catch the Germans in a pincer. This gave Helmuth von Moltke, the German Chief

of Staff in Berlin, time to replace the commander of the Eighth Army, General Maximilian von Prittwitz, with Generals Paul von Hindenburg and Erich Ludendorff, and to regroup. Rather than concede Prussia to the Russians or potentially face another defeat at the hands of the First Army, Ludendorff looked south for an opening to attack the Russian Second Army. He authorized the movement of a corps from Gumbinnen south via railroad to attack the Second Army's left flank. He also considered marching the bulk of his remaining forces south to envelop the right flank —this, however, would leave northern Prussia exposed to the First Army. Shifting fronts would be risky.

While both side's staffs planned for the coming great battle, a secret war was waged behind the scenes by cryptologists. Early in the days of radio communications, neither side was particularly astute in communications security, and both exposed their vulnerabilities over the airwaves. But the poorly educated and trained Russian cryptologists were unable even to master their simple cipher system and, in the case of the First Army, did not use a communications code. This led to frequent lapses in security and resulted in operators repeatedly resending messages, often uncoded, in plain language. The result was a windfall of intelligence for the Germans. Intercepting Russian communications, German cryptologists deduced troop strengths and movement schedules, picked up orders, and, most importantly, messages between the First and Second Armies that showed how poorly the two were coordinating their efforts.[8] While the German staff can be credited with developing the concept of operations that would lead to victory in the engagement, it was communications intelligence that provided a clear picture of the battlefield, or in today's parlance, the battlespace awareness.

As the single German corps under General Hermann von Francois began its attack against the exposed left flank of the Second Army on 27 August, two particularly important unencrypted communications transmitted by the Russian First and Second Armies were intercepted.[9] The first, sent by General Paul von Rennenkampf, commander of the First Army, revealed the distance between the two armies and that Rennenkampf needed at least three days before his army could join the Second Army in attacking the Germans. This suggested to Ludendorff that he need not worry about First Army assistance to the Second or exploitation of the gap created by his own army's movement south. The second intercept, a communiqué from the Second Army, provided a complete description of its dispositions and planned route of attack to the north. As important as the first, this gave Ludendorff the foreknowledge he needed to achieve surprise and a

concentration of force against an exposed adversary.

As the bulk of the German Eighth Army advanced on the right flank of the Russian's Second Army and the Russians' plight became apparent, German cryptologists began intercepting pleas for assistance, as well as orders from General Zhilinski, overall commander of Russian forces, directing the First Army to move northwest, away from Second Army—a clear sign that the Russian leaders did not have a clear understanding of German dispositions or just how precarious Second Army's situation was. This knowledge emboldened the Germans. With the two corps from Gumbinnen and Francois' corps to the south, the German forces swept around the Second Army and on 29 August completed the encirclement that would spell its demise.

By destroying Second Army with relatively little loss, Hindenburg and Ludendorff could turn north against the First Army and a newly formed army, the Tenth. These were defeated at the Battle of First and Second Masurian Lakes and effectively destroyed Russia's capacity for carrying out offensive operations against Germany.

Intelligence at Tannenberg did not win the battle, but it did play a decisive role in dictating the way the Germans employed their units against a force that was, overall, larger than theirs. German leaders had a thorough understanding of their adversary's capabilities, schedules, and concept of operations, and this knowledge allowed them to exploit Russian vulnerabilities and defeat them in detail. Thus, if "[O]nly numbers can annihilate," as suggested by Lord Nelson, the successful exploitation of intelligence in this case demonstrates that they need not be superior numbers.[10]

The Battle of Midway: 4-7 June 1942

Midway was one of the decisive battles of history. The loss of her fleet carrier force deprived Japan of the initiative; henceforward she was on the defensive— attempting to hold the great spread of the Southern Resources Area and contiguous regions she had so handily won.... Two basic factors led to the result: first and foremost, the American knowledge of the Japanese secret codes, which presented Nimitz with an accurate picture of Japanese intentions and dispositions.

—R. Earnest and Trevor Dupuy[11]

As with battles on land, intelligence can drive the employment schemes necessary for a leader to win against superior odds at sea. Midway, a battle in which intelligence allowed the United States to spring a trap against what the Japanese had planned as their own ambush, resulted in an immediate shift in the balance of sea power in the Pacific. The Japanese Navy, which had a fleet of six carriers before the battle, lost four at Midway, and it lost the bulk of its trained pilots and hundreds of aircraft. While the United States would lose one carrier, it was left with five spread throughout the world. Thirteen more were under construction. Yamamoto believed that for Japan to win the war it would need to destroy the carriers early.[12] Due in large part to the foresight provided by US naval intelligence, he failed.

Following the victory at Pearl Harbor, Japanese strategists had different conceptions about how to proceed in the war in the Pacific. However, James Doolittle's carrier strike on Tokyo in April 1942 gave impetus to the argument that what was needed was the destruction of America's carrier fleet. In considering the options, Yamamoto believed that the United States, whose naval order of battle in the Pacific after the Pearl Harbor strike was significantly less than that of Japan, would not risk a major fleet engagement for anything other than defense of a vital target. Midway fit this bill.[13] Were the Japanese to take Midway, they would threaten not only the Hawaiian Islands, but they could use Midway as a springboard for attacks on the continental United States. As such, a direct attack against Midway would force the US hand. In this, Yamamoto was right.

Meanwhile, the United States was facing its own strategic dilemmas. Having lost so much of its fleet at Pearl Harbor, it had only limited options.

First, the United States was committed to a defensive war in the Pacific—they had to react to Japanese actions, and, second, since they were committed to defend the Hawaii-Australia line with inferior numbers and weapons, the only real chance for success was to concentrate their forces at the right place at the right time.[14]

To succeed, therefore, foreknowledge of the Japanese plans was vital. And if the US command had it, it could compensate for the disproportionately large force that Japan could bring to bear.

And foreknowledge the US Navy had. Since World War I, the Navy had placed a good deal of effort into developing a strong communications

intelligence capability. Its OP-20-G Navy Radio Intelligence Section had over the years garnered a number of successes, including breaking many of the Japanese Navy's codes. While diverted from conducting operational intelligence prior to Pearl Harbor, OP-20-G had reestablished its functional capabilities by March 1942 and was reporting daily on hundreds of Japanese naval intercepts.[15] The Japanese, like the Russians before Tannenberg, committed the egregious error of having to resend messages because command elements used outdated code books—US cryptologists had the benefit of capturing transmissions in both old and new codes, thereby providing multiple opportunities to mine transmissions for useful intelligence. OP-20-G's successful reporting of Japanese naval movements prior to the Battle of the Coral Sea, which ADM Nimitz had used to determine what forces to commit, bolstered its credibility.

Even as the Coral Sea engagement was being waged, intercepts strongly suggested a major Japanese combined, amphibious buildup. Naval intelligence determined in early May the composition of Japanese forces, where they were staging, and their operational schedules.[16] The precise location of attack, however, was more difficult to surmise because the codes for Japanese geographic designators remained unknown. Nimitz believed the Japanese would strike Oahu; others felt the target was the US West Coast. OP-20-G, though, reasoned that the target was Midway. In order to validate their position, the cryptologists successfully used a ruse to get the Japanese to reveal their target.

The idea was to send a message, via the cable to Midway, to the Commanding Officer of the Naval Base instructing him to "...send a plain language message to Com 14 (Commandant 14th Naval District) stating in effect, that the distillation plant had suffered a serious casualty and that fresh water was urgently needed—to which Com 14 would reply, (also in plain language), that water barges would be sent, under tow, soonest.[17]

Soon after that message was sent, a Japanese message was intercepted noting that "AF is short of water." OP-20-G was able to report to Admiral Nimitz that the objective was, indeed, Midway.

By the time the Japanese changed their cipher codes on 28 May, it was too late. Having been provided Yamamoto's strategy, order of battle, transit dates, and carrier strike point, Nimitz had what he needed to commit his forces to battle. Rather than fall into a Japanese trap, Nimitz could set one himself by concentrating his forces against an unsuspecting enemy. Deploying three carriers north of Midway to lie in wait, Nimitz had nearly evened the odds.

On 2 June 1942, with a good understanding of the general whereabouts of the Japanese fleet—a result of communications intercepts from the Japanese carriers—a US Navy patrol aircraft located and maintained regular contact with it.[18] In the ensuing battle, US intelligence, surveillance, and reconnaissance allowed for the coup de main on 4 June when dive-bomber squadrons from the carriers caught the Japanese completely by surprise, sinking the carriers *Akagi, Kaga,* and *Hiryu*. Having gained the advantage, US forces traded blows, sinking the *Hiryu*, while losing *Yorktown*. In addition to the lost four carriers, three Japanese battleships were damaged, two heavy cruisers sunk and three more damaged, and several destroyers and auxiliary ships were sunk.

But, what if in mid-May 1942, a Japanese sailor, after transcribing a radio message he had just intercepted from Midway Island, had turned to his superior to ask, "Why are they broadcasting this message in the clear?"... A simple question, heightened alertness, and suddenly what historians have often described as the decisive US advantage in the close-run Battle of Midway might well have become the Japanese side's key to a great victory in the central Pacific, dramatically altering the course of the Second World War.[19]

Keegan's analysis of the battle in *Intelligence and War* stresses that even with all the intelligence that Nimitz had, and while striking a sizable blow to the Japanese, it had nearly been a major US defeat:

[M]idway demonstrates that even possession of the best intelligence does not guarantee victory.... A little less intuition by McClusky of Bombing 6, a little more intellectual resolution by Nagumo, and it would have been the carriers of TF 16 and 17, not those of Yamamoto's Mobile Force, which would have been left burning and bereft in the bright waters of the Pacific on 4 June 1942.[20]

This conclusion misses the point. Battle is always risky and can be swayed one way or another by sheer chance. Yet the US Navy would never have had the opportunity at Midway to avoid the Japanese trap and to concentrate its forces in a surprise attack against an adversary with numerical superiority had it not been for operational and tactical intelligence of the kind it received. "Armed with the support of excellent communications intelligence and of his superiors in Washington, CINCPAC was able to satisfy all three of Clausewitz's 'principles of warfare': decision, concentration, and offensive action."[21] Foreknowledge, not willpower, was the most decisive factor at Midway.

Inchon Landing: 15 September 1950

The first three examples illustrate how intelligence can help lead to victory through clandestine intelligence operations designed to provide indications and warning information of impending attacks or operations. Another way is through the support intelligence gives to planning, when it provides information on the adversary's capabilities and vulnerabilities—in today's terminology "intelligence preparation of the battlespace."

"Intelligence reduces the unknowns that planners must face and forms the basis for both deliberate and crisis action planning," the Naval Doctrinal Publication points out.[22] In the case of the amphibious assault at Inchon, an attack that led to the collapse of the North Korean army and the taking of some 125,000 prisoners, intelligence gathering and planning allowed US forces to overcome geographic disadvantages and take the enemy by surprise.

On 25 June 1950 four columns of North Korean infantry and tanks under the command of Marshal Choe Yong Gun surprised the world by driving south and pushing South Korean and contingents of US forces to the southeast corner of the Korean peninsula. While winning a series of tactical successes, the North was unable to gain its strategic objective—command of all Korea—and was faced with the proposition of using all its remaining forces against the last allied forces holding the Pusan perimeter. Through August and into September, the North threw 13 infantry and two armored divisions (98,000 men) at the Allies, necessitating the commitment of all UN reserves. And while the North suffered horrendous casualties, its tenacious attacks and acceptance of losses suggested a stronger force than they had.

General MacArthur, the supreme allied commander in Korea, considered a major counterstroke to catch Choe's forces in a net. This would involve a two-pronged attack in which an amphibious landing would be made on the west coast. The amphibious assault was designed to sever Choe's lines of communication and retreat and would be coupled with a break-out from the Pusan perimeter. Two questions, however, had to be answered: (1) Where should the landing occur? and (2) What forces could the enemy bring to bear when it began? The intelligence community set about answering these questions.

After a prototypical Intelligence Preparation of the Battlespace, General Douglas MacArthur decided that naval forces could dramatically alter the course of the war by seizing Inchon, a major port on Korea's Yellow Sea coast. Possession of Inchon would enable the allies to recapture a key air base, and mount a major

ground offensive on Seoul which would cut off North Korean forces in the south. **[23]**

Inchon, however, was not ideal. The 45-mile-long approach from the open ocean to the landing area would be complicated by tides— which caused the water's depth in the landing area to recede to dangerously low depths —and the proximity of several small islands occupied by North Korean forces. To be successful, the Allies would need to clear the islands, intelligence would need to be collected on water depths, and enemy troop strengths in the surrounding area ascertained. In addition, a forward reconnaissance element would need to be in place to provide eyes and ears to the Marines assigned to the assault. The assignment fell to a Naval Intelligence officer attached to the ROK Navy, LT Eugene Clark.

Clark, a veteran of the OSS, recruited local fishermen and partisans for his team. Deployed on the 26th of August, he and his team silenced opposition on most of the islands by 8 September and began a thorough reconnaissance of approaches and Inchon itself.[24] Particularly crucial to success was the assessment of the depths and advice to planners on where and when to strike. Clark and a companion measured tides and found that the mud flats initially selected for the attack were not suitable to withstand the weight of fully armed marines. This critical piece of what today would be known as measurements and signatures intelligence (MASINT) averted what could have been a disaster, as the landing plans were modified to account for the findings. Clark and his men also held key positions up to the morning of the attack and lit beacons to guide the lead elements of the assault force.

While Clark was providing on-site intelligence, planners were aided by imagery and human intelligence. Aerial photographs and reports from former inhabitants were used in shaping the operational plans for the amphibious task force commander, RADM James Doyle and his staff. Taken with Clark's information, "intelligence helped Admiral Doyle select the best water approach, set the time for the amphibious assaults, and identify the North Korean Army line of communication as a critical vulnerability."[25] Additionally, the intelligence estimates suggested that the North did not have forces enough in the area to offer significant resistance to the landing or to the recapture of Seoul.[26]

With a full understanding of what he faced, MacArthur told the Joint Chiefs of Staff that he could conduct a successful amphibious operation. Meanwhile, he and his staff developed a concept of operations that would allow for concentration of force, and surprise, against a most vulnerable

enemy point.

This comprehensive planning bore fruit on 15 September, when the allied amphibious task force launched its initial assault from the sea. By the 19th, the 1st Marine Division seized the air base at Kimpo and began the assault on Seoul. U.S. Army troops pushed out from the Inchon beachhead and on the 27th linked up with their comrades advancing north from the Pusan perimeter. Two days later, the Marines captured Seoul. Thus, by skillfully incorporating intelligence into operational planning, in a little more than two weeks, allied forces were able to oust the invaders from the Republic of Korea.[27]

The role of intelligence in the Inchon landing is significant if for no other reason than it shows how central it is to planning a victorious campaign. Intelligence at Inchon was not happenstance, like the discovery of Lee's lost orders before Antietam, but a conscious and necessary task assigned by leadership; before MacArthur could determine how to employ his forces, he first had to know whether he could attack or not and where he could attack if it was possible. By emphasizing intelligence, MacArthur conducted a masterful offensive and avoided an American Gallipoli.

The Six-Day War: 5 June 1967

Israeli intelligence was outstanding, having pinpointed the location of every Egyptian squadron, revealed the layout of every air base, and mastered every detail of Egyptian Air Force operational procedure.… During the course of the morning, the Israelis struck 18 of Egypt's Air Force bases, cratering runways, blowing up aircraft, and destroying support facilities. The Egyptians lost over 300 of their 420 combat aircraft, and 100 of their 350 qualified combat pilots.

Israeli intelligence was, indeed, outstanding in the Six-Day War. It demonstrated how strategic intelligence can be used in conjunction with operational intelligence to provide senior decisionmakers information necessary to make well-informed national security decisions and to give leaders opportunities to mitigate the numerical superiority of an adversary. Yet, just as Israeli intelligence in this case can be viewed as an example of how intelligence operations should be conducted, Egypt's poor intelligence opened the door to its own defeat.

In 1967, Israel faced a monumental security task: defense of the nation against several Arab armed forces that, when combined, held an advantages of two to one in manpower, two to one in tanks, seven to one in artillery, three to one in aircraft, and four to one in warships. On its southern border, Israel had roughly 70,000 troops in the Sinai against Egypt's 100,000; 700 tanks against 950; and it had to distribute its 200 aircraft across all fronts while facing Egypt's concentrated 430.[29]

Nor could Israel count on technological superiority to overcome the odds. Israeli intelligence, for example, had scored a coup by obtaining a MiG-21 fighter from an Iraqi defector, and it had determined that Egypt's MiGs were better than all but their Mirage aircraft. Egyptian artillery was superior, and their T-55 tanks were more capable than the majority of Israel's tanks.[30] And while Israeli forces were better trained, had superior leadership, and had a far more flexible doctrine, Egypt's army could boast that the majority of its soldiers were combat veterans.

Israel faced a similar situation to its north, against Syria and Lebanon, and to its east, against Jordan. Finally, Israel faced a hostile international community; the United States was an ally but eager to avoid any spark that could ignite a conflict with Egypt's ally, the Soviet Union.

Events began spinning into war in November 1966, with the signing of an Egyptian and Syrian alliance, and led to an Egyptian threat to use force on 18 May 1967. Egypt had mobilized its military and announced combat readiness in the Sinai, followed on the 23rd by a closure of the Straits of Tiran, blockading the Israeli port of Eliat.

Israel took these acts, particularly the blockade, to be cause for war. Further, Israeli intelligence was able to verify that Egypt had plans for an attack, code named Asad, on Eliat and other targets in the Negev on the 27th. This revelation was passed to the United States, which placed

sufficient pressure on the Soviet Union and Egypt to force a cancellation of the attack.[31] But all other diplomatic efforts failed, and the Israelis confronted the decision of (1) preempting their enemies' first strikes; (2) allowing themselves to be hit first by a numerically stronger adversary; or (3) continuing an unacceptable status quo. Israel chose to attack first.

A preemptive strike against the Arabs had always been a major part of the Israeli concept of operations, but it was their military intelligence, under the command of the bright and aggressive Aharon Yariv, that proved decisive.

'Know your enemy' was not, Yariv told his heads of departments, merely a figure of speech; it had to be taken literally. It was not enough to know Arab strategy on the grand scale; Yariv wanted to know everything about every Arab unit down to the menus served in the sergeants' mess.[32]

And, quite literally, Israeli intelligence had a clearer picture of the Egyptian order of battle and capabilities than did Egypt's own commanders.

In the two-years before the Six-Day War, Yariv not only set about knowing the whereabouts of every Arab air base, but also having each inspected. Israeli intelligence officers, often working as chefs or coopting Egyptian soldiers, provided a complete picture of the EAF, including:

- the whereabouts of every aircraft and name/information on the pilot;

- the name, background, status, and schedule of every base commander;

- schedules and turnovers of Egyptian radar controllers;

- reveille and morning schedules for the pilots and ground crews;

- the complete Egyptian battle codes and communications networks; and

- when senior air officials would be absent from their commands, and unable to direct operations.[33]

From this information, Israeli intelligence developed a precise targeting package. It knew when the EAF would be most vulnerable–when the aircraft would be most exposed; when the pilots would be slowest in getting to their aircraft for flight operations; and when leadership would be unable to provide direction. With comparable intelligence on Egypt's land forces and effectiveness, Yariv believed that Israel could not conceivably lose the war. "So finely tuned was his intelligence apparatus that he was

able to predict an outcome which was to astonish the world when it was all over."[34]

Coupled with military operational intelligence, the Israeli Mossad—its state intelligence agency—had developed relationships with foreign governments and intelligence agencies that provided new and corroborated strategic and tactical intelligence before the war. The relationship with the United States, in particular, served a critical role before the preemptive strike by making clear to both the CIA and Pentagon that war was inevitable and getting tacit buy-in on the plan. "The United States understood Israel's reasoning and did not object to the preemptive attack. Amit's (head of the Mossad) achievement in secret diplomacy was built upon the international intelligence links which the Mossad had worked so hard to foster for years."[35]

Knowing that the United States would not condemn the attack and armed with an exceptionally well-developed plan, Israeli leaders authorized the use of force, thus seizing the initiative from their adversaries.

The preemptive air strike proved decisive. The attack caught the Egyptian Air Force with its commander, General Mahmud, out of contact with his forces. "In his absence, the EAF was paralyzed. Without specific authorization, the vast majority of Egypt's air force officers, from air sector commanders all the way down to pilots, were uwilling to take even the most obvious emergency procedures."[36] Only eight MiGs got into the air to defend their airfields; every one was shot down. The airfields that were undamaged in the initial strikes managed to get only 20 aircraft into the air, all of which were either shot down or crashed when they could find no undamaged airstrips to which to return. All told, three-quarters of the EAF was destroyed in the first hours of the war. Intelligence had paved the way for the Israeli Air Force to win one of the most lopsided victories in history.

But credit for Israel's success cannot be explained by its intelligence alone; indicators and warning should have prepared the Egyptians for what was to come. As Kenneth Pollack contends, "There was a colossal failure on the part of Cairo's intelligence services to provide the Egyptian military with the information required to fight Israel." He notes that Egyptian intelligence:

- was biased to the political climate and, therefore, did not provide clear and decisive analysis on whether Israel was going to attack;

- issued reports to commanders that changed daily and were often contradictory;

- provided no credible intelligence on Israel's order of battle, effectiveness, doctrine, or planned strategy;

- had no intelligence on where Israeli forces were and, to the extent that it had information, fell victim to Israel's denial and deception campaign; and

- did not understand the concept of flexibility stressed by the Israeli military in conducting joint and independent operations.[37]

As a result of these failings, even had Egypt's military been better trained and led, it was at a significant disadvantage from the outset. Once combat began, Egyptian forces had no understanding of where Israel would strike, with what force, in what manner, with what tactics or effect, over what duration, or with what objective—in short, they were blind.

Conclusion

Kimmel stood by the window of his office at the submarine base, his jaw set in stony anguish. As he watched the disaster across the harbor unfold with terrible fury, a .50-caliber machine gun bullet crashed through the glass. It brushed the admiral before it clanged to the floor. It cut his white jacket and raised a welt on his chest. "It would have been merciful had it killed me."

—RADM Edwin Layton[38]

The great military victory we achieved in Desert Storm and the minimal losses sustained by U.S. and Coalition forces can be directly attributed to the excellent intelligence picture we had on the Iraqis.

—General H. Norman
Schwarzkopf III, U.S. Army[39]

Battle is a physical activity and requires force. And yet, to speak of force without associating a corresponding value to intelligence is akin to speaking of a boxer without eyes or a brain. Additionally, "employment of force" is hollow without an understanding of where, in what conditions and geography, and against whom to employ force. Success in the physical act of battle requires well-trained soldiers who are properly equipped, led by strong leadership willing to use force against a clear objective, employing it correctly, and sacrificing when necessary. But it also requires foresight, analysis, eyes and ears, and the development of a playbook on how to win —it takes intelligence. Therefore, just as Keegan correctly states that "Knowledge of what the enemy can do and of what he intends is never enough to ensure security," so too, having superior forces equipped with better technology is no insurance for victory when opposing an enemy that invests in intelligence.[40] Absolute power does not win absolutely.

None of the battles described were won by intelligence alone—victory was achieved by the application of force. However, in each case, the victor could only employ the forces necessary to achieve victory through the advantage of foreknowledge. What would have happened, for instance, had Jackson not reached Bull Run in time to "stand like a Stonewall"? How would Germany have fared had it been faced with defeat on the Eastern Front just one month after the initiation of hostilities in 1914? How would Nimitz have handled the Japanese attack on Midway had he not known in advance of the trap? How successful would the Inchon landings have been if intelligence had not warned of the mud flats on the approaches to the proposed landing sites? And, how much longer and precarious would the 1967 war have been had Israel's intelligence not warned of the impending Arab attack, or had it not expended so much effort in knowing every detail of its adversaries force composition?

Intelligence "failures," too, tell of the significance intelligence plays. Pearl Harbor, Tet, or, for that matter, the attacks of September 11th, do not diminish the importance of intelligence but rather demonstrate the impact of not placing sufficient emphasis on it. Britain's failed intelligence and

misunderstanding regarding Japan's military capabilities prior to 1942, for example, doomed its army of some 146,000 in Singapore to a crushing defeat at the hands of only 35,000.**[41]** History abounds with such examples.

As in the past, intelligence will continue to play a vital role in future conflicts. As General Hugh Shelton, former chairman of the joint chiefs of staff, noted in 2000: "Successful employment of modern weapons systems, new operational concepts, and innovative combat techniques—particularly those involving forces that are lighter, faster, more agile, and more lethal—also depends on rapid, precise, accurate, and detailed intelligence."**[42]** It behooves the planner, the operator, political and military leadership, and members of the Intelligence Community to understand this and not relegate intelligence to a secondary status as authors such as John Keegan suggest. The strongest boxer cannot defeat the foe he hasn't studied or cannot see.

Foonotes:

[1]Sun Tzu, *The Art of War* (New York: Oxford University Press, 1963), 144.

[2]Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, NJ: Princeton University Press, 2004).

[3]John Keegan, *Intelligence and War: Knowledge of the Enemy From Napoleon to Al-Qaeda* (New York: Alfred Knopf, 2003), 25.

[4]Thomas A. Brooks, RADM (USN, Ret.), "Review of John Keegan's *Intelligence and War," Naval Intelligence Professionals Quarterly* (Winter 2004): 32.

[5]*The Civil War: Spies, Scouts and Raiders* (Alexandria, VA: Time-Life Books, 1985), 25.

[6]Ibid., 26.

[7]Stephen Sears, "Battle of Bull Run, or the Rebellion of '61?" in Robert Cowley (ed.), *What If? The World's Foremost Military Historians Imagine What Might Have Been* (New York: Berkley Books, 2000), 241–45. For the most recent work on Greenhow, based on new-found records, see Ann Blackman, *Wild Rose: Rose O'Neale Greenhow, Civil War Spy* (New York: Random House, 2005).

[8]See Col. Frederick E. Jackson, "Tannenberg: The First Use of Signals Intelligence in Modern Warfare" as submitted to the United States Army War College (Carlisle Barracks, PA: US Army War College, 2002), 1–37.

[9]FirstWorldWar.com, http://www.first-worldwar.com/battles/tannenberg.htm. Accessed 17 November 2004.

[10]Vice Admiral Lord Horatio Nelson, quoted in Michael I. Handel, *Masters of War: Classical Strategic Thought, Third, Revised and Expanded Edition* (London: Frank Cass, 2001), 155.

[11]R. Earnest Dupuy and Trevor N. Dupuy, The Harper Encyclopedia of Military History from 3500 B.C to the Present, Fourth Edition (New York: Harper Collins, 1993), 1255–56.

[12]Mansanori Ito, with Roger Pineu, *The End of the Imperial Japanese Navy* (New York: Jove Books, 1956), 51.

[13]Ibid., 52–53.

[14]Henry F. Schorreck, Battle of Midway: The Role of COMINT at the Battle of Midway (SRH-230) (Washington, DC: Department of the Navy Historical Center, April 1999), 2.

[15]Ibid., 3.

[16]Frederick D. Parker, "A Priceless Advantage: U.S. Navy Communications Intelligence and the Battles of Coral Sea, Midway, and the Aleutians" in *United States Cryptologic History,* Series IV, Volume 5 (Ft. Meade, MD: National Security Agency, 1993), 45.

[17] Schorreck, 7.

[18]*Naval Doctrine Publication 2: Naval Intelligence,*at http://www.nwdc.navy.mil/ library/documents/NDPs/NDP2/ NDP2003.ht, Chapter 3 (hereafter NDP2), "Battle of Midway: The Attributes of Naval Intelligence."

[19] *Theodore F. Cook, Jr., "Our Midway Disaster," in Cowey, 318–19.*

[20] *Keegan, 220.*

[21]Parker, 65.

[22]NDP2, "Support to Planning."

[23] Ibid., "Support to Planning—The Inchon Landing."

[24]Peter Harclerode, *Fighting Dirty: The Inside Story of Covert Operations from Ho Chi Minh to Osama Bin Laden* (London: Cassell & Co., 2001), 171–73.

[25]NDP2, "Support to Planning—The Inchon Landing."

[26]Carl H. Builder et al., *Command Concepts: A Theory Derived from the Practice of Command and Control* (MR-775-ORS) (Santa Monica, CA: Rand Corporation, 1999), 8.

[27] *NDP2, "Support to Planning—The Inchon Landing."*

[28]*Kenneth M. Pollack, "The Influence of Arab Culture on Arab Military Effectiveness," (PhD Dissertation Submitted to the Department of Political Science at the Massachusetts Institute of Technology, 1996), 201.*

[29]Kenneth M. Pollack, *Arabs at War: Military Effectiveness, 1948–1991* (Lincoln: Nebraska University Press, 2002), 59.

[30]Ibid., 59–61**.**

[31]Oren B. Michael, "Did Israel Want the Six-Day War?" *Azure* (Spring, 1999).

[32] Stewart Steven, The Spymasters of Israel: The Definitive Look at the World's Best Intelligence Service (New York: Ballantine Books, 1980), 229.

[33]Ibid., 229–31.

[34]Ibid., 223.

[35]Dan Raviv and Yossi Melman, *Every Spy a Prince: The Complete History of Israel's Intelligence Community* (Boston: Houghton Mifflin, Co., 1990), 161–62.

[36]Pollack, *The Influence of Arab Culture on Arab Military Effectiveness*, 201.

[37]Ibid., 200.

[38]Edwin T. Layton, *And I Was There: Pearl Harbor and Midway—Breaking the Secrets* (New York: Random House, 1987), 315.

[39]NDP2, Chapter 3.

[40]Keegan, 348.

[41]John Hughs-Wilson, *Military Intelligence Blunders* (New York: Carrol & Graf Publishers, 1999), 102.

[42]Chairman of the Joint Chiefs of Staff in *Joint and National Intelligence Support to Military Operations* (JP 2-01), (Washington, DC: Department of Defense, November 2003), V-14.