Leavenworth Papers Number 21

The 1973 Arab-Israeli War: The Albatross of Decisive Victory

by Dr. George W. Gawrych



FOREWORD

The observation that military establishments in peacetime generally prepare to fight their last war has acquired the status of a cliché. Whatever the merit of this generalization, it should not suggest that, in the wake of hostilities, military professionals should foreswear changes and adjustments designed to make their forces more proficient on future battlefields. Indeed, military forces that have just suffered a costly defeat often manifest a greater readiness to initiate military reforms than those that have experienced a decisive victory. One will recall, for example, that following 1763, some of the most original thinking on military reform, organization, and tactics came out of France, a country that had paid dearly for its loss in the just-completed Seven Years' War. A case in point more familiar to today's U.S. officer corps is the reorientation of their Army's military doctrine in the aftermath of the Vietnam War. Dr. George Gawrych reminds us of another instance in his Leavenworth Paper, *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*—the example of the Egyptian armed forces, who following Egypt's humiliation in the 1967 Six-Day War, made significant changes to their force structure and tactics. The Egyptians may have been preparing for something like their last war, but given a chance to refight it, they prepared for a different outcome.

The victors in a conflict are often less inclined than the vanquished to make radical departures from methods and means that, after all, had proved effective. In a postwar period, analysis by the winners will proceed apace, new technology and weapons will be incorporated into the inventory, and appropriate adjustments will be made. But short of a dramatic change in the external environment, these developments will often serve only to reinforce the conventional wisdom bred of earlier military success. Sometimes, this intellectual and institutional inertia might prove to be exactly what is required. In other cases, it might lead to disaster or near disaster—as the Israelis discovered to their dismay in 1973. Decisive victory in 1967, as Dr. Gawrych points out, became an albatross for Israeli military leaders who, wed as they were to the lessons of 1967, lacked the flexibility to recognize, much less adapt to, a dynamic, rapidly changing situation.

Most military professionals think of themselves as open-minded and flexible. They would be shocked, probably angered, to be described otherwise. In this context, as the reader may conclude from Dr. Gawrych's account, self-deception and overconfidence can be the worst enemies of officers in peacetime, to be guarded against with all their powers of perception and analysis.

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by Dr. George W. Gawrych



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. . . The dazzling victory in the '67 war . . . contributed to the building of a myth around the IDF [Israel Defense Forces] and its personnel. The common expectations from the IDF were that any future war would be short with few casualties.

— Major General Avraham Adan,
Israeli division commander, 1973[1]

The standard for America's Army must be "decisive victory."

— General Gordon Sullivan,
U.S. Army Chief of Staff, 1992[2]

Achieving a decisive victory in a short period with relatively few casualties stands as a desirable goal for modern armies in conventional war. The Six Day War of 5–10 June 1967 saw the Israel Defense Forces (IDF) achieve such a military triumph over the combined Arab armies of Egypt, Jordan, and Syria. As a result of this remarkable achievement, Israel emerged as the superpower in the Middle East, seemingly invincible in conducting maneuver warfare against any Arab coalition. Conventional wisdom, therefore, would counsel against challenging such a militarily superior foe in a major war. But Egypt and Syria subsequently risked just that by attacking Israel on 6 October 1973, less than seven years after their debacle. Acutely aware of the unfavorable odds, Egypt's President Anwar Sadat resorted to a war strategy designed to achieve political success *without* a military victory.

There is an important lesson here about the limits of military power. Israel's impressive battlefield accomplishment in 1967 had failed to bring peace with any Arab state. In fact, the Arabs' resolve was strengthened by the humiliation of their decisive defeat. Meanwhile, the dramatic military victory unconsciously created an albatross for the IDF. In particular, the stellar military performance in 1967 spawned an unrealistic standard of excellence virtually impossible for the IDF to duplicate in its next armed conflict. Furthermore, the Israelis expected the Arabs to perform in the next war as poorly as they did in 1967. Rather than discern these two expectations as a recipe for disaster, the Israeli military unconsciously fell into the trap of preparing to fight its next war as it had waged its last conflict. And this it did in a spirit of over-confidence.

In response, the Egyptians, led by Anwar Sadat, exploited Israel's strategic mindset through a judicious and fortuitous combination of war and diplomacy. The shock and lethality of the 1973 war, coupled with Sadat's adroit statesmanship and America's determined mediation, led to a change in Israeli attitudes and policy. Eventually, a new Israeli government signed a peace treaty

with Egypt that promised to return the entire Sinai to the Egyptians. That agreement significantly altered the political landscape of the Middle East.

The Egyptian achievement should give reflective pause to any country confident in the superiority of its military forces *alone* against any potential adversary. The United States certainly falls into this category, especially after its armed forces, supported by contingents from other coalition members, decimated the Iraqi military in 100 hours during Desert Storm. The Gulf War resembles, in many respects, the Israeli victory in 1967 and has raised similar expectations within American society concerning its military establishment's ability to attain decisive victory, in a short time, and with relatively few casualties. Because of this haunting parallel, the United States stands to gain much from a reexamination of the 1973 Arab-Israeli War in light of the earlier Six Day War.

THE BLITZKRIEG OF THE SIX DAY WAR. The 1967 Arab-Israeli War transformed tiny Israel into a regional superpower: a puny but potent David had handily defeated a Goliath. The IDF had every reason to bask in its resounding military victory, both for the magnitude of that success and for the social and economic benefits that accrued from the war. There now appeared little hope for the defeated Arabs militarily, for with the passage of time, Israel seemed destined to become even more powerful than her Arab neighbors. Nonetheless, six years later, in 1973, Egypt and Syria initiated another war against Israel, knowing full well that they were incapable of decisively defeating the Israelis. Caught off guard, the IDF failed to duplicate its impressive performance of 1967. The consequent political fallout in Israel after this failure can only be understood in light of the Six Day War.

On 5 June 1967, Moshe Dayan, the Israeli defense minister, unleashed Israel's military juggernaut with a plan designed to humiliate Egypt by utterly destroying its armed forces. An important lesson from the 1956 Sinai campaign shaped Dayan's final war strategy. In the 1956 war, the IDF had defeated the Egyptian Armed Forces and captured the entire Sinai peninsula in collusion with British and French forces, which, for their part, destroyed Egypt's air force on the ground and occupied the twin cities of Port Fu'ad and Port Sa'id on the northern entrance to the Suez Canal. This Israeli military triumph, however, proved for naught, for the international community, led by the United States, condemned the combined military action against Egypt and eventually pressured the three allies to withdraw from the captured territories. Though defeated militarily, Egyptian President Gamal Abdul Nasser, by defiantly resisting the tripartite onslaught and saving part of his army in the Sinai, emerged from the Suez Crisis a hero. His political fortunes rose dramatically, transforming him into a pan-Arab leader and a major figure in the "Nonaligned Movement."

Now, almost eleven years later, Dayan, who had been the Israeli chief of the General Staff in the Sinai campaign, wished to avoid a repeat of 1956. Upon his appointment as defense minister on 1 June 1967, just five days prior to Israel's attack on Egypt, Dayan reviewed the current war plan and found it unacceptable. The plan called for the IDF to seize the Gaza Strip and the northeast portion of the Sinai peninsula as bargaining chips in negotiations for opening the Strait of Tiran, which Nasser had closed to Israeli shipping toward the end of May. Dayan rejected these limited operational aims and told the General Staff that Israel must avoid a repetition of 1956 when Nasser, though defeated, had gained a political victory. Only a crushing military defeat would prevent Nasser from gaining a propaganda victory after the next conflict.

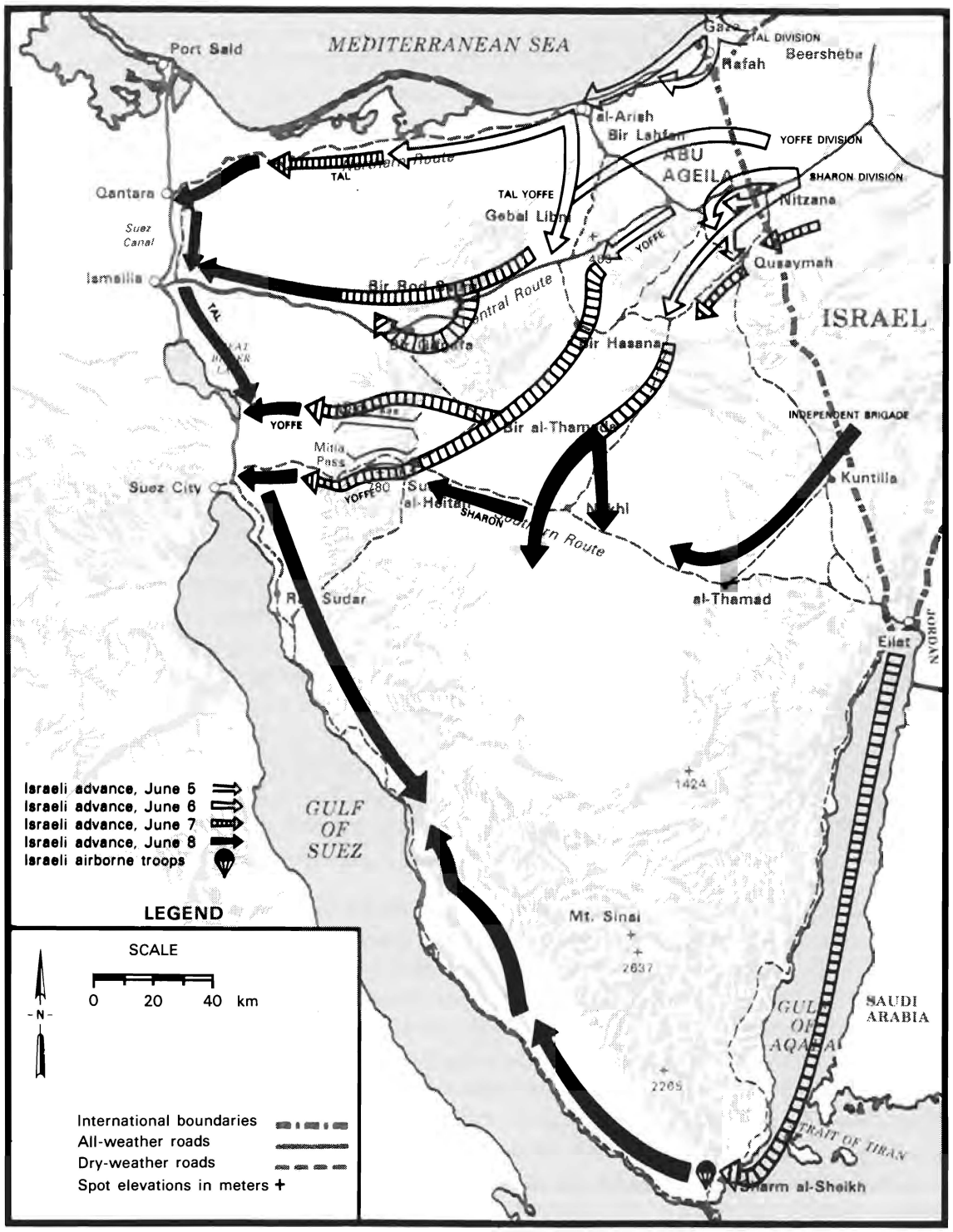
Consequently, Dayan widened Israel's operational objectives to encompass the capture of the entire Sinai peninsula short of the Suez Canal. The main Israeli military goal was to destroy as much of the Egyptian Armed Forces as possible. According to Dayan, such a decisive Israeli military triumph would not just defeat Nasser but would humiliate and emasculate him as an Arab leader.[3]

The Israeli military victory proved brilliant indeed, dazzling the West while shocking the Arab world. In a mere six days, from 5–10 June, the IDF routed the combined Egyptian, Jordanian, and Syrian Armies. On the first day, the Israeli Air Force destroyed the combined air forces of Egypt, Syria, and Jordan, while Israeli ground forces launched a major offensive into the Sinai. On the fourth day of the campaign, Nasser admitted defeat just as Israeli units reached the Suez Canal.[4] (See map 1.) In addition to attacking Egypt on the first day of the war, Dayan ordered an attack against Jordan later that afternoon; the morning of the third day found King Hussein approving a general withdrawal of the Jordanian Army from the West Bank. Finally, the Israelis devoted the last two days of the war to capturing the Golan Heights from the Syrians.

In dramatic fashion, Israel had won outnumbered and outgunned. The IDF, with 250,000 men, 1,000 tanks, and 275 combat aircraft, had decimated an Arab coalition of 300,000 troops, close to 2,000 tanks, and over 500 fighters and bombers. In consequence, Israel increased its size fourfold, adding 26,476 square miles to its territory: the Sinai (23,622 square miles), the Gaza Strip (140 square miles), the West Bank (2,270 square miles), and the Golan Heights (444 square miles). These acquisitions provided Israel with strategic depth and more defensible borders, gains that made the Israelis feel quite confident about their national security. Israeli losses in this lightning campaign were 983 killed, 4,517 wounded, and fifteen missing, a relatively small figure when compared to the over 10,000 Egyptian casualties. Jordan, for reluctantly participating in the Arab cause, lost 80 percent of its armor and suffered 700 killed and 6,000 wounded and missing. Syrian figures were somewhat lower than those for Jordan.[5] For the Israelis, the dramatic nature of the victory made the human losses bearable and elicited little criticism of the war's conduct from the Israeli public afterward. No one could argue against such success.

Israeli self-confidence understandably soared after the Six Day War, buoyed by international acclaim. Western writers were especially lavish in their praise of the IDF. Retired French General André Beaufre compared the Israeli victory to Germany's crushing defeat of France in 1940: "[The 1967 war] is indeed lightning war of the kind whose effects we experienced everywhere in 1940, but this time [it was] compressed within a limited time frame never before realized."[6] Writing for the Institute of Strategic Studies in England, Michael Howard and Robert Hunter likened the Six Day War to the daring campaigns of the great Napoleon Bonaparte: "The Third Arab-Israeli War is likely to be studied in staff colleges for many years to come. Like the campaigns of the younger Napoleon Bonaparte, the performance of the Israeli Defence Force[s] provided a text-book illustration for all the classical Principles of War: speed, surprise, concentration, security, information, the offensive, above all training and morale."[7] Such analyses underscored the mystique with which the Israeli military machine was regarded by the West, sentiments that continued unabated right up to the 1973 war.

The magnitude of the Israeli victory suggested that the Arabs would need many years before they could embark on another major armed conflict. Egypt, for its participation, lost 85 percent of its air force and 80 percent of its ground equipment. Israel, in sharp contrast, immediately



Map 1. The Six Day War: Egyptian front

increased its fighting capabilities through its captured arsenal, and subsequent years saw the country grow stronger militarily. The Israeli defense industry, for example, experienced remarkable growth. By 1973, Israel, although a small country of just over three million inhabitants, could boast the production of the Kfir attack plane, mobile medium artillery and long-range guns, the Shafrir air-to-air missile, air-to-ground missiles, the Reshef missile boat, the Gabriel sea-to-sea missile, sophisticated electronic devices, and most types of ammunition and fire-control systems (with the help of Western finance and technology). These military accomplishments ushered the IDF into the age of electronic warfare and served to enhance Israeli society's undaunted confidence in the deterrent capabilities of its military.

Other nonmilitary indicators supported Israel's new status as its region's superpower. Demographically, 31,071 Jews settled in the Holy Land in 1968, a 70 percent increase in immigration over the previous year. This trend continued for the next several years, especially after 1972 when the Soviet Union permitted its Jews to emigrate to Israel. In addition to drawing new settlers, Israel became a more attractive country for tourism, which grew dramatically from 328,000 visitors in 1967 to 625,000 in 1970, bringing with it much-needed foreign exchange. Economically, the integration of captured Arab territories brought in new markets, cheap labor, and valuable natural resources. The Abu Rudeis wells in the Sinai, for example, provided Israel with over half its oil needs, whereas control of the Golan Heights permitted the Israeli government to channel the waters of the Jordan River into Lake Galilee, thereby reclaiming 12,000 acres in the Chula Valley as new farmland. Meanwhile, a postwar economic boom reduced unemployment to below 3 percent in 1970, transforming the pre-1967 recession into a consumption boom: the 1 percent growth of the economy in 1967 climbed to 13 percent in 1968, dropping only to a still respectable 9 percent in 1970. The number of private automobiles doubled between 1967 and 1973, a clear indication of the country's new-found prosperity.

Politically, Israel appeared firmly wedded to the dual forces of stability and continuity. The ruling Labor Party, in power since the founding of the state in 1948, maintained its hold on the reigns of government through the 1973 war. After Prime Minister Levi Eshkol's death on 26 February 1969, Golda Meir took over as prime minister, maintaining the old guard's control of the party. Though some Israelis encouraged the government to seek reconciliation with the Arabs, the peace issue never developed into an urgent national debate. Foreign pressures agitating for a solution to the Arab-Israeli problem also failed to materialize. The status quo was thus becoming enshrined, thereby validating a greater Israel, now containing a large but tranquil Arab population. Internationally, the United States replaced France as Israel's main arms supporter. Having the world's most powerful country as a close ally further strengthened Israel's status as a regional superpower, especially since neither President Lyndon Johnson nor his successor, President Richard Nixon, wanted to force Israel to withdraw from its captured territories as President Dwight D. Eisenhower had after the 1956 war. For all appearances, Israel stood as an impregnable fortress defended by an invincible military. But the IDF was far from invulnerable.

THE ISRAELI JUGGERNAUT. After the Israeli triumph in the Six Day War, no Arab army or coalition of armies seemed a match for the IDF in a conventional war. Israel's victory in 1967 rested on the three pillars of intelligence, the air force, and armored forces; together they allowed the Israelis, though outnumbered, to win dramatically.[8] It seemed unlikely that any army would wage a conventional war against an adversary superior in these three critical areas of maneuver warfare. But the Egyptians, in conjunction with the Syrians, would find ways to exploit

Israeli vulnerabilities in each area, and the cumulative effect of these exploitations would produce tremors within Israel both during and after the 1973 war.

One Israeli pillar was its intelligence branch, or Aman, supported by Mossad, the Israeli equivalent of the Central Intelligence Agency. The victory in 1967 had stemmed from excellent information that the Israeli intelligence community had gathered about the Arab armies. On the eve of the war and throughout the campaign, senior Israeli commanders possessed intimate knowledge of Arab war plans, capabilities, vulnerabilities, troop dispositions, and redeployments. Well-placed spies, the use of technological assets, and poor Arab security were keys to the Israeli intelligence coup, and after the war, Israel appeared destined to retain a first-class intelligence apparatus.[9]

The Egyptians publicly recognized Israel's remarkable intelligence achievement. One year after the war, Muhammad Hassanayn Heikal, a close confidant of Nasser, provided a critical account of the Israeli success in the semiofficial Egyptian newspaper, *al-Ahram*, focusing on the preemptive air strike. According to Heikal, the Israeli Air Force had destroyed virtually the entire Egyptian Air Force on the ground in a mere three hours owing to superb intelligence gathering and analysis. Rather than attack with the first or last light of day, as the Egyptians would have expected them to, the Israelis struck between 0830 and 0900, when they knew, through careful study, that the Egyptian air defenses were exposed. Moreover, according to Heikal, Israeli Military Intelligence learned of the scheduled flight of Field Marshal 'Abd al-Hakim Amer, general commander of the Egyptian Armed Forces, and the air force chief, to inspect Egyptian forces in the Sinai. All senior Egyptian field commanders gathered at Bir Tamada's airport in central Sinai to await Amer's arrival. While Amer was in the air, the Israeli Air Force struck Egyptian airfields, leaving Egyptian troops without their principal commanders at a time of great crisis. In addition to this excellent timing, Israeli pilots knew which airports to hit first, singling out for destruction the TU-16 medium bombers and the MiG-21 fighters. Heikal ended his article with both a compliment and a condemnation—"the enemy knew more [about us] than necessary, and we knew less [about him] than necessary."[10] The underlying message was clear: the Egyptians would have to win the intelligence war if they hoped to gain a military advantage over the IDF in the next conflict.

This startling success by Israel's Military Intelligence subsequently lulled Israel into overconfidence. For the next conflict, Israeli senior commanders expected to win the intelligence struggle again with accurate and timely information buttressed by accurate analysis. In fact, by 1973, Major General Eliyahu Ze'ira, Israel's director of Military Intelligence, confidently promised to provide a forty-eight-hour warning of an impending Arab attack—ample time for Israel to mobilize its reserves and gain mastery of the skies![11] All Israeli war plans were based on obtaining this advance alert. An Arab surprise did not figure into Israeli calculations. But promising such a wake-up call proved unrealistic. Clever Egyptian deception operations, coupled with Israeli miscalculations, were to mask effectively the Arabs' intent long enough for them to gain initial advantages on the next battlefield.

A second Israeli pillar was the Israeli Air Force. In the Six Day War, Israeli pilots, flying mainly French-made aircraft, destroyed 304 Egyptian planes on the tarmac and then inflicted similar damage on the smaller Jordanian and Syrian air forces. This astonishing feat, indelibly marked as a classic in the annals of air warfare, depended upon excellent intelligence, detailed

planning, and superior training. Control of the air allowed the Israeli ground forces to roll through the Arab armies with relative ease and dramatic speed. The 1967 war confirmed the critical importance of gaining air superiority in maneuver warfare. Consequently, Israeli war strategies depended upon Israel maintaining an air force superior in quality and comparable in quantity to the Arab air forces.

By 1973, over half the Israeli defense budget went to the air force with its 17,000 personnel. The number of combat aircraft increased from 275 in 1967 to 432 by the summer of 1972. By this time, the Israeli Air Force had transitioned from being a French- to an American-supplied war machine, with an inventory that included 150 Skyhawks, 140 F-4 Phantoms, 50 Mirages, and 27 Mystere IVAs. On the other hand, the Egyptian Air Force, some 23,000 officers and men, fielded a Soviet air fleet comprising 160 MiG-21s, 60 MiG-19s, 200 MiG-17s, and 130 Su-7s. To the Egyptians' chagrin, the Soviets refused to provide Egypt with more advanced MiG-23s and Tu-22s. Despite Egyptian advantages in numbers, especially when combined with the Syrian Air Force, the Israelis were markedly ahead in avionics and air-to-air missiles, possessing the American Sidewinder and Sparrow as well as the Israeli Shafrir. In addition to its technological advantage, the Israeli Air Force also maintained a clear edge in pilot expertise. Israeli pilots received approximately 200 flight hours per year with emphasis on initiative, whereas the Egyptians garnered only 70 hours in a more centralized system based on ground direction centers. In air-to-air combat, Israeli pilots outclassed their Egyptian counterparts, and the Egyptians clearly understood that their air force was the weak link in their armed forces.

Waging modern warfare in an open desert without a competitive air force appears suicidal. The Six Day War had confirmed beyond any doubt the critical importance of air supremacy for successful ground offensives over open terrain. But the dilemma of achieving air-to-air competitiveness constituted only half of Egypt's problem. The Egyptians also wanted the capability to conduct strategic strikes into Israel, both as a deterrent and as a means for retaliation in the event the Israelis turned to strategic bombing. In light of these two imperatives, the senior Israeli military leadership, with few exceptions, was confident that Egypt would avoid launching a major war against Israel without first ensuring sufficient air power to challenge the Israeli Air Force. Senior Israeli officers believed that the Egyptians' capability to attack Israel in strategic depth with either missiles or long-range bombers was still a couple of years in the future. As underscored by the Agranat Commission (established after the 1973 war), Israeli intelligence assessments of Egyptian intent depended upon this basic assumption. It proved dead wrong![12] Though the Soviets did provide Egypt with a small number of long-range SCUD missiles on the eve of the war (mid September), Egypt was prepared to risk a different kind of war, one not reliant on its possession of a competitive air force.

The Armor Corps constituted Israel's third pillar. In 1967, after achieving breakthroughs in eastern Sinai at Rafah and Abu Ageila, armored brigades led by tanks with little or no infantry support spearheaded the IDF's lightning advance across the Sinai desert. The IDF's success had rested on the ability of its tactical commanders to demonstrate initiative in combat while Israeli tank crews exhibited mastery of fire and movement over their Egyptian counterparts. Thus, after the war, the Israeli General Staff placed an even greater emphasis on armor in budget allocations, doctrine, organization, and tactics. Infantry and artillery experienced a concomitant neglect. Indeed, a number of infantry brigades were converted to armor units. Tank-heavy armored brigades, lacking in well-trained mechanized infantry, became the norm, with Israeli doctrine

and practice consigning mechanized infantry to the role of mopping-up operations. To compensate for a tank-heavy doctrine for land warfare, the Israeli General Staff counted on the Israeli Air Force quickly gaining air superiority and then serving as "flying artillery" for ground forces. Another lightning campaign, fought along the lines of the Six Day War, would result from this hopeful doctrinal scenario.

In essence, the IDF prepared to fight the last war. Rather than develop a more balanced force structure centered on combined arms, Israeli doctrine and strategy relied upon what worked best in 1967: intelligence, the air force, and tanks. This dynamic trinity would carry the fight into the enemy's territory in decisive fashion. The Israeli military leadership assumed confidently that the Arabs would wage Israel's kind of war—one fought over open terrain pitting air and armor forces directly against each other. Not only did the Israelis expect to fight the last war, they also expected a repeat command performance. Put another way, the IDF in 1973 was designed to fight more as a swift rapier employing agile maneuver forces than as a bludgeon overpowering its adversary with firepower. Israel's enhanced geostrategic situation after the 1967 War only served to accentuate that doctrine and force structure.

The amazing victory of 1967 left Israel with a feeling of invincibility, but it also created a major burden for the IDF by setting an incredibly high standard of stellar performance against which both Israeli society and the army would measure their competence in the next major conflict. Writing in 1979, Major General (retired) Avraham Adan, who commanded both the Armor Corps and a reserve tank division in the 1973 War, tersely described this albatross: "The dazzling victories in the '67 war . . . contributed to the building of a myth around the IDF and its personnel. The common expectations from the IDF were that any future war would be short with few casualties."[13] But blitzkrieg wars are far from the norm in military history, and societies that expect lightning results every time stand to suffer major disappointments. It fell to Egypt's political and military leadership to take advantage of this albatross in the next war.

EGYPTIAN WAR STRATEGY. All indicators suggested that Egypt, Syria, and Jordan would require a generation before they could face Israel in another major war. The IDF had clearly demonstrated its military prowess on the battlefield, while the three Arab states had shown considerable military ineptitude. For the Arabs to attack from their position of military weakness with the goal of achieving political gains seemed to make little sense. But Egypt and Syria surprised everyone by doing just that!

Though the IDF had virtually decimated the Egyptian Armed Forces in the 1967 War, Nasser refused to admit defeat and allow Israel to dictate peace terms. Over the next three years, numerous clashes between the two armies took place over the Suez Canal, culminating in the War of Attrition (1969–70). This three-year period witnessed sporadic but sometimes intense fighting, during which time Nasser's regime, with major Soviet assistance, struggled to rebuild its armed forces. Then, unexpectedly, a major setback occurred in January 1970, when the Israeli Air Force bombed Egypt's heartland, exposing the inability of Nasser's air defense system to defend Egyptian cities.

Unable to meet the Israeli air threat, Nasser secretly flew to Moscow for emergency assistance. He convinced the Kremlin to commit Soviet combat personnel to man Egypt's strategic air defense sites, as well as to fly Egyptian combat planes, an undertaking that began in March. There now loomed the possibility of a direct confrontation between Israel and the

Soviet Union. After matters came to a head on 30 July 1970, when Israeli pilots shot down four Soviet-piloted MiGs, American mediation helped bring about a three-month cease-fire in August. Israel welcomed the respite, for the war of attrition had cost the country over 400 killed and 1,100 wounded.[14] Barely one month after the cease-fire went into effect, Nasser suddenly died of a heart attack, leaving it to Sadat, who assumed the presidency in September 1970, to craft a war strategy for the next stage in the conflict. Sadat's answer would surprise everyone, including his fellow Egyptians.

The broad outlines of Egypt's war strategy of 1973 had, in fact, emerged during Nasser's last years, although Nasser had reached no final decision about going to war. In an article published in 1969 in the semiofficial newspaper *al-Ahram,* Heikal, still a member of Nasser's inner circle, provided prescient insights into the nature of the next war:

> . . . I am not speaking of defeating the enemy in war (*al-harb*), but I am speaking about defeating the enemy in a battle (*ma'arka*) . . . the battle I am speaking about, for example, is one in which the Arab forces might, for example, destroy two or three Israeli Army divisions, annihilate between 10,000 and 20,000 Israeli soldiers, and force the Israeli Army to retreat from positions it occupies to other positions, even if only a few kilometers back. . . . Such a limited battle would have unlimited effects on the war. . . .
>
> 1. It would destroy a myth which Israel is trying to implant in the minds—the myth that the Israeli Army is invincible. Myths have great psychological effect. . . .
>
> 3. Such a battle would reveal to the Israeli citizens a truth which would destroy the effects of the battles of June 1967. In the aftermath of these battles, Israeli society began to believe in the Israeli Army's ability to protect it. Once this belief is destroyed or shaken, once Israeli society begins to doubt its ability to protect it, a series of reactions may set in with unpredictable consequences. . . .
>
> 5. Such a battle would destroy the philosophy of Israeli strategy, which affirms the possibility of "imposing peace" on the Arabs. Imposing peace is, in fact, an expression which actually means "waging war". . . .
>
> 6. Such a battle and its consequences would cause the USA to change its policy towards the Middle East crisis in particular, and towards the Middle East after the crisis in general.[15]

Though the Egyptian Armed Forces failed to annihilate 10,000 Israelis in 1973, Heikal's analysis captured the broad outlines of Sadat's strategy. Rather than aiming to destroy Israel's armed forces or capture key terrain, Sadat would instead seek to change attitudes in Israel and to alter United States policy toward the Arab-Israeli conflict by means of a limited war. The Egyptians would achieve these two goals, although with far less damage to Israel than they had hoped—but certainly with far more benefit to Egypt than ever envisaged by Heikal.

Sadat developed a war strategy different from that of his predecessor. Nasser, who after the 1967 war lost faith in the ability of the United States to conduct an even-handed foreign policy in the Arab-Israeli conflict, had worked closely with the Soviets, relying on the Kremlin to represent Egyptian interests to Washington. Sadat, on the other hand, mistrusted the Soviets and wanted to draw Egypt closer to the West, in particular the United States. Without formal diplomatic relations with the United States, a situation inherited from Nasser, Sadat sought to develop a meaningful dialogue with Washington by using backdoor channels. Willing to distance himself from the Soviets, he went so far as to expel all Soviet military advisers and experts from

Egypt in 1972—a dramatic step that surprised and befuddled Middle East experts in the West. When Washington failed to take advantage of this Russian exodus, Soviet military assistance resumed again at the beginning of 1973, ironically in greater quantities than before.

But Sadat failed to involve either the United States or the Soviet Union in any meaningful way. In fact, by 1972, both Washington and Moscow were experimenting with détente, and neither side wanted to jeopardize that delicate relationship by becoming involved in the volatile issues of the Arab-Israeli conflict. Moreover, Washington was consumed with ending the Vietnam War and with making overtures to Communist China. The Middle East had to wait its turn in the order of priorities. Henry Kissinger, the U.S. national security adviser and later secretary of state, believed that time worked to America's advantage. "A prolonged stalemate," he calculated, "would move the Arabs toward moderation and the Soviets to the fringes of Middle East diplomacy."[16]

There appeared little reason for the United States to change its policy toward the Arab-Israeli conflict. A relative peace reigned in the region. Moreover, seeking an agreement with a weak political leader made little sense. Few policy makers in Washington took Sadat seriously; most regarded him as merely a weak, transitional figure, soon to pass into historical oblivion. As later admitted by Kissinger, "when Hafiz Ismail [Sadat's national security adviser] arrived in Washington for his visit on 23 February 1973, we knew astonishingly little of Egypt's real thinking."[17] Increasingly aware of the significance of détente for the Arab-Israeli problem, Sadat slowly crept to the conclusion that only a major military operation across the Suez Canal would jar both Israel and the two superpowers out of their general lethargy toward Egypt and the Arab-Israeli conflict. The Egyptian president reached this conclusion sometime in the latter half of 1972.

Many discussions over strategy took place among the Egyptian political and military leadership before Sadat reached the final decision for a limited war. Most senior Egyptian commanders pushed for a general war to determine the fate of the Sinai. This view became abundantly clear in January 1972 when Sadat chaired a special meeting with senior military commanders at his residence in Giza (Cairo).[18] But most of these officers resisted the idea of going to war in the near future, arguing that the armed forces were as yet unprepared for fighting Israel. Apparently, only Lieutenant General Sa'ad al-Din al-Shazli, the chief of the Egyptian General Staff, and Major General Sa'id al-Mahiy, commander of the Artillery Corps, expressed a willingness to risk a limited military operation across the Suez Canal.

During that January session, General Muhammad Sadiq, the war minister, presented the most powerful arguments against going to war in the near future. For him, it was inconceivable that a limited war could bring Egypt political gains. The army's own internal studies estimated that the Egyptian Armed Forces would suffer 17,000 casualties in crossing the Suez Canal, whereas Soviet calculations placed Egyptian losses over the first four days of combat as high as 35,000. Egypt would gain nothing from such a bloody conflict, even if it could hold on to a bit of territory in the Sinai. Therefore, before embarking on any hostilities, Sadiq wanted to have a much better-trained and equipped military force—one of 250,000 troops capable of defeating the Israelis in a decisive battle. He also underscored the critical importance of air power and the fact that the Egyptian Air Force still lacked the ability to challenge the Israeli Air Force for control of the skies. After emphasizing the above points, the prevailing military position was quite clear.

Only a major war to liberate most, if not all, of the Sinai in a single campaign made any sense, and for this kind of struggle, the Egyptian Armed Forces were far from ready.



Egyptian General Ahmad Ismail Ali, war minister and commander in chief

Sadat dismissed these arguments for political reasons. From his perspective, the government could ill afford to wait the five to ten years for the military to reach the necessary state of preparedness. The Egyptian people, angered by the "No War, No Peace" situation, were agitating for action, and the economy lacked the resources to remain on a war footing much longer. When Sadiq seemed unwilling to embrace a limited war concept, Sadat fired him after a stormy session of the Supreme Council of the Armed Forces held on 24 October 1972, some ten months later. Other senior officers who lost their jobs included the deputy war minister and the commanders of the Egyptian Navy and the Central Military District (Cairo). In Sadiq's place, Sadat appointed General Ahmad Ismail Ali, who would prove a loyal commander in chief, faithfully carrying out his president's wishes.[19] Within eight months, the Egyptian Armed Forces were prepared to fight a limited war.

To improve Egyptian odds on the battlefield, Sadat sought to tap the resources of the Arab world. By April 1973, he had firmly cemented a coalition with President Hafiz al-Asad of Syria so that Israel would have to fight on two fronts. By attacking Israel from the north and the south simultaneously, the two Arab states would offset, to some degree, Israel's advantage of interior lines. In addition, to gain invaluable allies for the war, Sadat initiated discussions with oil-producing Arab states about the possibility of employing oil as an economic weapon to pressure Western governments to adopt policies more favorable to the Arab cause.[20] At this time, however, no Arab leader envisaged the enormous amounts of money that would be transferred to the coffers of oil-producing Arab states with the imposition of an oil embargo during the war.

Sadat's political goals were simple and clear, as were his means. With respect to Israel, Sadat sought to discredit the "Israeli Security Theory," an Egyptian term to describe what most Egyptians considered the main obstacle to peace. According to Egyptian analysis, the Israeli Security Theory was founded upon the Israelis' firm belief that the IDF could deter any Arab attempts to regain lost territories through military actions. This article of faith carried political implications for the Arab-Israeli conflict: the Israeli government, believing in the invincibility



President Anwar Sadat of Egypt and his Syrian ally, President Hafiz al-Asad

of its armed forces, would continue to refuse to negotiate with the Arabs other than from a position of strength from which the Israelis could then dictate peace terms. In other words, military supremacy and political arrogance had spawned a diplomatic stalemate. To soften Israel's intransigence toward peace negotiations, Sadat felt he needed to undermine Israeli confidence in the IDF by tarnishing its image with Israeli society through a successful Arab military operation of operational and tactical significance. Egypt's military weaknesses, however, would prevent it from defeating Israel decisively. This handicap required Sadat to develop a realistic war strategy commensurate with Egypt's military capabilities.

On 1 October 1973, Sadat outlined his strategic thinking in a directive issued to General Ahmad Ismail Ali, the war minister and commander in chief:

> To challenge the Israeli Security Theory by carrying out a military action according to the capabilities of the armed forces *aimed at inflicting the heaviest losses on the enemy* and convincing him that continued occupation of our land exacts a price too high for him to pay, and that consequently his theory of security—based as it is on psychological, political, and military intimidation—is not an impregnable shield of steel which could protect him today or in the future.
>
> A successful challenge of the Israeli Security Theory will have definite short-term and long-term consequences. In the short term, a challenge to the Israeli Security Theory could have a certain result, which would make it possible for an honorable solution for the Middle East crisis to be reached. In the long-term, a challenge to the Israeli Security Theory can produce changes which will, following on the heels of one another, lead to a basic change in the enemy's thinking, morale, and aggressive tendencies.[21]

In this directive, Sadat clearly directed the Egyptian Armed Forces to focus on achieving a psychological effect against Israel by hemorrhaging its nose—that is, by causing as many casualties as possible—rather than on seizing strategic terrain or destroying the IDF. Life was precious in Israel, hence an opportunity for Egyptian exploitation.

Apparently, on the eve of war, Ahmad Ismail requested an additional directive from Sadat designed to clarify unequivocally, for the historical record, that the Egyptian Armed Forces were embarking on a war for limited objectives in accordance with their capabilities.[22] On 5 October, the day before the war, Sadat complied with the request by delineating three strategic objectives affirming the limited nature of the war:

> —to end the current military situation by ending the cease-fire on 6 October 1973.
>
> —to inflict on the enemy the greatest possible losses in men, weapons, and equipment.
>
> —to work for the liberation of occupied land in successive stages according to the growth and development of possibilities in the armed forces.[23]

Moreover, Egypt would definitely commence hostilities on 6 October, with or without Syrian participation.

The above strategic directive once again avoided mentioning the defeat of the IDF as an objective. Clearly Sadat risked a war without much hope, if any, of destroying, or even soundly defeating, the IDF on the battlefield. Rather, he called upon his military to begin the war, make the Israelis suffer from high losses in blood and treasure, and to seize as much terrain as opportunities permitted. The directive, however, failed to identify a clear end state. Rather, by merely discrediting Israel's security theory, Egyptian pride would be restored at the IDF's expense, and Egypt could then enter negotiations after the war from a position of strength. In the end, astute diplomacy would transform military gains into a political victory.

In addition to challenging Israel, Sadat also targeted the United States in his war strategy. According to his thinking, only effective American pressure could nudge Israel into returning captured lands to the Arabs. A limited military success, Sadat hoped, would shake the superpowers, in particular the United States, out of their diplomatic inertia toward the Arab-Israeli conflict and force a change in their attitude and policy toward Egypt. Superpower intervention also could end hostilities at an opportune moment. In the process, Egypt could immediately gain diplomatic maneuverability and regain her pride and rightful place in international politics. Strengthened diplomatically, Sadat then hoped to entice Washington into becoming Egypt's ally. The Egyptian president desperately wanted American technology and capital in order to revitalize Egypt's stagnant economy. In this regard, going to war would strengthen Sadat's political position in Egypt through the prospect of an economic recovery.

Sadat shed some light on his strategic thinking in an interview conducted by *Newsweek* magazine in April 1973, six months before the war.[24] The Egyptian president drew upon the contemporary example of the Vietnam War to reveal how Egypt might approach its next conflict with Israel. The Vietnamese people should have taught the United States the critical importance of a national will wearing down an opponent superior in technology. "You Americans always use computers to solve geopolitical equations and they always mislead you. . . . You simply forgot to feed Vietnamese psychology into the computer." In much the same way, Sadat felt, the United States lacked any understanding of the Egyptian psyche, how the Egyptian people were determined to regain their lost lands—whatever the odds and cost. Without American pressure on Israel, war was inevitable. "The time has come for a shock," warned Sadat. Should war break out, however, Sadat promised the continuance of dialogue, even in the midst of hostilities. "Diplomacy will continue before, during, and after the battle." Here the Egyptian leader alluded to the use of war designed in a rational sense to achieve political benefits. Diplomacy, rather than waging war, would constitute Egypt's main effort.

Arnaud de Borchgrave, *Newsweek*'s senior editor who conducted the interview, provided additional insight into the Egyptian president's thinking by noting discussions with Sadat's aides. According to these unnamed sources, Sadat had learned an important lesson from the Vietnam

War when, in 1968 and 1972, the Vietnamese Communists had suffered a military defeat but still gained a psychological victory. Egypt could achieve similar results. A military victory was thus not essential for political gain; even a defeat in battle could bring significant psychological results, followed by tangible advantages. Nasser had demonstrated just such a possibility in 1956 when the United States cooperated by forcing Israel to withdraw completely from the Sinai. In 1973, Israel was not adequately prepared, militarily or psychologically, for Sadat's type of war—much to Egypt's strategic advantage.

To appreciate Sadat's strategic thought, an analogy can be made between Israel and a bully living in a neighborhood filled with children. From the Egyptians' perspective, Israel was the classic bully in their region. In the neighborhood situation, such a troublemaker uses his physical strength to intimidate or terrorize other kids to conform to his wishes, for he believes no one can beat him in a fair fight. He relates with others only from a position of strength, with little if any desire for compromise. The bully's reasoning and attitude are what the Egyptians labeled, on the macrolevel, the Israeli Security Theory. But often in real life, one does not need to beat the bully to elicit a change in his attitude. A serious fight bloodying his nose can often change a bully's attitude and behavior, even gain his respect. Rather than engage in another bloody fight—with its physical and emotional costs—the bully is willing to relate differently to the one kid who has stood up to him, even though the child lost the fight. This analogy of the neighborhood bully captures the essence of Sadat's strategic thinking and war aims.

Finally, to help achieve his goals, Sadat worked carefully to enlist the support of Saudi Arabia and other oil-rich Gulf States. Egypt needed petrodollars, and there was the possibility of gaining diplomatic leverage using oil as a political weapon. On 21 July 1972, Heikel published an article in *al-Ahram* arguing for the use of oil in such a manner, and in January 1973, Sadat raised the issue with King Faysal during his Pilgrimage to Mecca.[25] Three months later, in a *Washington Post* interview, Ahmad Zaki Yamani, the Saudi petroleum minister, raised in public the possibility of a link being made between the continued flow of Mideast oil to the West and changes in American policy toward Israel. Further warnings came from King Faysal, other Arab leaders, and even American oil men, but none of these cautions received serious consideration by the Nixon administration. Still, by September, the American media was clearly discussing the emerging oil crisis and the question of a potential oil boycott.[26] Saudi Arabia, with a production of 8 million barrels of oil a day, coupled with an expected cash surplus of 6 billion dollars by the end of the year, could stop the flow of oil without a drastic effect on the kingdom's economic development. By hinting of oil politics, Faysal was clearly working in tandem with Sadat and Asad in preparing for the prospect of another armed conflict. The diplomatic stage was thus set for the fourth Arab-Israeli war.

ISRAELI DEFENSES IN THE SINAI. Although willing to embark on a limited war with clear political aims, Sadat faced a difficult military dilemma. The Egyptian Armed Forces were as yet unprepared for a major campaign to regain the Sinai. Moreover, the bitter memory of the devastating defeat in 1967 militated against the Egyptians taking any great risks. As a result of these considerations, Sadat was determined to avoid placing the armed forces in a position that might lead to another disaster. But to achieve any tactical success required the Egyptians to overcome formidable Israeli defenses in the Sinai. In other words, to accomplish Sadat's political objectives, the Egyptian Armed Forces had to effect a respectable military performance.



President Anwar Sadat of Egypt and King Faysal of Saudia Arabia,
who helped implement the oil embargo against the United States

Opposite the Egyptian Army stood the Bar-Lev Line, an elaborate system of fortifications to a depth of thirty to forty kilometers designed to deter the Egyptians from launching a major amphibious operation. Constructed in 1968–69 at a price tag of $235 million, the Bar-Lev Line experienced some decay after the War of Attrition ended in August 1970, as the Israeli military gradually closed some fortifications, cutting the number of strongpoints from around thirty to approximately twenty-two. Despite these reductions, the Bar-Lev Line still presented a formidable barrier, and the Egyptian General Staff had to devote a great deal of time, effort, and resources in developing a plan for overcoming the Israeli defenses. While the Bar-Lev Line was not constructed as a Maginot Line, the Israeli senior command still came to expect it to function

as a graveyard for Egyptian troops, preventing any major Egyptian effort to establish bridgeheads on the east bank.

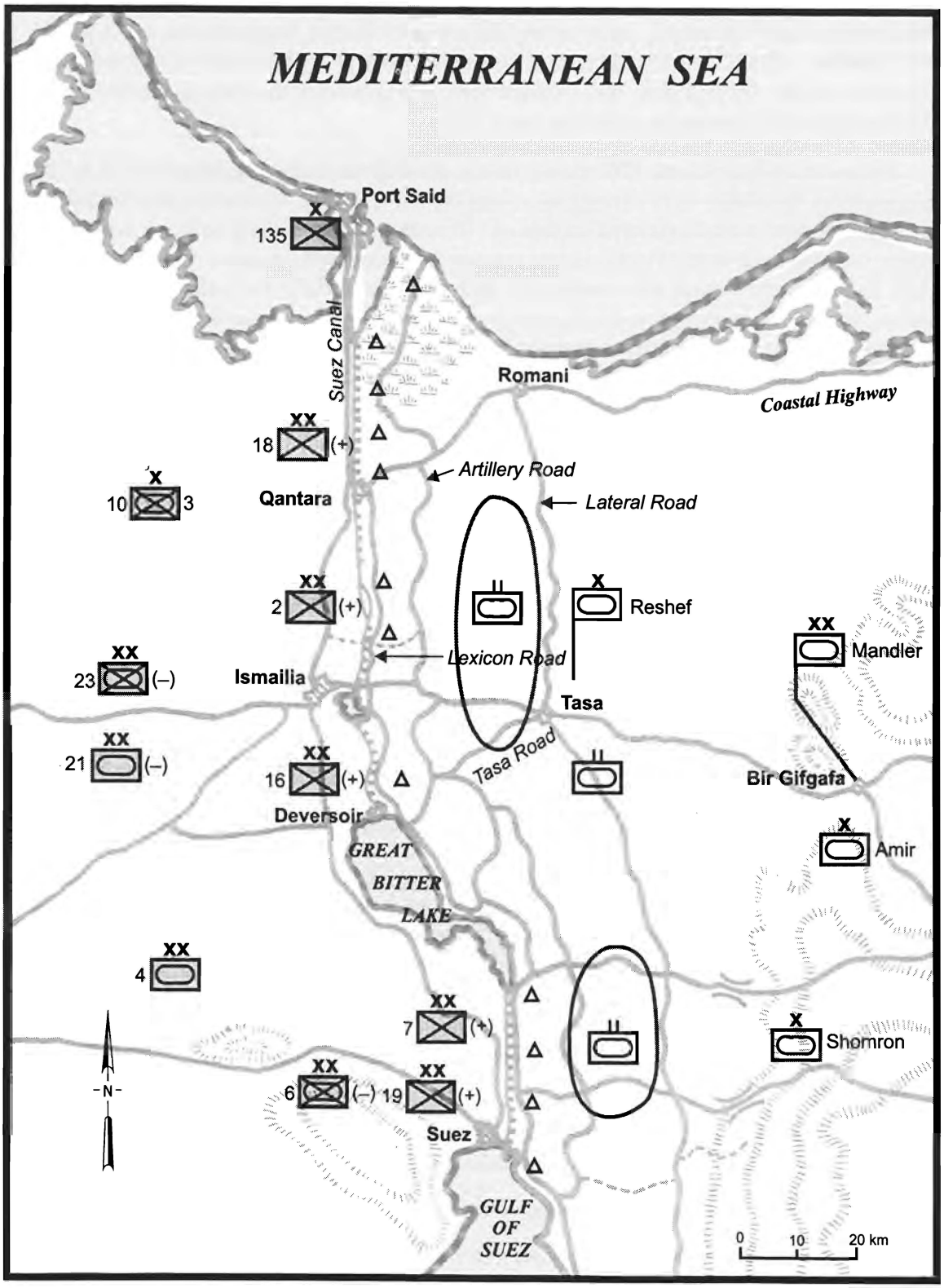
The first major obstacle for the Egyptians to overcome was the Suez Canal, which Dayan once referred to as "one of the best anti-tank ditches in the world." The waterway was 180 to 220 meters in width and 16 to 20 meters in depth. To prevent sand erosion, concrete walls lined the water's edge. At high tide, the water flowed a meter below the top of the concrete wall lining the canal; at low tide, the water shrank to two meters below the wall in the north to three meters in the south. At the water's edge, Israeli engineers constructed vertical sand ramparts that rose at an angle of 45 to 65 degrees and to a height of twenty to twenty-five meters. These obstacles would prevent the Egyptians from landing tanks and heavy equipment without prior engineering preparations on the east bank. Israeli military planners calculated that the Egyptians would need at least twenty-four, if not a full forty-eight hours, to break through this barrier and establish a sizable bridgehead.

As a final touch to take advantage of the water obstacle, the Israelis installed an underwater pipe system designed to pump flammable crude oil into the Suez Canal to create a sheet of flame. This burning furnace would scorch any Egyptians attempting a crossing. Some Israeli sources claim the system was actually unreliable, and apparently only a couple of taps were operational. Nevertheless, the Egyptians took this threat very seriously, and, on the eve of the war, during the late evening of 5 October, teams of frogmen blocked the underwater openings with concrete.[27]

At the top of the sand ramparts that ran the length of the canal, Israeli engineers had constructed thirty strongpoints at seven- to ten-kilometer intervals. Built several stories high into the sand, these concrete forts were designed to provide troops with shelter from 1,000-pound bombs as well as offer creature comforts such as air conditioning. Above ground, the strongpoints' perimeters averaged 200 by 350 meters, surrounded by barbed wire and minefields to a depth of 200 meters. The entire length of the canal contained emplacements for tanks, artillery pieces, mortars, and machine guns so that Israeli soldiers could foil an Egyptian crossing at the water line.

To support the rapid movement of Israeli troops to the possible Egyptian crossing zones, the IDF constructed an elaborate road system (see map 2). Three main roads facilitated movement north and south. Lexicon Road ran along the canal and allowed the Israelis to conduct patrols between the strongpoints. Ten to twelve kilometers east of Lexicon stood Artillery Road, with some twenty artillery and air defense positions and tank and logistic bases. Thirty kilometers from the waterway, Lateral Road allowed the Israelis to concentrate operational reserves for a major counterattack. A number of other roads running east and west were designed to facilitate Israeli counterattacks against the Egyptian crossing sites.

The defense of the Sinai depended upon two plans, Dovecoat (*Shovach Yonim*) and Rock (*Sela*).[28] In both plans, the Israeli General Staff expected the Bar-Lev Line to serve as a "stop line" or *kav atzira*—a defensive line that had to be held at all cost.[29] As noted by an Israeli colonel shortly after the War of Attrition, "The line was created to provide military answers to two basic needs: first, to prevent the possibility of a major Egyptian assault on Sinai with the consequent creation of a bridgehead which could lead to all-out war; and, second, to reduce as much as possible the casualties among the defending troops."[30] To prevent a limited Egyptian crossing operation, Dovecoat called for the employment of only regular forces. Responsibility for



Map 2. Sinai front, initial dispositions, 6 October 1973

defending the Sinai fell mainly upon the regular armored division, supported by an additional tank battalion, a dozen infantry companies, and seventeen artillery batteries for a total of over 300 tanks, seventy artillery guns, and 18,000 troops. The mission of these regular forces was to defeat an Egyptian crossing at or near the water line.

Dovecoat envisaged some 800 infantry troops, divided into small detachments of 15 to 100 men, manning the twenty or so strongpoints along the Bar-Lev Line. Behind the forward line of fortifications stood a single armored brigade of 110 tanks positioned along Artillery Road. This brigade was deployed in three tactical areas running from north of Qantara to Port Tawfiq in the south. Each forward tactical area contained a tank battalion of thirty-six tanks whose primary mission, in case of an Egyptian attack, was to move to the water line and occupy the firing positions along the ramparts and between the fortifications. Behind this tactical area of defense, the IDF positioned two armored brigades, one to reinforce the forward armored brigade and the other to counterattack against the Egyptians' main effort. One of these brigades was located at Bir Gifgafa, the other at Bir Tamada, east of the Giddi and Mitla Passes. Should the regular armored division prove inadequate for defeating the attacking Egyptian troops, the Israeli military would activate Rock, a plan mobilizing two reserve armored divisions with support elements. Their employment would signify a major war.

All Israeli planning was predicated on the assumption of a nearly forty-eight-hour advance warning to be provided by Israeli Military Intelligence. During these two days, the Israeli Air Force would assault the Arab air defense systems while the reserves mobilized and moved to their assigned fronts according to plan. On land, the Israelis expected to defeat the Egyptians with tank-heavy brigades, with Israeli pilots providing reliable "artillery" support to counter the Egyptians' firepower.

EGYPTIAN MILITARY AIMS AND PLAN. To achieve any success against the IDF, the Egyptians had to penetrate the sand embankments of the Bar-Lev Line while simultaneously exploiting cracks in the three Israeli pillars of intelligence, air force, and armor.

The responsibility for breaching the earthen embankments before the IDF could react with sufficient repelling force fell to the Engineer Corps, under the command of Major General Gamal Ali. Upon this engineering problem rested much of the crossing operation's tempo. To clear a path seven meters wide for the passage of tanks and other heavy vehicles involved removing 1,500 cubic meters of sand. Meanwhile, in the Egyptians' worst-case scenario, Israeli tank companies and battalions might be counterattacking within fifteen to thirty minutes, with an armored brigade arriving in two hours. Breaching operations, therefore, had to be effected quickly.

To facilitate these operations, the Egyptian General Command assigned six missions to the Engineer Corps:

1. Open seventy passages through the sand barrier;
2. Build ten heavy bridges for tanks and other heavy equipment;
3. Construct five light bridges, each with a capacity of four tons;
4. Erect ten pontoon bridges for infantry;

5. Build and operate thirty-five ferries;

6. Employ 750 rubber boats for the initial assaults.[31]

Of the six tasks, the first proved the most critical.

To expedite the breaching operation, the Egyptians discovered a simple yet ingenious solution: a water pump. Other methods involving explosives, artillery, and bulldozers were too costly in time and required nearly ideal working conditions. For example, sixty men, 600 pounds of explosives, and one bulldozer required five to six hours, uninterrupted by enemy fire, to clear 1,500 cubic meters of sand. Employing a bulldozer on the east bank while protecting the congested landing site from Israeli artillery would be nearly impossible during the initial hours of the assault phase. Construction of the much-needed bridges would consequently begin much too late.

At the end of 1971, a young Egyptian officer suggested a small, light, gasoline-fueled pump as the answer to the crossing dilemma. So, the Egyptian military purchased 300 British-made pumps and found that five such pumps could blast 1,500 cubic meters of sand in three hours. Then, in 1972, the Corps of Engineers acquired 150 more-powerful German pumps. Now a combination of two German and three British pumps would cut the breaching time down to only two hours. This timetable fell far below that predicted by the Israelis, who apparently failed to appreciate the significance of the water cannons used by the Egyptians during their training exercises.

While finding a solution for the sand embankment, the Egyptian Armed Forces still faced an opponent superior in air power and armor. In the face of such a formidable foe, Sadat demanded that the senior leadership of the armed forces devise missions only within their means. On 3 June 1971, he outlined his vision of a limited war: "When we plan the offensive, I want us to plan within our capabilities, nothing more. Cross the canal and hold even ten centimeters of [the] Sinai. I'm exaggerating, of course, and that will help me greatly and alter completely the political situation both internationally and within Arab ranks."[32] With such words, Sadat breathed a spirit of caution into his top senior commanders, even to the point of once warning his new war minister, Ahmad Ismail, not to lose the army as had happened in 1967.[33] Ahmad Ismail was a conservative and cautious commander who, in his previous position as director of general intelligence, had assessed the Egyptian military as unprepared for war. But his temperament of loyalty and caution conformed well with Sadat's strategic use of the military in a limited war.

Caution on Sadat's part made sense. Egypt's military was markedly inferior to the IDF. The Egyptians did outnumber the Israelis in planes, tanks, artillery pieces, and surface-to-air missiles, and these numerical advantages increased precipitously with the participation of the Syrian Armed Forces and the token units from other Arab countries. But the IDF offset these disadvantages in numbers with clear advantages in quality over quantity in both human and technological terms. Israeli soldiers were generally better trained and could employ their weapons more effectively than their Arab counterparts.

Soviet military aid, nonetheless, provided the Arabs with the technological means to challenge seriously Israeli superiority in air and maneuver warfare. To compensate for an inferior air force, the Egyptians, as well as the Syrians, fielded an integrated air defense system comprising SAM-2s, SAM-3s, SAM-6s, SAM-7s, and ZSU-23-4s. The SAM-6s and ZSU-23-4s

were mounted on vehicles and could easily accompany armor; the SAM-7s were infantry weapons carried by one soldier on foot. But the Soviet air defense system had a serious weakness: the SAM-2s and SAM-3s were immobile and could only be moved with great care over a nine-hour period at best. Thus, the danger existed of a possible degradation in the integrated nature of the air defense umbrella should there be a major redeployment of missiles to the east bank in the midst of war. The deployment of SAM-2 and SAM-3 battalions close to the Suez Canal during the last days of the War of Attrition extended the air defense coverage about twenty kilometers into the Sinai—but far short of the fifty to fifty-five kilometers needed to extend the coverage to the three strategic passes of Bir Gifgafa, Giddi, and Mitla. A dash by armor to the strategic passes would surpass the air defense's coverage and would expose Egyptian ground forces to the devastating power of the Israeli Air Force.

To support its land operations without degrading its air defense system, the Egyptian Armed Forces limited their initial bridgeheads to twelve to fifteen kilometers east of the canal, within the range of their air defense umbrella. Within this parameter, the Egyptians could attain air parity over the battlefield with land-based missiles and still conduct a major offensive operation. With this territorial limitation, the Egyptian Air Force could then restrict its missions to ground support and the bombing in depth of the Sinai and thus avoid a direct confrontation with the Israeli Air Force for air supremacy. After supporting the crossing with bombing missions deep into the Sinai, the Egyptian Air Force could then redeploy, with its main mission to serve as a strategic reserve for defense against Israeli air strikes west of the Suez Canal.

For ground operations, the Egyptians countered the Israelis' predominantly tank-intensive force (and doctrine) by employing Soviet antitank missiles—Saggers and RPG-7s (both infantry weapons that could be effective at maximum ranges of one mile and 325 yards, respectively). If used in sufficient numbers, these weapons posed a serious threat to Israeli tanks attacking hastily prepared defensive positions during the crossing operation. Egyptian planners expected their infantry armed with these weapons, supported by artillery and tanks, to play the main role in defeating Israeli armor counterattacks during the amphibious assault. Here, the Egyptians planned to exploit a serious flaw in Israeli doctrine and organization. Israeli armor units lacked enough infantry, mortars, or artillery to suppress Egyptian foot soldiers armed with antitank missiles. The Egyptians thus approached the war with some confidence in respect to the tactical defensive. As noted by an Egyptian brigadier general who crossed with his brigade in the first hour of the war: "the enemy's tanks making a penetration are a rich meal for starved men if our defenses are in depth."[34] The Egyptian Armed Forces had trained to turn Israeli breakthroughs into opportunities. The conduct of a major offensive based on air defense and infantry carrying antitank missiles represented an innovation in modern warfare and caught the IDF off guard.

Beginning in November 1972, the Egyptian General Command proceeded with final plans to translate Sadat's war aims into concrete operational and tactical objectives.[35] The campaign plan, eventually given the code name Operation Badr, contained two phases. The first phase called for five infantry divisions in two field armies to cross the Suez Canal on a broad front without a main effort. As a consequence of this phase, Israeli senior commanders in the Sinai would lose precious hours seeking to discover the Egyptian main effort. Operation Badr outlined the following missions for the crossing operation:

1. Cross the Suez Canal and destroy the Bar-Lev Line,



In the Memory of the Passing of 2 Years . . .

Egyptian soldiers wielding antitank weapons as they prepare to ambush tanks

2. Establish bridgeheads of ten to fifteen kilometers depth on the east bank,
3. Inflict as much damage as possible in men, weapons, and equipment,
4. Repel and destroy Israeli counterattacks,
5. And be prepared for further missions depending on the situation.

Egyptian planners allotted four to five days for crossing the Suez Canal, capturing the Bar-Lev Line, and establishing bridgeheads twelve to fifteen kilometers in depth. Each field army would have one continuous bridgehead, with the Bitter Lakes serving as a natural barrier between the Second and Third Field Armies.

Then, on the fourth or fifth day of the war, a decision would have to be made either to proceed with an offensive eastward, most likely to capture the passes, or wait for further developments before making that decision. Sadat's strategic directive on 5 October clearly left the question of a second phase dependent on an assessment of the overall situation. Senior Egyptian commanders knew the follow-on missions would almost certainly involve seizing the three strategic passes of Bir Gifgafa, Giddi, and Mitla, some fifty to fifty-five kilometers from the Suez Canal. Therefore, the Egyptian Armed Forces planned and trained as if they would seize the Israeli

passes, with or without an operational pause. The Egyptians expected to transfer some SAM assets to the east bank for that offensive.

While the Egyptians planned for and expected to attack toward the passes, with timing being the variable, the top political and military leadership apparently lacked serious commitment to implement this second phase of Operation Badr. This tiny circle of leaders included Sadat, Ahmad Ismail, and Shazli, each of whom had his own reasons for reticence. Sadat was more inclined to make bold political moves, not military ones. Establishing bridgeheads on the east bank would suffice to break the diplomatic stalemate; anything that risked these military gains would jeopardize his bargaining position after the war. Shazli, as chief the General Staff, vigorously opposed the second phase, believing such an attempt would prove suicidal: the Egyptian Air Force lacked the capability to challenge the Israeli Air Force for control of the skies, and a move to the strategic passes lay outside the Egyptians' air defense umbrella. Ahmad Ismail, the war minister, held a similar evaluation to that of Shazli; for him, a drive to the passes appeared an unnecessary gamble given the history of the Egyptian Army in fighting the Israelis.[36]

Thus, an inherent tension or ambiguity existed between Egypt's political and military objectives. The passes acted as a magnet for senior Egyptian commanders, who, like Sadiq earlier, thought in terms of waging war by either decisively defeating an opponent or capturing strategic terrain. Sadat, however, was mainly concerned with breaking the diplomatic stalemate, not so much in capturing land per se. In Arabic parlance, he envisioned more a war of political movement (*al-tahrik*) through limited military action than a war of liberation (*al-tahrir*) by a major seizure of land. A military assault on the Bar-Lev Line and the capture of land on the east bank would, in his view, suffice to force the superpowers, in particular the United States, to become involved in the Arab-Israeli problem. A limited but successful military operation would enhance Egypt's strategic importance and thus provide Sadat with diplomatic leverage. While Sadat sought psychological effects that would strengthen his diplomatic position—for which any seizure of territory in a major operation might suffice—the Egyptian Armed Forces, for their part, prepared for a war designed to capture the passes.

Though not primarily interested in seizing territory, Sadat did, however, need some terrain on the east bank. Thus, his attention focused on the rapid capture of Qantara East. Located on the east bank of the Suez Canal, this virtual ghost town had been, before the Six Day War, the second most important city in the Sinai after al-Arish. Its recapture would carry immense propaganda value, being the first instance of Arab forces capturing a city held by Israeli troops. To facilitate the swift occupation of the town, as demanded by Sadat, Ahmad Ismail decided to reinforce the 18th Infantry Division, into whose zone of operations Qantara East fell, with an armored brigade. Sadat also directed General Command to take Ismailia and Suez City (outside the range of Israeli artillery) as quickly as possible to avoid the embarrassment of having these two Egyptian cities bombed by Israeli ground fire. Again, the war minister solved the tactical problem by attaching a tank brigade each to the 2d and 19th Infantry Divisions. Finally, the commanders of the 7th and 16th Infantry Divisions, the last two remaining divisions involved in the crossing operation, clamored for their own tank brigades, and Ahmad Ismail yielded to their requests. Operation Badr thus ended up with five divisions crossing the Suez Canal on a broad front, each augmented by an armored brigade.[37](See map 2.)

These decisions underscored the great emphasis Sadat and Ahmad Ismail placed on the crossing operation, each showing reticence for follow-on missions. To commit five tank brigades to the crossing phase, however, required stripping armor assets from each field army's operational reserves, those very forces that would be used in a move to the passes. Each infantry division gained additional forces—one armored brigade of ninety-six tanks, one commando battalion, and one SU-100 battalion of tank destroyers. Operation Badr committed 1,020 tanks to the crossing operation, leaving 580 on the west bank, 330 in the operational reserve, and 250 in the strategic reserve.[38] Egyptian war planners expected to defeat Israeli counterattacks by throwing in all available weapons and employing a combined arms doctrine hinging on air defense and leg infantry.

It was natural to employ the bulk of resources to the risky mission of assaulting the fortified positions of the Bar-Lev Line. An Egyptian failure would result in heavy human and materiel losses, and the Egyptian Armed Forces would then require several years of rebuilding before making another such attempt. Most likely, Sadat would not have survived politically such a major military defeat.

FINAL PREPARATIONS. By the end of September 1973, the Egyptian Armed Forces and their Syrian allies were prepared for war and awaited the green light from their civilian leadership. Once the order was given, all that remained was to mask the Egyptian intent for war, thereby undermining Israeli war plans, which expected a forty-eight-hour advance warning. To achieve strategic surprise, the Egyptians implemented an elaborate deception plan and hoped for Israeli miscalculations and fortuitous events.

On 13 September, an unexpected incident occurred that would cloud the Israelis' judgment over the next several weeks. A routine Israeli reconnaissance overflight of Syria and Lebanon turned into a major dogfight as Syrian fighters challenged the Israeli planes. At the end of the air combat, Israeli pilots had downed twelve Syrian MiGs while losing only one Mirage. This incident formed an important backdrop to the outbreak of war.

Israeli leaders now expected Arab retaliation as revenge for the Syrian humiliation suffered in the aerial encounter. Within two weeks, the IDF noted unusual military activity across their northern border. On 26 September, at 0815, Lieutenant General David Elazar, the chief of the General Staff, convened a high-level meeting with senior officers and staff to evaluate intelligence reports indicating possible military action by Syria. Syria's General Command had canceled leaves, activated numbers of reserve officers and soldiers, and mobilized civilian vehicles. Despite these disconcerting moves, Israeli Military Intelligence confidently insisted that Syria would not go to war on her own and that Egypt was too preoccupied with internal matters to contemplate any military adventurism. Instead, Syria might opt for a show of force or, in a worst-case scenario, try to snatch part of the Golan Heights. Despite assurances from Israeli Military Intelligence of a low probability for war, Elazar ordered the transfer of the 77th Tank Battalion from the Sinai to Golan as a precautionary step.

Reports of increased Syrian military activity continued over the next few days, heightening concern in Tel Aviv. By 30 September, virtually the entire Syrian Army had deployed to positions from which it could assume an offensive. Su-7 planes, for instance, had moved to forward air bases, and reports of Syrian armor units moving from northern Syria to the front reached The

Pit, the command center for the IDF located in Tel Aviv. Each day brought new information challenging the general Israeli assessment of a low probability of war.

Meanwhile, developments along the Sinai front caused far less concern for the Israeli General Staff than those in the north, even though the events occurred simultaneously and should have aroused more anxiety. While Syrian forces were moving into place, the Egyptians ingeniously used their annual peacetime maneuvers, announced far in advance, to mask their intent for war. Consequently, initial Egyptian military movements near the Suez Canal failed to appear out of the ordinary. This peacetime training exercise began on 26 September, the day before the Israelis began celebrating Rosh Hashanah, the Jewish New Year, which somewhat distracted the IDF.

The Egyptians continued to implement a carefully orchestrated deception plan designed to delude the Israelis into believing that the Egyptian Armed Forces were unprepared for war and were merely conducting a routine training exercise.[39] Egyptian accounts tend to present a story of meticulous and deliberate planning and cleverly designed deception. However, the overconfidence and serious misconceptions of the Israelis played a major role in allowing Egypt and Syria to achieve such surprise.

The Egyptians took numerous steps to prevent Israeli intelligence from getting wind of the war. A key element in the strategic surprise was to limit severely the number of Egyptians and Syrians privy to the date of the attack. On 22 September 1973, Sadat and Asad ordered their war ministers and chiefs of the general staffs to begin hostilities on 6 October, thus providing them fourteen days' advance warning.[40] Slowly word filtered down to subordinate commands. On 1 October, Ahmad Ismail informed the two Egyptian field army commanders of the date. Division commanders were notified on 3 October, brigade commanders on 4 October, and battalion and company commanders on 5 October. Platoon commanders learned of the war only six hours before the attack.[41] On the civilian side of the house, only a few key individuals learned of the approach of war, and virtually all senior ministers were kept in the dark so that they could perform their official duties in a routine fashion. By 1 October, a number of senior officials understood that war loomed but had no knowledge of the exact date or time until war broke out.

A number of other steps were taken to deceive Israel's Military Intelligence. In September, Sadat attended the Nonaligned Conference in Algeria, ostensibly returning to Egypt near exhaustion and ill. For several days before 6 October, Sadat remained out of the public limelight while Egyptian intelligence carefully planted false stories about his illness and even initiated a search for a home in Europe for him, purportedly for his medical treatment, adding further credibility to the floating rumor. To paint a picture of normalcy in the armed forces, Egyptian newspapers announced the holding of sailboat races that would involve the commander of the Egyptian Navy and other naval officers. Business on the diplomatic front included a routine invitation to the Rumanian defense minister to visit Cairo on 8 October, two days after the scheduled attack. In addition, the foreign, economic, commerce, and information ministers were all out of the country, conducting their normal business activities. The Egyptian military also planted stories in Arab newspapers of serious problems with Soviet equipment, thereby hinting at the unpreparedness of the armed forces. To lull the Israelis into further complacency, the government announced on 4 October 1973 a demobilization of 20,000 troops and ostentatiously granted leaves for men to perform the Pilgrimage to Mecca. Finally, as a last touch, on the

morning of the attack, Egyptian soldiers were positioned as innocent fishermen along the Suez Canal, giving an ordinary, peaceful appearance to things. The Egyptian deception plan was thus comprehensive, covering both political and military spheres, and integrating strategic, operational, and tactical movements from the president to the individual soldier—all designed to fool the Israelis until they discovered the Egyptians' intent too late.

The timing of the attack coincided with the final phase of the annual autumn maneuvers on the west bank, scheduled to end on 7 October. On 27 September, Cairo Radio announced the mobilization of reservists. General Command used this training exercise to bring combat units to their staging areas near the canal, and the forty-meter sand rampart along the canal permitted field commanders to conceal a portion of their troops near the water's edge. A unit would move to the canal rampart for training and then withdraw, leaving part of the unit behind with orders to remain concealed until further orders. These maneuvers, which commenced on 1 October according to schedule, proved a brilliant cover for final war preparations. Although Israeli Military Intelligence noted an unusual level of Egyptian communications for a peacetime maneuver and an exceptional level of troop deployment near the canal, no senior Israeli military official seriously questioned Military Intelligence's estimate of a very low probability for war. Everything appeared normal precisely because the general feeling was that the Egyptian Armed Forces would not dare fight the Israelis from a position of weakness.

There was another important reason why no senior Israeli officer seriously questioned Military Intelligence's assessment. Back in May 1973, a similar situation of heightened Arab military activity had raised anxieties in Tel Aviv. Despite Military Intelligence's assurances of a very low probability for war, the government, at the request of the chief of the General Staff, had mobilized some reservists at great cost to the treasury. In this case, the intelligence community proved right, and now, in September and early October, as a result of this previous experience, the assessments by Military Intelligence received little critical cross-examination from senior commanders.

FINAL STEPS. Proper coordination between the two fronts loomed as a last major item for Arab consideration. On 3 October, General Ahmad Ismail Ali, who as Egyptian war minister also served as general commander for the Egyptian and Syrian Armed Forces, and Major General Baha al-Din Nofal, his chief of operations for the two fronts, flew to Damascus to meet with senior Syrian commanders to inspect last-minute preparations and determine the time for the attack. A surprise awaited these Egyptians. The Syrians apparently wanted a twenty-four to forty-eight-hour delay, and a disagreement surfaced over the timing of the offensives. The Syrians pushed for a dawn attack so that the sun would be in the eyes of the Israeli defenders on the Golan, whereas the Egyptians argued for an assault at 1800 so that darkness could cover their canal crossing. To resolve the matter expeditiously, Ahmad Ismail appealed to Asad, who agreed to an attack on 6 October and compromised on 1405 for a combined offensive.[42] This compromise proved fortuitous, for Israeli Military Intelligence later reported the combined Egyptian-Syrian attack as commencing at 1800.

The Egyptians and Syrians almost inadvertently divulged the secret of their combined offensive. Because the conduct of the war depended on Soviet assistance, Sadat and Asad decided to provide the Soviets with advance warning of their intention. As a result, on 3 October, Sadat informed the Soviet ambassador in Cairo of Egypt's and Syria's intent to go to war against Israel

and requested assurances of Soviet assistance. Asad, for his part, did the same on the next day, revealing to the Soviets the exact date of hostilities. The Kremlin surprisingly responded to this information by requesting permission to evacuate its embassy families from Egypt and Syria. Both Sadat and Asad reluctantly granted this request.[43] Late in the evening of 4 October, Israeli intelligence learned of the move of Soviet planes to both countries to evacuate the families of Russian officials; the departure took place on 5 October. By taking this unusual step, the Kremlin most likely sought to convey an appearance of noninvolvement in the Arab decision for war, thereby assuring the continuance of détente with the United States.[44]

Word of the unexpected departure of Soviet families from Cairo and Damascus caught the Israeli leadership completely by surprise. At 0825 on 5 October, Elazar held a conference with senior commanders to discuss the latest development. No one could find an adequate explanation for such an unusual move. Even Ze'ira, the director of Military Intelligence, found his self-confidence shaken, but he quickly found comfort in the prewar conception that Syria would not dare fight alone and that Egypt would not fight a major war without a capable air force. That third-dimension capability, as Arabs themselves admitted, would not materialize for a couple years.

Despite assurances from Military Intelligence of a low probability for war, Elazar took some precautionary measures on both fronts that proved critical for the approaching armed conflict. He canceled all military leaves, placed the armed forces on C (the highest-level) alert, and ordered the air force to assume a full-alert posture. In addition, he ordered the immediate dispatch of the remainder of the 7th Armored Brigade to the Golan Heights to join its 77th Tank Battalion (which had been there since 26 September). By noon on 6 October, the Israeli force on the Golan numbered 177 tanks and forty-four artillery pieces.[45] These additional reinforcements would save the Golan from certain Syrian capture. To replace the departed 7th Armored Brigade in the Sinai, the Armor School, under the command of Colonel Gabi Amir, received word to activate its tank brigade (minus one tank battalion earmarked for the Golan) for immediate airlift to Bir Gifgafa in the Sinai, less its tanks. Amir's brigade was in place when war began the next day.

Despite the above measures, no decision was taken to mobilize the reserves, and there was good reason for that. Elazar and other senior commanders still expected at least a day or two warning of an impending Arab attack, as had been promised by Military Intelligence.[46] Such an advance alert would provide ample time for the mobilization of the reserves and for the air force to destroy the Arab air defense systems. Nothing of the sort occurred, however; the Israelis' plans were founded on the shifting sands of a best-case scenario.

The religious factor also complicated the Israeli decision-making cycle. Yom Kippur (the Day of Atonement), the most solemn day in Judaism, fell on 6 October, the day of the Egyptian and Syrian offensives. To call-up the reserves on the eve of this holy period without a clear warning from Military Intelligence was not an easy decision. Moreover, on the Arab side, both Egypt and Syria were observing the Muslim fasting month of Ramadan, with 5 October falling on the ninth of the Islamic calendar. For Muslims to wage war during Ramadan was not without precedent but still appeared as an unlikely course of action.

The Arabs' intention to make war finally became revealed. Definite word from Ze'ira reached Meir, Dayan, and Elazar shortly after 0430 on 6 October.[47] An "indisputable" source indicated a joint Egyptian-Syrian attack scheduled for 1800 that day. Israeli Military Intelligence

had failed to deliver on its tacit contract and now provided a wake-up call of only nine and a half hours before the outbreak of hostilities. Compounding this failure, Ze'ira erred further in identifying the time of the Arab attack as 1800 when, in fact, the Egyptians and Syrians actually planned their assault for 1400. These two failings created confusion for the IDF, and combined Egyptian and Syrian offensives caught Israeli reservists in the first stages of their mobilization. Regular units were still making final preparations for the onslaught expected in the early evening. After the Six Day War, the Israelis were rightfully confident in possessing a first-class intelligence community. The political and military leadership, however, had depended too much on Military Intelligence, and the Arabs had, in fact, won the first phase of the information war.

As soon as word arrived of the impending Arab offensives, the Israeli political and military leadership immediately went into action. Elazar telephoned his air force chief, Major General Benyamin Peled, who promised to be ready for a preemptive air strike by 1200. The chief of the General Staff also held a series of high-level meetings with his staff, senior commanders, and Dayan, where steps were taken to prepare the armed forces for war. But the most important decisions awaited the political leadership.

At 0805, Elazar met with Prime Minister Golda Meir and her kitchen cabinet, a meeting that lasted until 0920. Two key issues received serious attention. To ensure a favorable military situation at the onset of hostilities, Elazar recommended a preemptive air strike against Syria, but Dayan, the defense minister, counseled against one, citing the adverse American and international reaction that would result and mark Israel as the aggressor. Meir supported her defense minister on this issue. With the strategic depth gained from the 1967 War, Israel could take advantage of its geographical position and accept a first strike. Failing on the first issue, Elazar pressed for the mobilization of the entire air force and four armored divisions, a total of 100,000 to 120,000 troops. Dayan, however, favored only two armored divisions or 70,000 men, the minimum required for defense against full-scale attacks on two fronts. Meir, on this issue, sided with Elazar.

Seven years after the Six Day War, the IDF was once again confronted with another major conflict. This time, however, the initiative lay squarely with the Arabs, as the outbreak of war found Israeli reservists scrambling to reach their mobilization centers. Because the Egyptians and Syrians had won the opening round, the intelligence struggle, they would dictate the first phase of the war. As a result, numerous failings and mistakes would beleaguer the IDF and beg for accountability after the war. All this would play directly into Sadat's war strategy.

THE EGYPTIAN ASSAULT. The surprise achieved by Egypt and Syria was complete, stunning virtually everyone in Israel. This success allowed the Egyptians to dictate the tempo of the battlefield during the first phase of the war, as the crossing operation generally went according to plan.

The Egyptians assaulted the Bar-Lev Line with two field armies and forces from Port Sa'id and the Red Sea Military District. The Second Field Army covered the area from north of Qantara to south of Deversoir, while the Third Field Army received responsibility from Bitter Lakes to south of Port Tawfiq. The Bitter Lakes separated the two field armies by forty kilometers. The initial phase of the war involved five infantry divisions, each reinforced by an armored brigade and additional antitank and antiair assets. These units crossed the Suez Canal and established bridgeheads to a depth of twelve to fifteen kilometers over a period of four days (from 6 to 9

October). This assault force, containing over 100,000 combat troops and 1,020 tanks, accomplished most of its mission over a period of forty-eight to seventy-two hours.

At precisely 1405, the Egyptians and Syrians began their simultaneous air and artillery attacks. On the southern front, 250 Egyptian planes—MiG-21s, MiG-19s, and MiG-17s—attacked their assigned targets in the Sinai: three Israeli air bases, ten Hawk missile sites, three major command posts, and electronic and jamming centers. Meanwhile, 2,000 artillery pieces opened fire against all the strongpoints along the Bar-Lev Line, a barrage that lasted fifty-three minutes and dropped 10,500 shells in the first minute alone (or 175 shells per second). The first wave of troops, 8,000 commandos and infantrymen in 1,000 rubber assault rafts, crossed the Suez Canal at 1420. Special engineer battalions provided two engineers for each rubber boat. Once across, the two engineers returned to the west bank with their boats while the disembarked infantry scaled the ramparts. The first units reached the east bank at 1430, raising their flag to signal the Egyptians return to the Sinai.

After scaling the ramparts, the Egyptian commandos and infantry, armed with Saggers, bypassed the Israeli strongpoints and deployed one kilometer in depth, establishing ambush positions for the anticipated armored counterattacks. Subsequent waves of Egyptians brought additional infantry and combat engineers, the latter to clear minefields around the strongpoints. Operation Badr called for twelve waves, crossing at fifteen-minute intervals, for a total of 2,000 officers and 30,000 troops deployed to a depth of three to four kilometers by dusk. The first eight waves brought the infantry brigades across; waves nine to twelve ushered in the mechanized infantry brigades.

Within the first hour of the war, the Egyptian Corps of Engineers tackled the sand barrier. Seventy engineer groups, each one responsible for opening a single passage, worked from wooden boats. With hoses attached to water pumps, they began attacking the sand obstacle. Many breaches occurred within two to three hours of the onset of operations—according to schedule; engineers at several places, however, experienced unexpected problems. Breached openings in the sand barrier created mud—one meter deep in some areas. This problem required that engineers emplace floors of wood, rails, stone, sandbags, steel plates, or metal nets for the passage of heavy vehicles. The Third Army, in particular, had difficulty in its sector. There, the clay proved resistant to high-water pressure and, consequently, the engineers experienced delays in their breaching. Engineers in the Second Army completed the erection of their bridges and ferries within nine hours, whereas Third Army needed more than sixteen hours.

Two hours after the initial landings on the east bank, ten bridging battalions on the west bank began placing bridge sections into the water. The Soviet-made PMP heavy folding pontoon bridges allowed the Egyptians to shorten the construction time of bridges by a few hours and to repair damaged bridges more rapidly by simple unit replacement. The PMP bridges caught the Israelis (and many Western armies) by surprise. Unfortunately for the Egyptians, they possessed only three such state-of-the-art structures; the remainder were older types of bridges. Concomitant with the construction of real bridges, other bridge battalions constructed decoy bridges. These dummies proved effective in diverting Israeli pilots from their attacks on the real bridges. Meanwhile, engineers worked frantically to build the landing sites for fifty or so ferries. By the next day, all ten heavy bridges (two for each of the five crossing infantry divisions) were operational, although some already required repair from damage inflicted by Israeli air strikes.



The War of Atonement: October, 1973

One of the breaches in the Israeli rampart as seen from the Egyptian side of the canal

The bridges and ferries together allowed the Egyptians to transport heavy equipment to the east bank at a pace faster than that anticipated by the Israelis before the war. Ten hours into the operation, the first tanks began crossing under the cover of darkness to reinforce the bridgeheads.

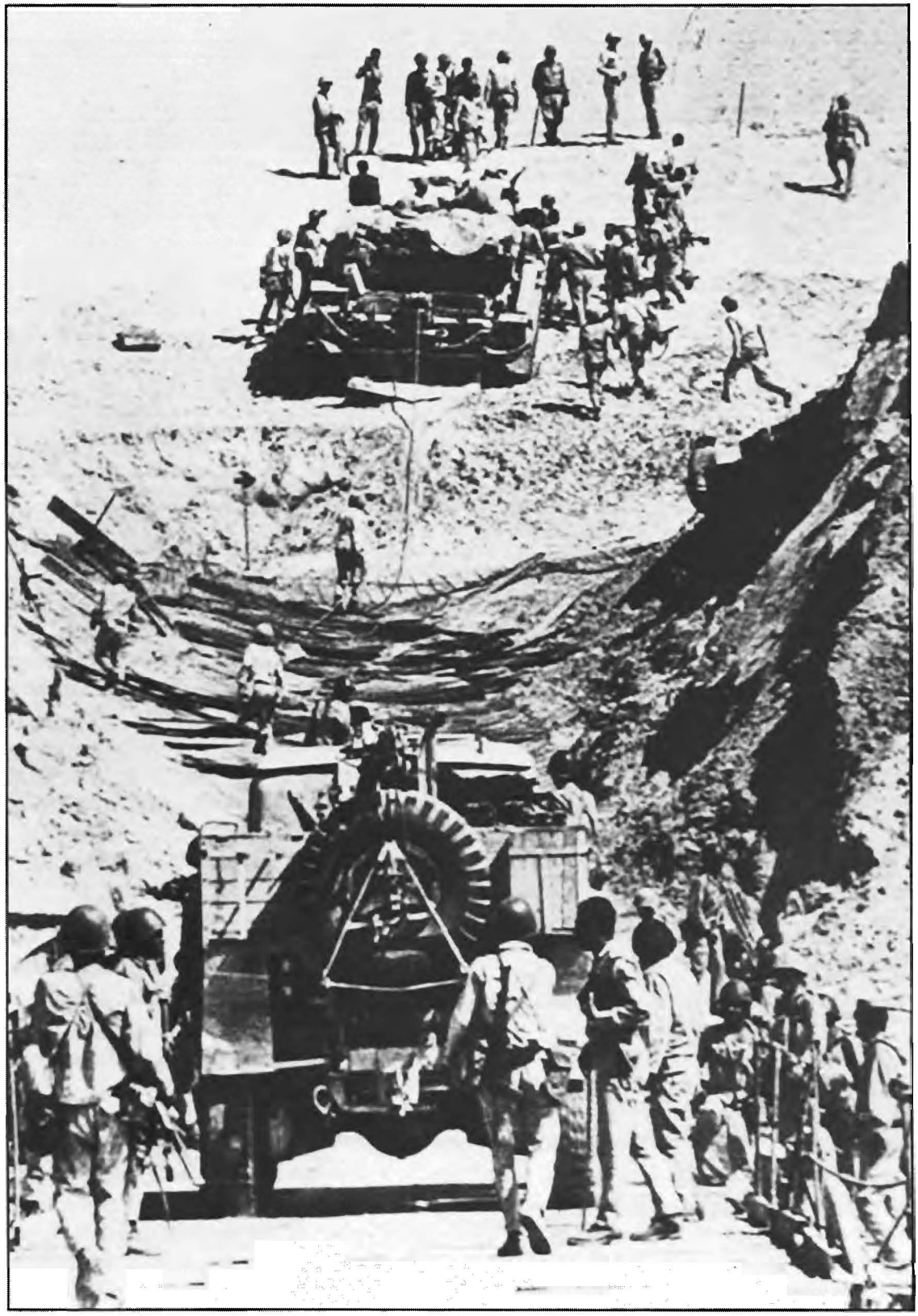
All these Egyptian achievements caught the Israelis completely off guard. Israeli reactions varied. Prime Minister Golda Meir described hers this way:

> The shock wasn't only over the way that the war started, but also the fact that [a] number of our basic assumptions were proved wrong: the low probability of an attack in October, the certainty that we would get sufficient warning before any attack took place and the belief that we would be able to prevent the Egyptians from crossing the Suez Canal. The circumstance could not possibly have been worse. In the first two or three days of the war, only a thin line of brave young men stood between us and disaster.[48]

Defense Minister Moshe Dayan noted wryly, "the Egyptian and Syrian attack on Yom Kippur came as a surprise, though it was not unexpected."[49] Regular officers were as hard hit by the surprise as the political leaders. Major General Avraham Adan, commander of the 162d Armored (Reserve) Division earmarked for the Sinai, left his morning meeting with Elazar puzzled by the prospect of war and even skeptical of its outbreak that evening: "That the Egyptians and Syrians would dare to launch a war against Israel seemed incredible. I couldn't believe that they were unaware that the Israel Defense Forces were far superior to theirs, and they would be risking a painful defeat."[50] Such Israeli reactions were widespread.



Egyptians crossing the canal



Mid-East Wars: The Yom Kippur War

An Egyptian BTR-50 APC climbs the steep rampart on the Israeli side of the Suez Canal



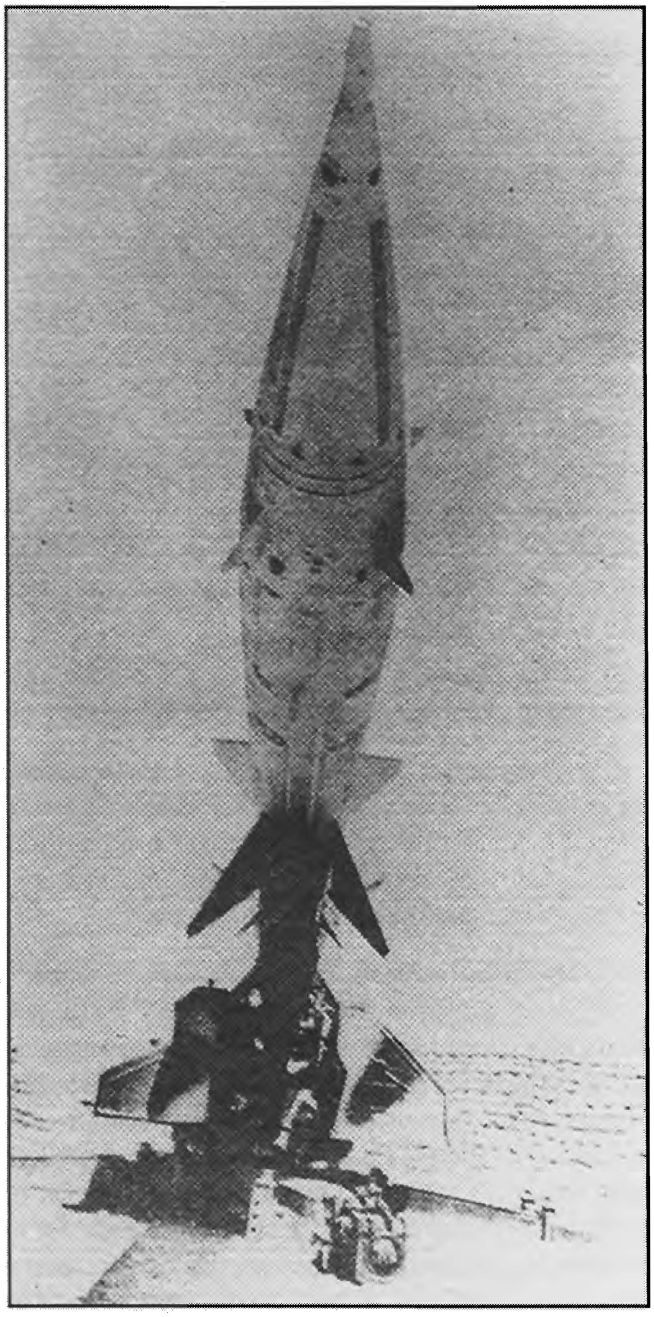
Egyptian Armor crossing the Suez in the first days of the 1973 Arab-Israeli War

The sudden and unexpected mobilization of reserves created its own set of problems. As Dayan noted: "Despite our self-confidence, there was disquiet in our hearts. It was not only that we were not used to a campaign where the initiative was in the hands of the enemy. The entire situation was out of keeping with our character and with the organic structure of our army, based as it is on reserves and their orderly mobilization. The transition within twenty-four hours from desk, tractor, and lathe to the battlefield is not at all easy."[51] Getting equipment quickly out of storage and to the front created numerous difficulties. Traffic jams developed along the few routes across the Sinai as reservists rushed to the front. One Israeli general who had fought in the Sinai in both 1956 and 1967 noted the golden opportunity missed by the Egyptians to take advantage of these congested arteries: "Had the Egyptian Air Force attacked our stalled convoys on the Qantara [to] al-Arish Road, I doubt that we would have escaped the same disastrous fate that befell the Egyptian forces from the Israeli air attacks on that same road in the 1956 and 1967 wars."[52]

Most important from the point of view of military operations, the Arab surprise negated the very foundations of Israel's war plans. The Sinai garrison numbered only 18,000 troops, 291 tanks, and forty-eight artillery pieces. Major General Avraham Mandler commanded the 252d Armored Division, while Major General Shmuel Gonen headed Southern Command. However, only 460 Israeli reservists from the Jerusalem Infantry Brigade—with little or no combat experience—manned the sixteen strongpoints of the Bar-Lev Line. Behind them stood the required three armored brigades: Colonel Amnon Reshef's Armored Brigade in the forward tactical zone of the canal, with Colonel Dan Shomron's Armored Brigade east of the Giddi and Mitla Passes, and Colonel Gabi Amir's Armored Brigade near Bir Gifgafa. Though placed on C alert and informed of the anticipated Egyptian attack, none of the three brigades deployed according to Dovecoat (the defensive plan)—a failure of which Elazar only became aware after the war. Gonen had ordered armor units to commence their final deployments at 1600, or only two hours before the expected invasion hour—actually two hours too late! Apparently, only

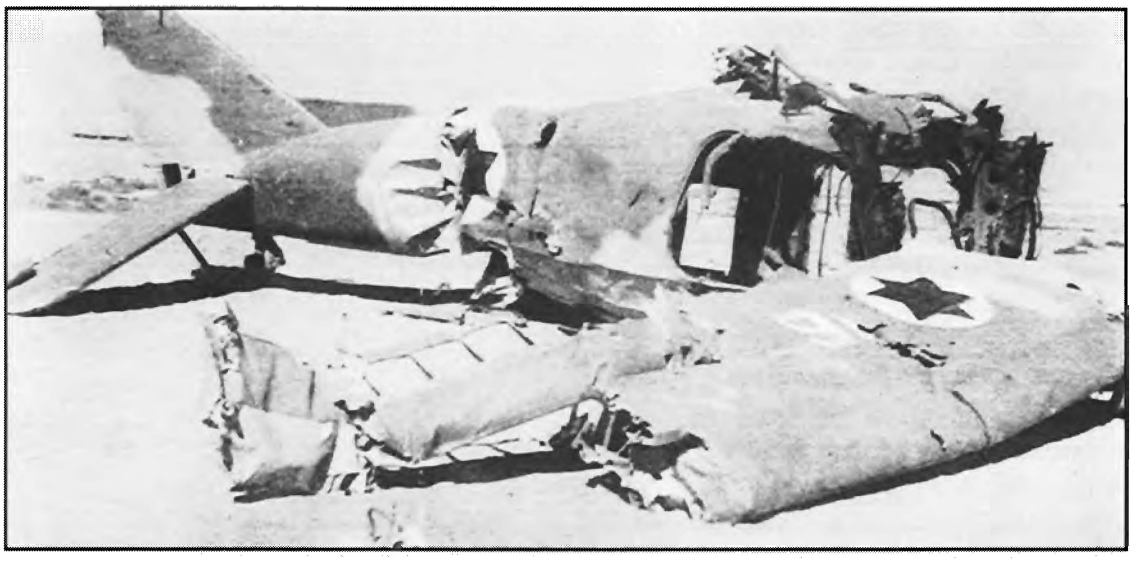
Orkal, the northernmost strongpoint on the Suez Canal south of Port Fu'ad, was reinforced by a tank platoon according to Dovecoat.[53]

The speed of the Arab attack surprised the IDF at all levels of command, catching Israeli units completely unprepared. The Israeli Air Force had expected to concentrate its effort on destroying the Egyptian air defense system but instead found itself providing ground support to stop the Egyptians attempting to cross the Suez Canal. Israeli pilots flying to the front thus encountered the dense Egyptian air defense system over the battlefield. The mobile SAM-6s, new to the theater, proved especially troublesome, but it was the sheer density of fire that inflicted havoc on the Israeli Air Force. As described by one Skyhawk pilot: "It was like flying through hail. The skies were suddenly filled with SAMs and it required every bit of concentration to avoid being hit and still execute your mission."[54] The barrage of missiles downed a number of Israeli planes. One pilot avoided five missiles before the sixth destroyed his plane. This onslaught forced pilots to drop their bombs in support of ground troops at safer distances, and they frequently missed targets altogether.



An Egyptian SAM missile, a bane to Israeli planes in the early days of the war

Meanwhile, on the ground, war plans called for a positional defense of the Bar-Lev Line. In accordance with Dovecoat, Reshef rushed his tank units forward to support the strongpoints and defeat the Egyptian effort to cross to the east bank. None of the Israelis expected to find swarms of Egyptian soldiers waiting in ambush, so company commanders had failed to conduct reconnaissance beforehand. Consequently, Egyptian antitank teams succeeded in ambushing a number of Israeli units attempting to reach the water line. Those Israelis who managed to reach the canal found themselves in the midst of massive Egyptian fires, some of them emanating from the Egyptian sand barrier constructed on the west



An Israeli jet, the victim of an Egyptian missile

bank of the Suez Canal. A number of Egyptian units failed to encounter Israeli forces and managed to avoid casualties on the first day of the war.

While Israeli units confronted the tactical challenge of defeating larger Egyptian forces on the east bank, Southern Command sought to determine the Egyptian main effort. There was none! Egyptian strategy had opted for a broad-front attack instead. As a result, Southern Command lost precious hours attempting to discover something their training suggested should exist for a military operation of this scope.

Caught by surprise, the Israeli high command failed to withdraw its troops from the strongpoints, a decision that haunted the IDF for the next several days. Dovecoat anticipated that the Israeli military would defeat Egyptian crossings at or near the water line. But all war planning had presumed adequate advance warning, which failed to materialize. Despite the Egyptian surprise attack, senior Israeli commanders felt no sense of urgency to order the immediate evacuation of strongpoints. Rather, the troops were left to fend for themselves. Meanwhile, rear units sought to reinforce them without a clear understanding of what to do next, given the confusion of the battlefield. During the first night, for example, an Israeli tank force from Amir's Armored Brigade managed to reach the strongpoint at Qantara, but Southern Command ordered the tanks to withdraw without evacuating the fort's troops. Ironically, the Israeli tanks had to fight their way back to the rear while the garrison troops were left to their fate.[55]

Until midmorning of 7 October, Elazar kept instructing Gonen to evacuate only those outposts not in the proximity of major enemy thrusts—even though, by the late evening of 6 October, Egyptian soldiers had in fact surrounded virtually all the strongpoints. Only after some twenty hours into the war did Gonen finally order those troops able to evacuate their positions to do so.[56] But by then, it was too late for the men remaining at the strongpoints, and they would remain a thorn in Southern Command's side. The troops inside the strongpoints had become, in effect, hostages requiring rescue.

The Israeli delay in evacuating their strongpoints actually abetted the Egyptians in their strategic objective of inflicting as many casualties in men, weapons, and equipment as possible.



In the Memory of the Passing of 2 Years . . .

Fortifications along the Bar-Lev Line being assaulted by Egyptian infantry



The War of Atonement: October, 1973

Major General Hofi confers with Lieutenant General Bar-Lev at the Northern Command headquarters. Major General Mordechai Hod leans between the two men.



In the Memory of the Passing of 2 Years . . .

Some of the more than 200 Israeli prisoners who experienced
a relatively new phenomenon for Israeli soldiers—mass capture

Because the Israeli military's doctrine and ethos calls for Israelis not to abandon their fellow soldiers—whether alive or dead—many commanders and soldiers experienced great anxiety and desired to relieve or support the isolated troops—especially since desperate calls for help occasionally emanated from them. There was thus a tendency, as noted by Major General Avraham Adan, for tank units to react "instinctively—just as they had learned to do during the War of Attrition—by rushing to the strongpoints."[57] During the first several days of the war, the area around these fortifications served as killing grounds for Egyptian troops, who aggressively ambushed Israeli counterattacks. The majority of the high losses experienced by the IDF during the first two days of the war can be attributed, in large measure, to the Israelis' stubborn determination to relieve their troops at the strongpoints.

To enhance their troops' chances for successful crossings, Egyptian planners included two types of special operations designed to strike into the operational depth of the IDF. The purpose of both was to delay the arrival of Israeli reservists and to increase the effects of shock and confusion in the Israeli rear. The first special mission involved an amphibious operation across the Bitter Lakes, conducted by the 130th Amphibious Mechanized Brigade under the command of Colonel Mahmud Sha'ib. This marine brigade was composed of 1,000 men organized into two mechanized battalions, one antitank Sagger battalion, one antiair battalion, and a 120-mm mortar battalion. Each mechanized battalion contained ten PT-76 light tanks and forty amphibious armored personnel carriers. The brigade crossed the Bitter Lakes on 6 October in a half hour, a feat accomplished without casualties. Each reinforced battalion then made a dash for the Mitla or Giddi Passes to capture the western entrances to the Sinai and prevent the arrival of Israeli reserves heading toward the canal. The battalion heading toward Mitla Pass ran into M-60 Patton tanks, and its PT-76 light tanks proved no match for the heavier American-made armor. The

battalion sustained heavy losses and retreated in great haste. Egyptian sources claim the second battalion passed through Giddi Pass to disrupt communications east of the passes. Remnants of the 130th Brigade managed to retreat westward to Kibrit East, where the commander established a bridgehead.[58] Overall, however, these Egyptian special operations proved largely unsuccessful.

The second type of Egyptian special operation employed airborne commandos, or *sa'iqa* (lightning) forces, to conduct "suicide attacks" in the operational depth of the Sinai. These elite forces were to establish ambushes along the major roads and in the passes for the purpose of delaying the arrival of Israeli reserves; they were also intended to add to the shock and confusion experienced by the IDF. For their transportation, the Egyptian commandos relied mainly on a fleet of Soviet-made Mi-8 medium-transport helicopters, each capable of ferrying approximately twenty-five soldiers. These craft were very vulnerable to combat planes, but General Command was determined to risk its elite forces. At 1730 on 6 October (at dusk), thirty helicopters departed on their assigned missions. The Egyptians repeated these dangerous operations over the next couple of days.

The report card on these air assault special operations remains controversial. Israeli sources have tended to downplay their significance, whereas the Egyptians have attributed great importance to them. In a number of cases, the Israeli Air Force discovered the helicopters and shot them down easily; other instances saw the accomplishment of missions—but at a generally very high cost in lives. One Israeli source estimates that seventy-two Egyptian sorties composed of 1,700 commandos were attempted, with the Israeli Air Force shooting down twenty Egyptian



When God Judged and Men Died

Egyptian commandos who were dropped behind Israeli lines in the Sinai

helicopters and claiming to have killed, wounded, or captured 1,100 commandos.[59] Whatever the exact figures of missions and casualties, the commandos achieved some damage to the Israeli rear. One commando force, for example, captured the Ras Sudar Pass south of Port Tawfiq and held it until 22 October. In perhaps the most famous case, Major Hamdi Shalabi, commander of the 183d *Sa'iqa* Battalion, landed a company along the northern route between Romani and Baluza and established a blocking position at 0600 on 7 October. About two hours later, this small force stopped the advance of a reserve armored brigade under the command of Colonel Natke Nir. In the ensuing battle, the Egyptian commandos killed some thirty Israeli soldiers and destroyed a dozen tanks, half a dozen half-tracks, and four transports, at a loss of seventy-five men killed ("martyrs,"or *shahid*, in Egyptian parlance).[60]

In Nir's case, the Egyptian ambush delayed reservists rushing to the battlefield; it also sent a new message to Israeli war veterans. Adan, Nir's division commander, noted the significance of this commando interdiction: "Natke's experience fighting against the stubborn Egyptian commandos who tried to cut off the road around Romani showed again that this was no longer the same Egyptian army we had crushed in four days in 1967. We were now dealing with a well-trained enemy, fighting with skill and dedication."[61] The presence of Egyptian commandos in the rear caused anxiety among senior Israeli commanders, who subsequently allotted forces for special security. Southern Command even assigned its elite reconnaissance companies to hunt down *sa'iqa* troops and protect command centers. Moreover, installations in the rear were placed on high alert, which diverted combat forces from the front lines to be used for guard duties.[62] While at present it is difficult to reach a definitive conclusion, the Egyptian airborne commando assaults appear to have presented more than a minor nuisance. These special operations slowed the Israelis and caused confusion, anxiety, and surprise in the Israeli rear, although at a high cost in lives of highly trained and motivated Egyptian troops.

The Egyptians could claim a major victory by the evening of the first day, 6 October, for nightfall brought them the cover necessary for the transfer of their tanks, field artillery pieces, armored vehicles, and other heavy equipment to the east bank. Egyptian planners had conducted detailed planning and countless training exercises to ensure the rapid transportation to the east bank of five infantry divisions, each reinforced with an armored brigade. To get across as fast as possible, each piece of equipment, each bridge, each unit, and each headquarters had a fixed time of arrival and destination. To facilitate efficient movement, the Corps of Engineers had constructed an elaborate road system—some 2,000 kilometers of roads and tracks—to move troops rapidly and efficiently to the Suez Canal with maximum protection and minimum congestion. Extensive field exercises and rehearsals removed glitches and improved final execution. Military police, in cooperation with engineers, worked to keep the system working according to set timetables whenever possible.

Much of the crossing operation's success hinged on the ability of the Egyptian Corps of Engineers to construct and maintain bridges across the canal. At first, the Israeli Air Force targeted bridges as an efficient means of defeating the crossing. Israeli morale subsequently rose whenever word reached the high command of the destruction of a bridge. But after several days of fighting, Elazar realized the limited results of such missions: "We destroyed seven of their bridges, and everyone was happy. The next day the bridges were functional again. [The Israeli Air Force] destroyed every bridge twice . . . [The aircraft] drop a bomb weighing a ton, one of

the bridge's sections is destroyed, and after an hour another piece is brought in and the bridge continues to function."[63]

Egyptian engineers performed commendably in keeping the bridges and ferries operational. Although much credit must go to junior officers and soldiers, many senior Egyptian commanders performed with exemplary dedication and heroism. When the Third Army experienced delays in breaching the earthen embankments, for example, Major General Gamal Ali, the director of the engineer branch, visited the affected sector to help tackle the problem personally. For his part, Brigadier General Ahmad Hamdi, commander of the engineers in the Third Army, lost his life on October 7 while directing bridge construction. The 15,000 members of the Corps of Engineers played a major role in the success of the crossing operation.

Despite the surprising onset of the war, the Israeli senior political and military leadership remained confident of a victory in quick order. At 2200, the Israeli cabinet met to hear Elazar's report on military operations. Dayan, on his part, appeared to take a pessimistic evaluation of the military situation and recommended a pullback to a second line some twenty kilometers from the Suez Canal. Elazar, however, believed optimistically in an early victory and was averse to any withdrawals unless absolutely necessary.[64] Washington had reached a similar assessment and adopted a wait-and-see policy, confident in an early Israeli victory, one that stood only a few days or more away.[65] Although diplomatic moves would await Israeli success on the battlefield, Washington agreed to send some sophisticated equipment to Israel for the war effort.

THE SECOND DAY. Tel Aviv and Washington greatly underestimated the fighting capabilities of the Egyptian and Syrian Armies, especially the former, and more time would elapse before Israel's senior commanders grasped the extent of the Arabs' tactical successes on the battlefield. Even then, Israeli commanders generally expected a quick recovery and resolution of the conflict. Once again, their timetables proved dead wrong. More surprises would occur in the latter part of the war, as the Egyptians and Syrians continued to demonstrate unexpected combat mettle in the face of the clearly superior Israeli military machine.

Dawn on 7 October found the Israelis facing some 50,000 Egyptian troops and 400 tanks on the east bank of the Suez Canal. On the average, each Egyptian infantry division's bridgehead was six to eight kilometers in frontage and three to four kilometers in depth. And the Egyptians had achieved this amazing feat with minimal casualties: only 280 men killed and the loss of fifteen planes and twenty tanks.[66] Moreover, by this success, the Egyptian Armed Forces were now entrenched in defensive positions ready to inflict more losses in men, arms, and equipment on the Israelis.

To dislodge the Egyptians from their bridgeheads would require the Israelis to mount frontal attacks on hastily prepared defensive positions without the aid of adequate air support. The Egyptian air defense system had for the most part neutralized the Israeli Air Force over the battlefield, forcing Elazar to commit the bulk of his air assets to stabilize the more threatening Golan front. Without air support and lacking in sufficient artillery and infantry, Israeli tankers in the Sinai found themselves vulnerable. Israeli doctrine had become too armor heavy, few Israeli artillery pieces were self-propelled, and their mechanized infantry formed a weak link in their maneuver operations. While the Egyptian troops established ambushes and killing zones to handle Israeli counterattacks, the IDF's tank forces resorted to cavalry attack tactics that

culminated in serious losses. The full impact of the Egyptian and Syrian tactical achievements began to surface slowly on the second day of the war.

By the end of the morning of 7 October, General Mandler reported that his armored division numbered some 100 tanks—down from 291 at the commencement of the war. Especially hard hit was Shomron's Armored Brigade in the south, whose tank count fell from 100 to 23.[67] In light of such heavy losses, Gonen decided at noon to form a defensive line along Lateral Road, thirty kilometers east of the canal, and ordered his division commanders to deploy their forces accordingly. Small mobile units were to patrol along Artillery Road, ten kilometers from the canal, with the mission to report and delay any Egyptian advances. Concurrent with this decision, Southern Command ordered the evacuation of all strongpoints, an order issued too late, for all were surrounded by Egyptian troops.[68]

Then at 1600, Elazar learned to his great dismay that the Israeli Air Force had lost thirty planes in the first twenty-seven hours of the war—a staggering figure given that the IDF was still on the defensive while engaged in fierce fighting on both fronts.[69] Rather than concentrate on destroying the Egyptian and Syrian air defense systems, the Israeli Air Force suddenly found itself forced to provide ground support. On the Golan Heights, the situation had become especially desperate. Syrian forces had virtually wiped out the Barak Armored Brigade (down from ninety to fifteen tanks) in the southern half of the Golan, leaving the road to the escarpment open for a rapid Syrian dash. Fortunately for Israel, the Syrian high command procrastinated in exploiting this golden opportunity, thereby allowing the Israelis time to bring up enough tanks for spoiling counterattacks. On 8 October, the IDF began slowly pushing Syrian forces back to the prewar Purple Line. Top priority for Israeli air assets naturally went to the Golan front.

The initial Israeli setbacks on the northern and southern fronts took a heavy toll on Israeli soldiers. Sharon later recalled his observations of the troops pulling back from the Suez Canal on 7 October: "I . . . saw something strange on their faces—not fear but bewilderment. Suddenly something was happening to them that had never happened before. These were soldiers who had been brought up on victories—not easy victories maybe, but nevertheless victories. Now they were in a state of shock. How could it be that these Egyptians were crossing the canal right in our faces? How was it that *they* were moving forward and *we* were defeated?"[70] The lethality and intense fighting of the 1973 war would bring a new type of casualty to the IDF—one resulting from combat stress.

Back at the Pit, the command center for the IDF (located in Tel Aviv), the tensions and stress ran high. Especially hard hit among the senior officials was Dayan, the defense minister since June 1967. His confidence seemed shattered on 7 October after a morning visit to the Sinai front. In a meeting at 1430 at General Headquarters in Tel Aviv, Dayan offered a dismal report, making doomsday references to the "fall of the Third Commonwealth" and the Day of Judgment. The temporary spectacle of witnessing the symbol of Israeli military prowess caving in to the pressures of war proved quite unsettling for the politicians and senior officers present. "Even first-hand accounts can scarcely convey the emotional upheaval that gripped them as they witnessed the collapse of an entire world view and with it the image of a leader who had embodied it with such charismatic power."[71] Cooler heads, however, prevailed and brought a modicum of calm to an otherwise very tense situation.

Despite a steady flow of bad news, some reports appeared upbeat. By noontime, both Adan and Sharon had arrived with forward elements of their two reserve armored divisions. Gonen promptly divided the front into three divisional commands: Adan with the 162d Armored Division in the northern sector, Sharon with the 143d Armored Division in the central sector, and Mandler with the 252d Armored Division in the southern sector. With this redeployment, the IDF had theoretically begun a transition from Dovecoat to Rock (its new operational plan)—although events on the battlefield had by now made both defensive plans obsolete.



An exhausted Israeli soldier after the intensive fighting

Mid-East Wars: The Yom Kippur War

That afternoon, Elazar received encouragement from Peled, his air chief. The air force had knocked out seven bridges and expected to finish off the remainder by nightfall. In actuality, several of the destroyed or damaged bridges were dummies. The Egyptians, meanwhile, were able to repair the real bridges in quick order. Unaware of this fact but buoyed by the positive reports, Elazar decided to visit Southern Command in person to meet with the theater and division commanders to formulate a plan for the next day.[72] Taking with him his aide, Colonel Avner Shalev, and the former chief of the General Staff, Yitzak Rabin (of 1967 fame), Elazar arrived at Gonen's forward command post at Gebel Umm Hashiba at 1845. The three men joined Gonen, Adan, and Mandler; Sharon missed the conference entirely, arriving after it had just broken off.

Gonen began the meeting by presenting a review of the war, followed by a summary of the current tactical situation.[73] By the next day, Southern Command expected to have 640 tanks, with 530 of them dispersed among three divisions: Adan with 200, Sharon with 180, and Mandler with 150. Intelligence estimates placed the number of Egyptian tanks on the east bank at 400 (when in fact 800 was closer to the mark). In light of the Israelis' low estimate, Gonen recommended a frontal, two-division attack conducted at night against the Egyptian bridgeheads, with Adan crossing to the west bank at Qantara and Sharon doing likewise at Suez City. Adan, who lacked sufficient infantry and artillery, urged a more cautious approach, that of waiting until all the reserves arrived at the front before embarking on a major operation.

Elazar also opted for a cautious course. His plan, however, deviated from an Israeli strategic principle that called for an offensive on one front while assuming a defensive posture on other



The War of Atonement: October, 1973

Major General Albert Mandler (standing) briefs the chief of staff on Sunday, 7 October. Seated left to right are Gonen, Elazar, Adan, Ben Ari, and Rabin.

fronts. The Golan clearly was the more critical front at the time and thus required a major counterattack. But rather than adopt a defensive posture in the Sinai, Elazar instead decided on a limited counterattack for the next morning. Adan would attack with the 162d Armored Division southward from the Qantara area, staying at least three to five kilometers east of the canal to avoid the heavy concentration of Egyptian antitank weaponry. Meanwhile, Sharon would remain at Tasa with the 143d Armored Division, acting as a reserve ready to move northward to assist Adan if needed. Should Adan succeed in his mission, Sharon would then head south and attempt to roll up the Egyptian Third Field Army's bridgehead by moving in a similar manner to that of Adan. Meanwhile, Mandler would remain on the defensive, reorganizing his badly battered division, now down to a few dozen tanks, essentially Dan Shomron's brigade and elite infantry units holding the Giddi and Mitla Passes. Elazar was clear and emphatic about two items: under no circumstances would either Adan or Sharon attempt a crossing to the west bank without his approval, and no attempt would be made to approach the strongpoints. The conference finally broke up at 2200.

As Elazar headed toward his helicopter, Sharon suddenly arrived, having missed the entire meeting. Rather than brief him personally, Elazar exchanged a few words with Sharon and then directed him to obtain his instructions from Gonen. Sharon, a maverick general noted for a predilection for bold action, disliked Elazar's cautious approach for the next day. Instead, Sharon recommended a concentrated two-division attack to destroy an Egyptian bridgehead, an idea that appealed to Gonen more than the plan developed by Elazar. Although eager to attempt a

countercrossing, Gonen had his orders, and all he could do was to offer general approval to Sharon's idea without endorsing it. A final decision would have to await developments on the battlefield.

THE FOILED ISRAELI COUNTERATTACK. The day of 8 October 1973 would prove one of the darkest days in the history of the IDF.[74] The day began with the Egyptians clearly possessing the initiative, but the Israelis were determined to stall the expected Egyptian attack to the passes with their own major countermove. A combination of Israeli mistakes and Egyptian resilience, however, would defeat the Israeli counterattack. At the end of the day, further shocks reached Israeli senior commanders, who now began to grasp the seriousness of their military situation in the Sinai.

After the conference at Gebel Umm Hashiba, Adan hurried back to his division, which was deployed along the Baluza-Tasa road. (See map 3.) The unit was comprised of Colonel Natke Nir's Armored Brigade with seventy-one tanks, Gabi Amir's Armored Brigade with only fifty M-60 tanks, and Aryeh Keren's Armored Brigade (still en route to the area) with sixty-two tanks, for a grand total of 183 tanks. A mechanized infantry brigade with forty-four Super Shermans was expected to join the operation by late morning.[75] For his attack north to south, Adan planned to lead with Gabi's and Nir's brigades and to keep Keren's as his reserve. For fire support, the



The War of Atonement: October, 1973

Generals Gonen (left), Elazar (middle), and Weizman being briefed

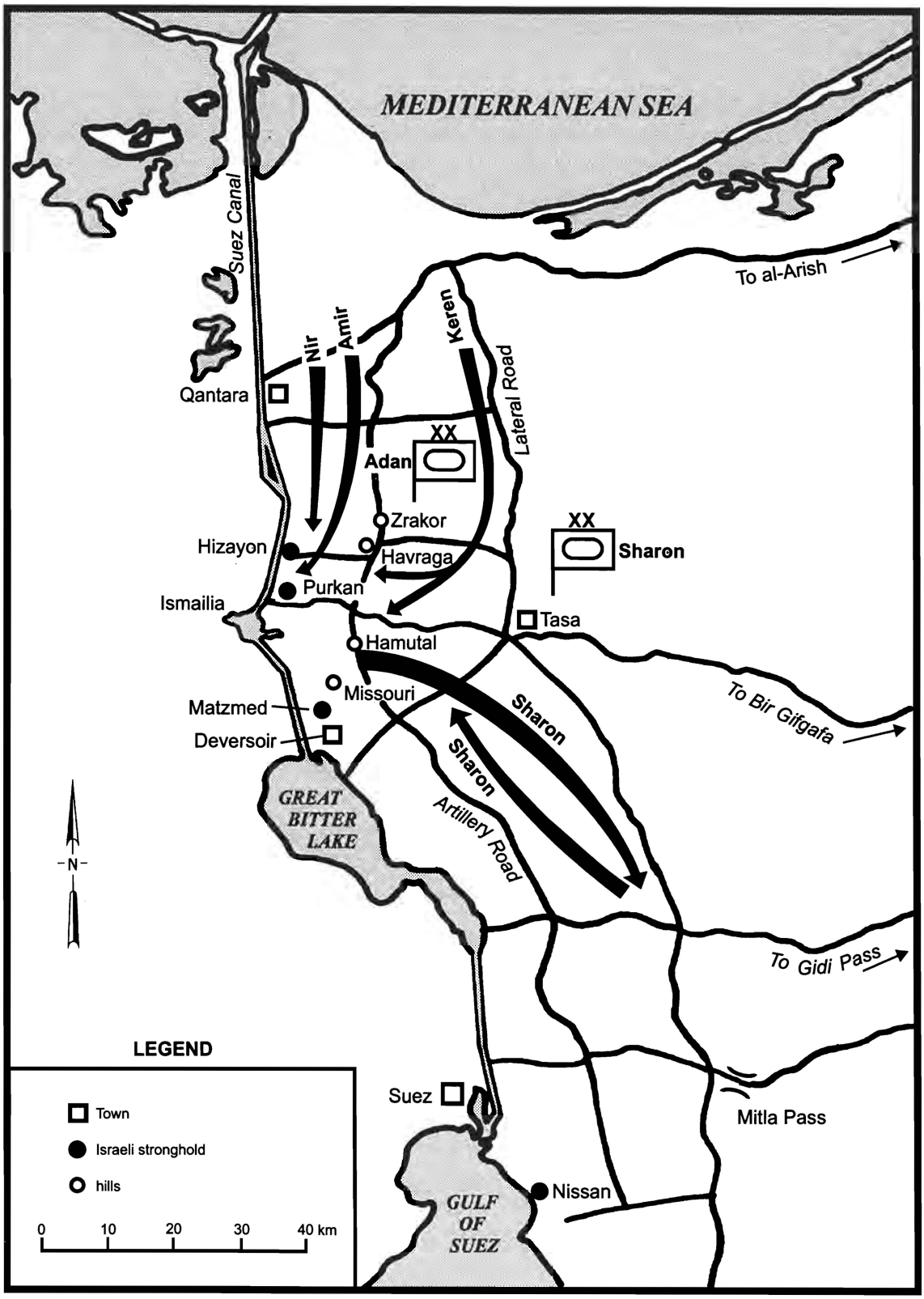
division possessed but a single battery of four self-propelled 155-mm artillery guns along Artillery Road, but Adan expected sufficient air support. This, however, failed to materialize. The Israeli Air Force had concentrated its main effort on the Golan to prevent a collapse of defenses on the strategic terrain that overlooked Israel proper; there, Israel could ill afford to give ground.

In war, battles never conform exactly to plans, even the best prepared ones, and the offensive of 8 October proved no exception. Israeli plans began to unravel even before the commencement of the operation. Shortly after midnight on 8 October, Gonen suddenly changed plans for no apparent reason, which sowed confusion for the remainder of the day. Instead of focusing on clearing the area between Lexicon and Artillery Roads, Gonen wanted Adan to approach the strongpoints at Firdan and Ismailia and prepare for the possibility of crossing to the west bank at Matzmed in the Deversoir area at the northern tip of the Great Bitter Lakes.[76] Apparently, optimistic reports from the field, coupled with wishful thinking in the rear, spawned the expectation of an imminent Egyptian collapse.

But the change in plans, formulated without precise tactical intelligence, smacked of bravado. At the same time, the Israelis appeared to let their doctrine blindly dictate their tactical and operational objectives. As noted by Adan, "Today it is easy enough to see that we were prisoners of our own doctrine: the idea that we had to attack as fast as possible and transfer the fighting to enemy territory."[77] The ghost of the Six Day War beckoned a quick resolution to the armed conflict.

Despite Gonen's new order, Adan still planned to avoid the heavy concentration of Egyptian antitank weaponry by keeping his brigades at least three kilometers from the canal. His scheme of maneuver north to south envisaged the following. Amir and Nir would move between Lexicon and Artillery Roads, with Amir on the western avenue and Nir on his left. Keren would move his brigade east of Artillery Road. Each brigade would reach positions designed to link up with the strongpoints of the Bar-Lev Line: Gabi opposite the Hizayon strongpoint at Firdan and the Purkan strongpoint at Ismailia; Nir opposite Purkan; and Keren facing Matzmed or Deversoir at the northern tip of the Bitter Lakes. At this juncture of the operation, the brigade commanders would await orders from Adan as to the feasibility of attempting a crossing operation to the west bank, a decision Elazar had reserved for himself.

A second major change in plans occurred at 0753 or just before the attack. In the Qantara sector, Israeli forces suddenly found themselves engaged in a heavy firefight with the right side of the Egyptian 18th Infantry Division. Brigadier General Fuad 'Aziz Ghali, the division commander, released two companies of T-62 tanks from the 15th Armored Brigade to support his southern brigade.[78] This unexpected Egyptian assault eastward threatened to outflank Israeli forces in the area. To help contain the Egyptians, Gonen wanted Nir's brigade to stay behind at Qantara under the command of Brigadier General Kalman Magen. This decision left Adan with only Amir's two battalions of twenty-five tanks each—a far cry from the divisional attack expected by Elazar after the previous night's conference. Rather than delay or abort the counterattack, Adan opted to follow Gonen's order, and at 0806, Amir began moving south, even though Keren's brigade was still en route to the area. Adan ordered Amir to be prepared "to link up with the Hizayon and Purkan strongpoints, but to do so only upon a specific order." Keren



Map 3. The southern front, 8 October 1973

would conduct offensive operations against the 16th Infantry Division's bridgehead toward Matzmed.[79]

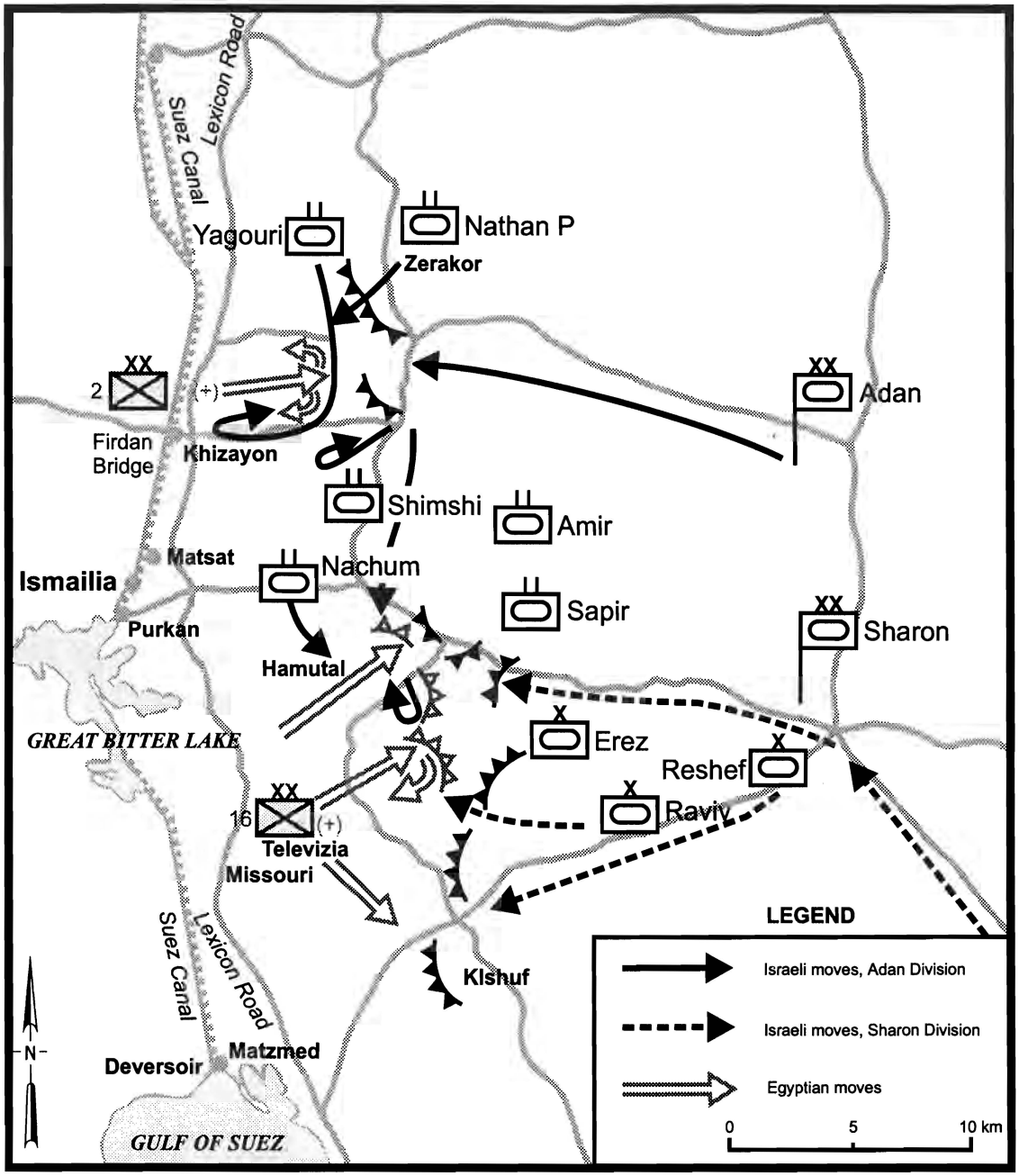
The move south quickly ran amiss. Instead of moving three kilometers from the canal just east of Lexicon, Amir advanced along Artillery Road, completely missing the Egyptian bridgeheads. For his part, Keren moved through Sharon's sector to get into position. As a result of his error in navigation, Amir would eventually have to attack east to west instead of north to south. The frontal, instead of flank, assaults would play directly into the strong Egyptian defenses and cause heavy Israeli casualties, aiding Sadat's war strategy of bleeding the IDF.

Around 0900, advance elements of Amir's brigade reached the plain between Artillery Road and the Firdan bridge without encountering any significant Egyptian opposition. (See map 4.) Awaiting Amir, however, was the Egyptian 2d Infantry Division reinforced with the 24th Armored Brigade from the 23d Mechanized Infantry Division. Two Egyptian infantry brigades formed the first echelon, with a mechanized infantry brigade constituting the second echelon. The 24th Armored Brigade formed the divisional reserve, but Brigadier General Hasan Abu Sa'ada could commit the tank brigade only in the event of an Israeli penetration into the divisional bridgehead.[80]

In the face of a reinforced Egyptian infantry division, Amir's two-battalion force lacked light reconnaissance units, 81-mm self-propelled mortars, and armored infantry. Without air cover and artillery, Amir had to rely on tanks alone to attack defended positions. A malfunction in his direct communications with Adan further complicated matters. Despite all of these problems, Gonen was confident of certain victory. After all, Adan's division had managed to advance virtually unimpeded from north to south. Consequently, Gonen wanted Adan to link up with the strongpoint at Hizayon for the purpose of crossing to the west bank and telephoned to Tel Aviv for permission to do so. At 1005, Southern Command even reported the imminent collapse of the Egyptian Army.

At 0955, choosing to ignore or downplay negative reports reaching him, Gonen reported only positive developments on the battlefield to General Headquarters and requested permission to cross to the west bank. His request found Elazar attending an important meeting of Meir's war cabinet. Rather than excuse himself from the session, the chief of the General Staff preferred to deal with Gonen through his assistant at the Pit. As a result of this peculiar arrangement, some miscommunication occurred during the transmissions between Gonen, the Pit, and Elazar. With each interruption at Meir's cabinet meeting—there were at least five over the span of an hour—Elazar found himself gradually accepting the optimistic reports from Southern Command and approving a countercrossing and release of Sharon to head south—all without ever having talked directly with Gonen![81] After the war, many would criticize Elazar for operating in such an unorthodox manner.

At 1040, Southern Command ordered Adan to cross to the west bank and gave Sharon the green light to head south toward Suez City. Short of forces, both Adan and Amir appealed to Gonen, asking for Sharon to detach an armored battalion to protect the 162d Armored Division's southern flank. Gonen consented to the request, but Sharon refused to comply—a refusal that would later result in the loss of several critical positions to the Egyptians.[82]



Map 4. The Israeli counterattack at the Firdan bridge, afternoon, 8 October 1973

While unnecessary haggling took place between two division commanders, a new and unexpected problem beset Amir. Lieutenant Colonel Haim Adini was ready to attack with his battalion, but Lieutenant Colonel Amir Joffe's battalion had to disengage in order to replenish its fuel and ammunition supply. Now, only a tank battalion of some twenty-five tanks would carry out the entire division's attack! At 1100, Adini attacked with two companies in line and a third in reserve. His assault ran into the right side of the Egyptian 2d Infantry Division. At first, success shined upon the Israelis, who broke through the first Egyptians and penetrated to within



Israeli Tank Battles

Israeli M-48 tank racing to counterattack Egyptian armor concentrations near the canal

800 meters of the canal. But then, a torrential downpour of antitank, tank, and artillery fire descended upon Adini's meager force, destroying eighteen of his twenty-five tanks within minutes and wounding Adini along with two company and two platoon commanders. The battalion suffered twenty killed, including two platoon commanders. Making the situation worse, Adan lost communications with Gabi Amir and was therefore initially unaware of the fate of the attack.[83]

Despite this first setback, the Israelis had the opportunity to regroup to conduct a coordinated three-brigade assault toward Firdan bridge, but this attack proved no more successful than the previous one.[84] Nir had disengaged at Qantara and, having left one battalion behind, arrived at 1230 in the area of the Firdan bridge with two tank battalions. Nir and Amir held a brief conference to discuss plans for attacking toward the bridge. Meanwhile, Keren moved into the area as well, and Adan ordered him to support Amir and Nir by attacking in the direction of Purkan.

Once again, the situation began unraveling for the Israelis. Gonen, confident of an Egyptian collapse, had already ordered Sharon to vacate the area around Tasa for a move to Suez City. In its tracks, the 143d Armored Division left only a reconnaissance company to hold the critical ridges of Hamadia and Kishuf, but not the hills north of them, such as Hamutal. Sharon's departure suddenly exposed Adan's southern flank at a time when the battle with the Egyptians

was going badly. Keren's Armored Brigade, by default, gained responsibility for Adan's left side. After the war, Adan and Sharon exchanged several verbal salvos over this turn of events.

Meanwhile, the anticipated attack by Nir and Amir faced enormous difficulties. Nir possessed some fifty tanks in two battalions, one under Lieutenant Colonel Asaf Yaguri and the other under Lieutenant Colonel Natan. Gabi Amir, for his part, was in dire need of additional forces to assault entrenched positions. He had virtually lost Adini's entire battalion and had released Natan to replenish this battalion. Suddenly and fortuitously, Lieutenant Colonel Eliashiv Shemshi appeared with his armored (reserve) battalion with twenty-five tanks, two half-tracks, and two jeeps. Shemshi had just arrived on the battlefront in an attempt to join up with Keren's Armored Brigade. Desperate for more armor, Amir quickly received Adan's permission to commandeer Shemshi's battalion to use in coordination with an assault on Firdan bridge. Amir then ordered Shemshi to provide covering fire for Nir's assault on Firdan bridge.

Such "theft" of units and equipment happened frequently during the war, as field commanders responded to immediate threats and urgent orders in the midst of the fog and friction of war. The confusion often left tactical commanders without a clear picture of the battlefield and their particular part in it, and the myriad kinks in execution accentuated each commander's immediate concerns and threats. The fact that the initiative lay squarely in Egyptian hands compounded the confusion and uncertainty and forced Israeli commanders to be more reactive than proactive. As a result, Israeli battalion, brigade, and division commanders experienced difficulty in coordinating their units to counterattack toward what were not always clearly defined and attainable objectives.

Though affected by the stress and chaos of the battlefield, the Israelis, nonetheless, pressed a second attack toward Firdan bridge at 1330. As the first attempt of that morning, this combined attack again lacked proper coordination in the face of overwhelming enemy forces. Natan and Yaguri began to move their battalions at the same time, the former on the right, the latter on the left. Suddenly, heavy Egyptian fire stopped Natan's tank battalion, leaving only Yaguri to proceed with twenty-five tanks. Shemshi, who had no idea of Yaguri's identity, assumed that the battalion belonged to Amir when in fact it formed part of Nir's brigade. The assault thus involved two battalions, from two different brigades, which had no direct communication between their two tactical headquarters. Yaguri charged in line, cavalry style, leaving Shemshi to watch helplessly as fellow Israeli tankers charged into the jaws of disaster.

The second assault on Firdan failed miserably. Warned in advance by intelligence, Brigadier General Abu Sa'ada, the commander of the Egyptian 2d Infantry Division, had prepared his forces for the expected attack. Yaguri now stumbled into a killing zone (*ard qatl*) between the two forward brigades and straight into the Egyptian mechanized infantry brigade. Within minutes, an avalanche of Egyptian fire destroyed eighteen tanks and killed thirty-two Israelis. Yaguri and three other soldiers were captured. By the end of the day, Nir reported fifty-four men missing in action. Among the Egyptians killed were Colonel Fatin Diyab and Lieutenant Colonel Ibrahim Zeydan, the latter a battalion commander. That evening, the Egyptian military displayed its prize captive, Lieutenant Colonel Asaf Yaguri, on national television to bolster public morale. (A military spokesman in Cairo wrongly identified Yaguri as a brigade commander.) The next day, Egyptian newspapers carried exclusive stories and pictures of Israeli prisoners of war.

Unknown to the Israelis, Operation Badr called for the expansion of the bridgeheads on 8 October to a depth of ten to twelve kilometers, with each field army forming one continuous bridgehead in its sector. To accomplish this mission required a redeployment of forces. In the crossing operation, each Egyptian infantry division placed two infantry brigades forward with the mechanized infantry brigade in the second echelon. Behind these three brigades stood the attached armored brigade. For the widening of the bridgeheads, Operation Badr required the mechanized infantry brigade to push forward between the two infantry brigades, thereby creating a three brigade front, with the attached armor brigade now forming the division's second echelon, or tactical reserve.[85]

Suddenly, during the afternoon of the 8th, the Israelis facing the Egyptian Second and Third Armies found themselves under an artillery barrage and air strikes followed by advancing Egyptian troops determined to expand their bridgeheads. Progress was uneven among the five Egyptian infantry divisions, not all reaching the ten or twelve kilometers necessary to gain control of Artillery Road. In the Second Army sector, however, the 16th Infantry Division proved most successful by occupying the important positions of Missouri, Televizia, Machshir, and Hamutal, the latter overlooking the juncture of Ismailia and Artillery Roads. These four positions would later prove a thorn in the Israeli countercrossing operation to the west bank. In the process, one Egyptian infantry brigade commander, Brigadier General 'Adil Yusri, lost his leg while manning the forward command post.[86]

The Israelis, meanwhile, fought back to regain some of the lost ground.[87] Keren organized his brigade for an assault on Hamutal hill. While Nahum's battalion provided covering fire, Amir's battalion with twelve tanks and Lieutenant Colonel Dan Sapir with fifteen tanks attacked in a southeasterly direction. Approximately one thousand meters from Hamutal, Egyptian fire killed Sapir, disrupting his battalion's assault. Amir's battalion continued to fight until twilight, but stiff Egyptian resistance forced a pullback of his five remaining tanks.

Just at that moment, an armored brigade under the command of Colonel Haim Erez from Sharon's division returned to the area. By midafternoon, Gonen had realized the gravity of Adan's predicament and, at 1445, ordered Sharon to return to the area he had just vacated. Erez' Armored Brigade arrived in enough time to offer some assistance to Keren, but both brigade commanders failed to coordinate their actions amid all the battlefield confusion. Erez committed a battalion to help Keren, but the battalion commander opted to avoid a major assault with the approach of nightfall and instead committed a tank company in an attempt to retake Hamutal. The company lost three of its eight tanks and failed in its mission.

By the end of the day, growing doubt began to set in among senior Israeli commanders as to Gonen's ability to command the Sinai front. He had pushed Adan to attempt a crossing to the west bank after enticing Elazar to grant his consent. In the end, the Israelis had little to show for their effort on 8 October. Adan's division had suffered heavy losses. Each brigade had lost one battalion, virtually wiped out in frontal assaults against fortified Egyptian positions: Adini's battalion in Amir's brigade; Yaguri's battalion in Nir's brigade; and Joffe's battalion, later transferred to Keren's brigade. Three battalion commanders had been lost too: Dan Sapir killed in action, Haim Adini seriously wounded, and Asaf Yaguri a prisoner of war. Adan, at times, had lost control of his forces and been unable to observe or communicate with them. In terms of combat power, the 162d Armored Division, with the number of its operational tanks dropping



The Heroism of the Egyptian Soldier

Egyptians employing a Soviet-made T-54 in the Sinai



When God Judged and Men Died

Egyptian soldiers using bomb craters as shelters in the Sinai



Knocked-out Israeli tanks near the Lexicon-Tirtur junction

from 183 to approximately 100, now was tantamount to a single brigade. As Adan noted later, "there had been moments when I was no longer sure I had a division."[88] Fog and friction had seemingly dominated the battlefield, abetted by a solid Egyptian performance. Gonen, on his part, had prematurely pulled Sharon for a dash to Suez City only to order him back too late. Had Sharon remained in support of Adan in the Tasa area, the Egyptian 16th Infantry Division might have failed to seize its objectives. Furthermore, Adan might have had some success in his attacks on Egyptian positions.

The bad news for the Israelis did not end there. At 2000, or fifty-four hours into the war, the Israeli Air Force reported losses of forty-four planes, a rate that would bring the air force to the dangerous "red line" in just a few days.[89] Even the Northern Front filed a sobering update: although the Israelis had stopped the Syrian advance and had begun pushing back the attackers in a few places, the Syrians were expected to commit fresh armor the next day. Unfortunately for his reputation, Elazar held his first news conference at 1800 before he had become fully aware of the actual situation on both fronts. Before the media, he bragged how the IDF would soon "break their [the Arabs'] bones," already claiming to have "begun the destruction of the Egyptian Army."[90] These overconfident words would come to haunt him after the war as evidence of unmitigated arrogance.

A number of Israeli historians and analysts have considered the eighth of October the worst day in the short history of the IDF. Numerous mistakes in planning and execution had caused heavy losses in men and equipment, and there had been no tactical or operational gains—a new experience for the Israeli military. On that fateful day, the standard set by the Six Day War and the doctrine of taking the fight to the enemy's territory as soon as possible compelled Israeli commanders to attempt to defeat the Egyptian Army in quick order. Combined with an arrogant and patronizing attitude toward the Arabs, the Israelis had created a perfect recipe for disaster. As Adan described the situation:

> Every IDF commander was deeply imbued with the idea that we would have to cross at some point; this was an organic part of the IDF's doctrine of transferring the war to enemy territory and terminating it there quickly . . . Virtually no one on the Israeli side doubted that the war would be decided only after we had crossed to the west bank and destroyed the main enemy force. The

> crossing idea was like some siren song, beckoning the commanders on, teasing them to dare and reach for the prize.[91]

The IDF, driven in some measure by overweening pride, underestimated its thrice-defeated foe, and many officers assumed a quick and easy victory would ensue from their cavalry-like counterattacks. The subsequent rude awakening jarred the Israeli military, as evidenced by Gonen's terse comment at day's end: "It's not the Egyptian Army of 1967."[92]

For the Egyptians, the eighth of October, in sharp contrast to the Israeli experience, proved "the decisive day of the crossing operation."[93] The Egyptian Armed Forces had defeated a division-size Israeli counterattack, thereby ensuring the success of the first phase of Operation Badr. Euphoria spread throughout the Egyptian High Command. Despite clear tactical successes, however, not all had worked perfectly for the Egyptians. During the morning and afternoon of 8 October, Shazli, the chief of the General Staff, had personally visited the 2d and 7th Infantry Divisions on the east bank to gather a firsthand assessment of the tactical situation and to congratulate the troops on their accomplishments. Two concerns surfaced that day. First, Israeli air strikes had damaged so many bridge sections that the Egyptians had lost the equivalent of three heavy bridges of the original twelve. These losses left only four heavy bridges in reserve and one operating for each division, raising some concern for supply in the weeks ahead, should losses continue at the same rate.[94] Second, in a few sectors, the infantry divisions had failed to reach their tactical objectives, falling short by several kilometers. As a result of these failures, both field army commanders, Major General Sa'ad Ma'mun for Second Army and Major General 'Abd al-Mun'im Wassel for Third Army, pressed for the implementation of an operational pause to consolidate their bridgeheads and to reorganize their forces before contemplating an offensive to the passes.[95]

Shazili's counterpart in Israel also journeyed to the front. To gain a firsthand appreciation of the extent of reverses in the Sinai, Elazar visited Southern Command. Just after midnight on 9 October, he and Dayan met with senior field commanders at Gebel Umm Hashiba to assess the military situation. Now, a modicum of realism and reassessment descended upon the military leadership, brought about by the harsh realities of the battlefield. Elazar wanted to suspend offensive operations in the Sinai for at least twenty-four hours while the IDF focused their effort on finishing off the Syrians. With only 400 tanks left in the Sinai, Israel could ill afford to wage major offensives on two fronts simultaneously, and the chief of the General Staff instructed his subordinates to avoid any battles of attrition. Reorganization and conservation were the top priorities; the countercrossing to the west bank would take place at a later date.[96] Now, a heightened concern for casualties began to emerge within the Israeli senior command.

TURNING THE TIDE. Meanwhile, the magnitude of success achieved by the Egyptian Armed Forces during the first three days of the war had pleasantly surprised senior officials in Egypt, and confidence soared among the political and military elite. Pressures from various sources mounted on Sadat to exploit the favorable tactical situation by moving immediately to the Sinai passes. More concerned about political ends than military means, Sadat remained unyielding and refused to countenance a quick expansion of the war.

At 0130 on 9 October, Heikal broached the subject of the passes with Sadat, who dismissed the notion out of hand: "As I told Hafez Asad, territory isn't important; what is important is to exhaust the enemy. I don't want to make the mistake of pushing too fast just for the sake of

occupying more territory. We must make the enemy bleed." Nonetheless, Sadat gave Heikal permission to call Ahmad Ismail. At 0300, Heikal telephoned Center Ten and spoke with Shazli, who declined to wake the war minister from his sleep and politely stated his own opposition to the idea. Finally, at 0715 that same morning, Heikal talked with Ahmad Ismail, who unequivocally supported Shazli's position.[97]

The issue failed to die there, however. Later that morning, on 9 October, the fourth day of the war, a group of senior officers also approached Ahmad Ismail, advocating an immediate offensive to the passes without an operational pause. These officers believed that stopping military operations would result in the transfer of the initiative to the Israelis, who could then attack at their leisure. Dismissing their arguments, the cautious war minister underscored his desire to continue inflicting heavy damage on the Israelis. Fighting on the defense, he felt, best achieved that objective. Going to the passes was thus out of the question—for the time being.[98]

The most important voice in the debate among senior Egyptian commanders was that of Anwar Sadat, and on 8 October, a day earlier than the above meeting, Ahmad Ismail had already received marching orders from the president—implement an operational pause.[99] Sadat wanted time to conduct secret diplomacy with the United States and also sought to inflict heavy casualties on the Israelis, making the war a costly one for them. In this, Sadat remained constant.

Even the Soviets encountered a stubborn Sadat on the issue of a wider war. Colonel General Mahmut Gareev, a former senior Russian military adviser in Egypt, noted how Sadat had consistently told Soviet advisers that he wanted to gain land east of Suez, even as little as "ten centimeters," in order to draw world attention to the Arab-Israeli problem. Vladimir Vinogradov, the Soviet ambassador in Cairo from 1970 to 1974, recalled that when in the middle of the war he raised the issue of more Russian military support for Syria, Sadat curtly responded: "Let it [Syria] go on the defensive and wage guerrilla warfare. Our main goal is to knock out as many enemy force[s] as possible."[100] As Sadat had outlined in his strategic directive of 5 October, inflicting heavy casualties on the Israelis constituted a key military objective of the war, and the Egyptian leader remained firmly wedded to that goal. Still, despite his political goals, Sadat would learn that he could not ignore the dynamic of the battlefield in the Sinai and on the Golan.

The ninth of October, nonetheless, still fit nicely into Sadat's war strategy of inflicting maximum casualties. All along the front, the Egyptians conducted probing attacks to expand their bridgeheads, and Israeli commanders often responded with costly counterattacks. In Sharon's sector, for example, the 16th Infantry Division attempted on 9 October to seize some important ridges; in consequence, Brigadier General Shafik Mirti Sedrak, commander of the 3d Mechanized Infantry Brigade, lost his life while attacking with his right battalion. Sharon, who opposed Elazar's decision to move onto the defensive and reconstitute, decided to retaliate and ordered a number of counterattacks throughout the day in clear violation of Elazar's intent to avoid battles of attrition. In response to Sharon's moves, Mu'nim, the commander of the Egyptian Second Army, released a tank battalion from the 14th Armored Brigade to help Brigadier General 'Abd Rab al-Nabi Hafiz, the commander of the 16th Infantry Division, thwart penetrations. Meanwhile, Colonels Amnon Reshef's Armored Brigade and Tuvia Raviv's Armored Brigade led several attacks to gain control of positions at Hamutal, Televiza, and Machshir, but to no avail. Lieutenant Colonel Shaul Shalev, a battalion commander from Reshef's brigade, lost his life that day. By nightfall, Sharon had lost some fifty tanks, a number comparable to that of Adan's

losses the previous day, and without any gains, although Reshef did extricate the garrison from the Purkan strongpoint.[101]

Upon learning of Sharon's brash action, Elazar became livid. But rather than remove Sharon, a controversial but innovative commander with political connections to the opposition party, Elazar opted to replace Gonen. Though a hero in the Six Day War, Gonen lacked the character and temperament to be a theater commander. Furthermore, his two subordinates, Adan and Sharon, had once been his superiors, which further complicated matters. Gonen's worst flaw, however, was that he remained preoccupied with current tactical events. As Elazar remarked later: "I think about tomorrow . . . That's my job. Whoever's shooting now, neither the front commander nor I can help anymore. That's a divisional commander's problem. I'm constantly telling him: Shmulik [Gonen], let's talk about what will happen tomorrow."[102] Gonen had failed to transition from being a tactical to an operational commander.

Part of Gonen's problem was that the Egyptians maintained the initiative—something the Israelis found unfamiliar and unsettling. But Elazar could not avoid the critical issue of competent command, and he decided to replace Gonen with former chief of the General Staff, Haim Bar-Lev. Although beset with his own share of problems in controlling Sharon, Bar-Lev brought a firmer hand to the Sinai theater. To avoid the appearance of firing Gonen, Elazar retained the general as a deputy to the front commander when Bar-Lev assumed command on 10 October. The next major round in the struggle would come in less than four days.

By 10 October, both the Egyptians and the Israelis had settled into their own version of an operational pause. During this phase in the war, Egyptian forces conducted probing attacks designed to expand their bridgeheads to at least the Artillery Road, while the Israelis, for the most part, proceeded to foil these efforts. Elazar suspended offensive operations based on military necessity—the IDF could ill afford launching simultaneous offensives on two fronts, and the Israelis were not yet finished with the Syrians. Although Northern Command had pushed the Syrian Army off the Golan Heights by 10 October, the Israelis wished to finish off the Syrian Armed Forces before turning to the Sinai front. Consequently, on 10 October, the Israeli cabinet approved an offensive into Syria with the goal of moving within artillery range of Damascus by capturing Sasa. With this drive, the Israelis hoped to take Syria effectively out of the war by forcing Asad to accept a cease-fire. The attack began at 1100 on 11 October.

Despite the Egyptians' strong position, Sadat could not, for political reasons, ignore the military situation on the Golan. The Syrian inability to capture the Golan Heights and their forced retreat back into Syria had complicated matters for the Egyptian president. At the beginning of the war, Syria threatened Israel directly, forcing the IDF to focus their main effort on the northern front. By 9 October, however, the military situation was becoming desperate for the Syrian Armed Forces, and pleas for help from Damascus were becoming more pronounced, eventually compelling Sadat to make a tough decision.

On 11 October, a special emissary from Asad arrived in Cairo appealing to the Egyptians to launch a major attack toward the passes to relieve Israeli pressure on the Golan front. Sadat was pressed to respond positively. To abandon Syria would have undermined his credibility in the Arab world after the war, and Egypt relied heavily on financial assistance from oil-producing countries like Saudi Arabia and Kuwait. Sadat was therefore compelled, out of political and economic necessity, to demonstrate solidarity with the Arab cause against Israel.



Israeli Tank Battles

Israeli Centurion tank from Nir's Brigade moving on Egyptian commandos, 12 October

Whatever the exact set of motivations, Sadat decided to heed Asad's plea for help, a decision that significantly altered the course of the war in the Sinai. In the early hours of 12 October, Sadat ordered an offensive toward the passes for the next day with the purpose of deflecting Israeli attention from the Syrian front. No forces from the five infantry divisions would participate in the attack; their mission remained to consolidate their bridgeheads on the east bank. At 0630 on 13 October, the attack forces would come from the mechanized infantry and armored divisions. Ahmad Ismail directed his two field army commanders to commence an offensive employing armored and mechanized brigades (taken from the Egyptians' operational reserves).[103]

Sadat's order sparked serious opposition at Center Ten and at both field army headquarters. Shazli and both field army commanders led the argument against the attack, attempting to convince Ahmad Ismail that the time had passed for moving outside the air defense umbrella. But the war minister had no choice but to obey his supreme commander. Ahmad Ismail did agree to postpone the offensive twenty-four hours to 0630 on 14 October, thereby hoping to obtain the additional time necessary to enhance the plan's chance of success.[104]

As anticipated by many senior Egyptian officers, the attack on the morning of 14 October proved an unmitigated disaster—a drive attempted too late and with insufficient forces (see map 5). Using four axes of advance, Egyptian forces composed of one mechanized infantry and four armored brigades attacked the Israelis over open terrain with the sun in their eyes. IDF forces waited in defensive positions, armed with an undisclosed number of recently arrived sophisticated antitank TOW (tube-launched, optically tracked, wire-guided) missiles from the United States. On 11 October, the IDF had established a special course for rapidly training instructors on the use of the TOWs.[105] This gave them ample time to train units for action by 14 October.

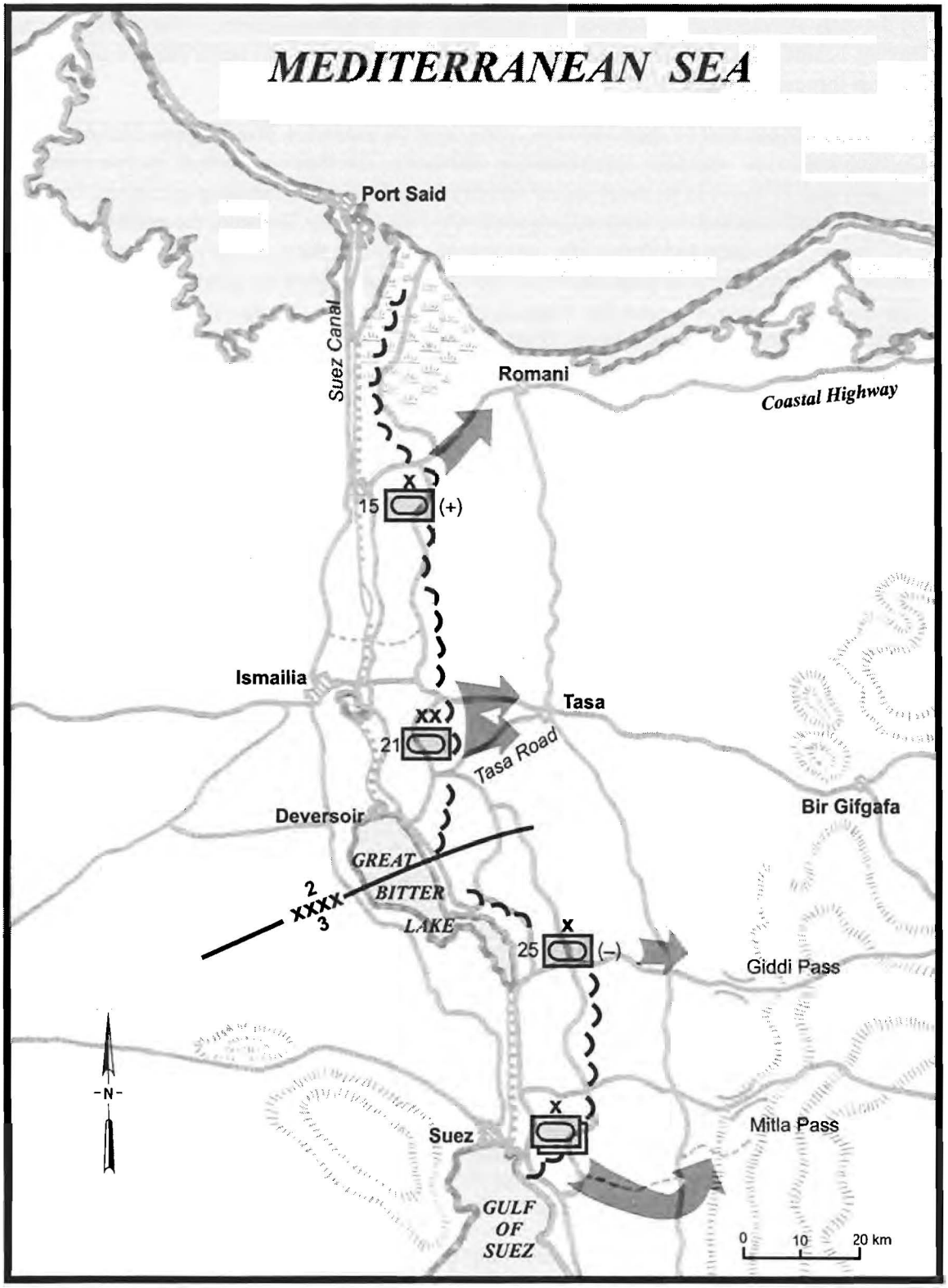
By the early afternoon of 14 October, the Egyptians were in full retreat back to their bridgeheads, leaving behind some 250 destroyed tanks—which surpassed the 240 tanks that the Egyptians had lost through 13 October![106]

The losses can best be appreciated by citing concrete examples. The Egyptian 21st Armored Division began the war with approximately 280 tanks, 124 tanks in each of its two armored brigades and 31 tanks in its mechanized infantry brigade. For the crossing operation, General Command had attached one armored brigade to the 16th Infantry Division; the remainder of the 21st Armored Division had formed the operational reserve on the west bank. To conduct the 14 October offensive, General Command transferred the remainder of the division to the east bank with the order to attack toward Bir Gifgafa. By the end of the day, the 1st Armored Brigade, which had experienced combat for the first time, had only sixty-six tanks (47 percent of its tanks having been lost), whereas the 14th Armored Brigade, already combat seasoned from the crossing operation, possessed only thirty-nine tanks (with 69 percent of its force now lost). Fortunately for the division, the 18th Mechanized Infantry Brigade saw no action that day and as a result maintained its full complement of thirty-one tanks.[107] The 21st Armored Division had thus lost over 50 percent of its tank force by the end of 14 October (down to 136 from a prewar figure of 280 tanks).

The Egyptian 3d Armored Brigade from the elite 4th Armored Division illustrates another example of the lethality of the Sinai battlefield. Assigned to the Third Army's operational reserve, the brigade spent the first week of the war in relative calm on the west bank. Then, it crossed the Suez Canal during the night of 12—13 October and launched its fateful attack toward Mitla Pass on the 14th into the waiting arms of the Israeli forces. Starting with 124 T-55 tanks, the Egyptian brigade lost sixty tanks, nine armored personnel carriers, and virtually all of its artillery pieces in less than eight hours. By midafternoon, the brigade had retreated back into the 19th Infantry Division's bridgehead with its combat power essentially down to that of two tank battalions.[108] Overall, the Egyptians never recovered from this major military setback, and it remained for the IDF to exploit this sudden turn of events.

With this Egyptian defeat, Israeli commanders quickly grasped that the tide of war had shifted in their favor. That night, Elazar called Meir with the good news and gave his assessment of the new strategic situation facing Israel in the Sinai. "Golda, it will be all right. We are back to ourselves and they [the Egyptians] are back to themselves."[109] Egyptian losses supported Elazar's optimistic appraisal, for Israeli intelligence estimates placed the number of Egyptian tanks destroyed at 280—a loss that shifted the balance of combat power to Israel.[110] Events would prove that the initiative had clearly passed to the IDF, and, as a result, the Egyptian Armed Forces would display some of the weaknesses that they had exhibited in their poor performance in the Six Day War. Yet, despite much reason for optimism, the Israeli political and military leadership would learn, *again*, that the Egyptians had not completely reverted to their old selves. Rather, the Egyptian Armed Forces would once again demonstrate their new-found combat mettle, thereby creating more surprises for Israel in the latter part of the war.

The 14th of October, though an unequivocal Israeli military success, carried with it a painful side for Israel. After some procrastination, partly out of a desire not to alarm the public, Elazar finally authorized the first official release to the media of casualty figures: 656 known dead Israeli soldiers in the first eight days of fighting, among them Major General Avraham Mandler, the



Map 5. Sinai front, Egyptian attack, 14 October 1973



Mid-East Wars: The Yom Kippur War

A tank's-eye view during an Israeli holding action in north Sinai

commander of the 252d Armored Division, killed by an artillery shell the day before. By now, many Israelis on the home front had realized that all was not well in the war, but this first public acknowledgment of the numbers killed gave concrete form to the extent of the human tragedy so far. In the 1956 and 1967 wars, both of less than a week's duration, newspapers had published the names of those killed in battle after the end of hostilities. This time, however, military censors had instructions to prevent the publication of any obituaries submitted by bereaved families until the end of the war. Citing the need for secrecy at a news conference, Dayan admonished the nation to delay its mourning until the resolution of the armed struggle: "We are in the midst of war, and we can't give public expression at this time to our deep grief for the fallen."[111] His words underscored the seriousness of the war, and Israel's national will focused on winning the conflict before confronting its tragic dimensions.

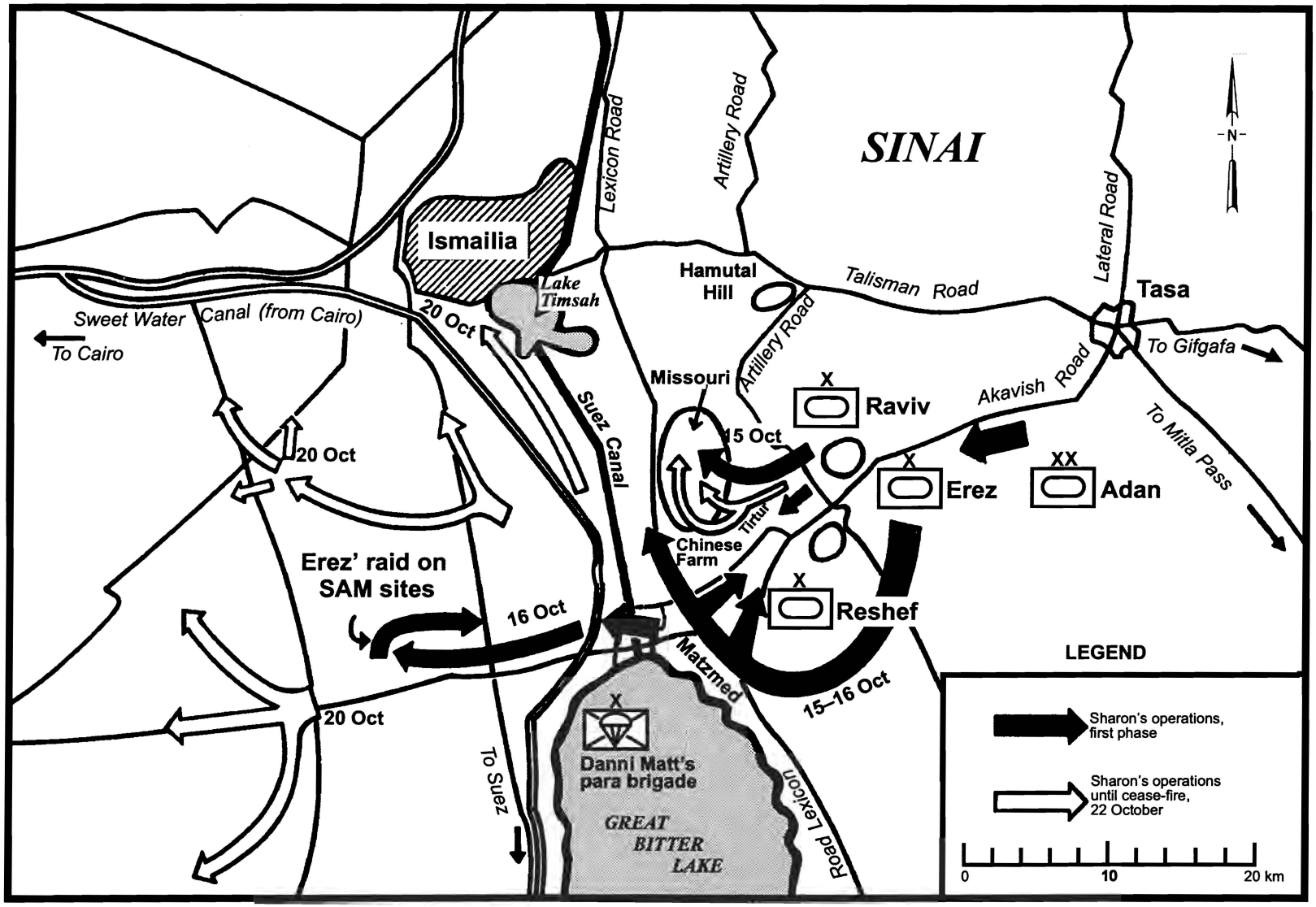
THE ISRAELI RESURGENCE. The sheer magnitude of the military defeat shocked, stunned, and demoralized the Egyptian High Command and energized the IDF. While Egyptian field officers attempted to regain their composure and regroup their battered forces, senior Israeli commanders prepared to take advantage of the new strategic situation in the Sinai. Late in the evening on 14 October, Elazar approached the cabinet, seeking approval for a crossing to the west bank—an operation called Stouthearted Men. Confirmation came at approximately 0030 on 15 October. The operation began with high hopes of achieving a quick victory on the battlefield.

Stouthearted Men called for three Israeli armored divisions to cross at Deversoir on the northern tip of the Great Bitter Lakes and encircle the Egyptian Third Army by surrounding Suez City, thereby cutting off the Egyptian troops on the east bank from their supply bases.[112] Israeli intelligence had estimated that the Egyptians had lost between 250 and 280 tanks on 14 October, which left them with only 700 tanks operational on both banks of the Suez. Southern Command possessed roughly the same number of tanks divided into four divisions: Sharon 240, Adan 200, Magen 140, and Sasson 125. Despite a roughly equal number of tanks on both sides, the Israelis could concentrate their armor at the crossing site of Deversoir, where the Egyptians had positioned the southern flank of the 16th Infantry Brigade. To meet the Israeli effort, Brigadier General Abd Rab al-Nabi Hafiz, the Egyptian commander of the 16th Infantry Division, could rely only on his divisional reserve and elements from the battered 21st Armored Division.

For the crossing operation, Sharon's 143d Armored Division would secure both sides of the Suez Canal and the two roads, Akavish and Tirtur, that led to the crossing site on the east bank (see map 6). Adan would then cross over with his 162d Armored Division to destroy the Egyptian air defense system, thus allowing the Israeli Air Force to provide needed ground support as well as threaten Cairo. If all went according to plan, the 252d Armored Division, now under the command of Brigadier General Kalman Magen (who replaced the fallen Mandler on 13 October), would cross over and relieve Sharon on the west bank. Adan would then race south to capture Suez City, thereby surrounding Third Army. Sharon, meanwhile, would provide flank protection for the dash south. To support the effort, Elazar planned to insert a paratroop force by helicopter to secure the key position of Gebel Ataka.

Based on the assumption that the Egyptians had returned to their form of 1967, Operation Stouthearted Men optimistically planned for a one-day crossing of the Suez Canal and for another day to conduct a lightning dash to Suez City to encircle Third Army. This forty-eight-hour timetable was completely unrealistic. Again, the Egyptians exhibited unexpected resilience, even when confronted with Israeli units in their operational rear. Again, the Israelis discovered that this was not the Egyptian Army of 1967.

Sharon, as noted, had received the mission of securing the access routes and crossing site. To draw Egyptian attention away from Deversoir, Raviv's Armored Brigade would launch a diversionary attack toward Televizia and Hamutal. Meanwhile, Reshef's Armored Brigade, with the mission of securing the crossing site and the route to it, would embark on a southwesterly route south of Tirtur and Akavish Roads. Once on Lexicon Road and heading north, Reshef planned to secure Deversoir with one force, push another force north and northeast to widen the crossing site, and send a third force eastward to open Tirtur and Akavish Roads. To facilitate the movement of troops and equipment across the Suez Canal, Southern Command hoped to capture some Egyptian bridges intact and to bring forward its own heavy bridge, pulled by a tank company. After Reshef secured Deversoir, Colonel Danni Matt's 600 paratroopers would cross over to the west bank during the night of 15–16 October, supported by a tank company from Haim Erez' Armored Brigade. The remainder of Erez' brigade would tow a preconstructed bridge to Deversoir, using Akavish Road. Once in place, the remainder of Erez' brigade would cross in rapid fashion to secure the bridgehead on the west bank. Sharon's command and control would stretch from Raviv, east of Artillery Road, to Matt, west of Deversoir.



Map 6. Surprise Suez crossing by Sharon's division, night, 15 October 1973

At 1700 on 15 October, the tenth day of the war, the IDF kicked off their crossing operation with an artillery barrage all along the Egyptian front.[113] Simultaneously with this display of firepower, Raviv launched his probing attacks toward Televizia and Hamutal. Two hours later, at 1900, Reshef embarked on his critical mission with ninety-seven tanks; his reinforced brigade was composed of four tank and three infantry-paratroop battalions on half-tracks. He managed to avoid any Egyptian resistance until three kilometers north of Deversoir, where he ran into an Egyptian defensive position, sparking alarms throughout the 16th Infantry Division. For the next several days, Reshef's brigade would be engaged in close-quarter combat waged in periods of utter confusion. At 0400 on 16 October, after heavy fighting most of the night, Reshef's tank force had dwindled from ninety-six to forty-one, or a loss of fifty-six tanks in a mere twelve hours—a figure comparable to the losses of the Egyptian 3d Armored Brigade on 14 October. By 1800, Reshef's inventory increased to eighty-one tanks, as Sharon released more tanks to help secure the crossing site.[114] The entire assault force would experience intense fighting and heavy losses in men and equipment for every kilometer of ground gained.

After the war, many Israeli participants found it difficult to describe the horrors of close combat in the Chinese Farms area. But Sharon provided his own poignant account of the carnage present on the battlefield: "It was as if a hand-to-hand battle of armor had taken place. . . . Coming close you could see Egyptian and Jewish dead lying side-by-side, soldiers who had jumped from their burning tanks and died together. No picture could capture the horror of the scene, none could encompass what had happened there. On our side that night [15th/16th] we had lost 300 dead and hundreds more wounded."[115] This battle of attrition served Sadat's purpose, as the Israelis suffered heavy losses on the battlefield, even though, from another perspective, the initiative was passing to the Israelis.

Stiff Egyptian resistance prevented Reshef from accomplishing all his missions, but seizing the crossing site proved no major problem. So at 0135 on 16 October, Matt began crossing over with his 600 paratroopers. At 0643, the first of thirty tanks traversed the Suez Canal aboard rafts. By 0800, Matt had expanded his bridgehead on the west bank some five kilometers in depth. Sharon and Erez would later join him on the African continent. Despite successfully crossing to the west bank, however, the Israelis failed to secure a corridor to support Matt. The Egyptian 16th Infantry Brigade, which had seen little combat until now, repelled Israeli attempts to open up Tirtur or Akavish Road for their bridging equipment. This Egyptian success virtually cut off the Israeli force on the west bank, causing Dayan to recommend an abortion of the operation. For thirty-seven hours after 1130 on 16 October, no more Israeli tanks crossed the canal, as Southern Command concentrated its resources on opening a secure route to Matt.

The unexpected Egyptian resistance forced Southern Command to change its plan.[116] By late morning on 16 October, Bar-Lev, anxious about the fate of the small force on the west bank, ordered Adan to commit his division to help open Akavish and Tirtur Roads. To clear out the Egyptians dug into dikes in the Chinese Farms required more infantry, and Southern Command turned to the paratroop battalion under Colonel Uzi Ya'iri, positioned at Ras Sudar since the first day of the war. Arriving at 2200 by helicopter, Ya'iri felt pressured to go immediately into action even though he lacked adequate intelligence or preparation. For the next two days, the paratroopers would experience intense combat with heavy casualties. Dayan, who met with Ya'iri on 21 October, described his touching encounter with Ya'iri in the midst of war:

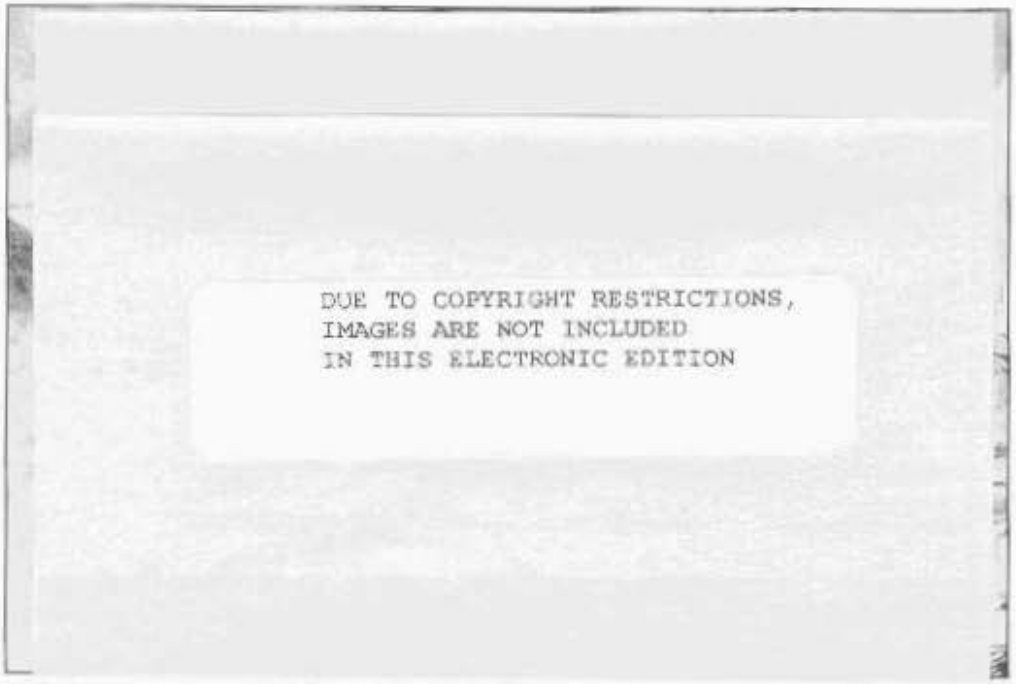


Israeli paratroopers under heavy fire in the "Chinese Farm" area

> I found him worn out. I knew him well, ever since he had headed the chief of staff's bureau under Bar-Lev. He was a first-class fellow, straightforward, sensible, and very responsible. I knew he had lost a lot of men in combat, but I had not expected to find him so downcast. His face bore an expression of ineffable sadness, and his eyes, swollen from lack of sleep, were—what was worse—without luster. We talked about his battle to open the access road to the Canal. Chaim Bar-Lev, who was with me, said, "Uzi, you suffered heavy casualties, but you opened the road!" Uzi held to his own: The road was opened not by me but by the armor. I would like to be able to say that my unit did it, but this was not so. We had suffered seventy casualties because we went into action too hastily, without proper intelligence on the enemy's defenses.[117]

Contrary to Ya'iri's personal assessment, the paratroopers certainly had played an important role in opening the access road, but their accomplishment seemed diminished by so many casualties. After the war's conclusion, the Israeli public would express similar feelings, but this time with political ramifications.

Egyptian soldiers and officers demonstrated unexpected resolve despite the emerging serious threat to their rear. Second Army directed the first major Egyptian response, which occurred on 16 October. Second Army committed the 1st Armored Brigade with thirty-nine tanks and the 18th Mechanized Infantry Brigade with thirty-one tanks to reinforce the southern flank of the 16th Infantry Brigade. Egyptian armored counterattacks pushed Reshef southward up Lexicon Road for several kilometers, while the mechanized infantry helped secure the defensive positions in the Chinese Farms sector. On the west bank, a reinforced battalion from the Egyptian 116th Mechanized Infantry Brigade attacked Matt's small force. The Israelis managed to defeat



Upgunned Israeli Patton M-48s preparing to cross the Suez Canal on assault rafts

the Egyptian task force quickly, and Colonel Hussein Ridwan, the Egyptian brigade commander, lost his life in the operation.[118]

A major Egyptian effort to defeat Operation Stouthearted Men occurred on 17 October. Center Ten, located far back in Cairo, now attempted to coordinate a three-pronged attack against the crossing sites on both banks. In their decision making, however, senior Egyptian commanders labored under one major restriction: Sadat prohibited the withdrawal of any Egyptian troops from the east to the west bank out of fear of losing any ground gained in the crossing operation. This restriction forced Ahmad Ismail to make his main effort to defeat the Israeli countercrossing on the east bank, rather than on the west bank where the terrain and the air defense umbrella favored the Egyptians. On the east bank, the Egyptian 21st Armored Division, led by its 1st Armored Brigade, launched an attack north to south from the Second Army's sector, while the Egyptian 25th Armored Brigade, from Third Army, advanced south to north. On the west bank, the remainder of the 116th Mechanized Infantry Brigade assaulted Matt's positions. The results proved devastating for the Egyptians. The 1st Armored Brigade lost twenty of its fifty-three tanks, whereas an Israeli ambush destroyed sixty-five of seventy-five T-62s from the 25th Armored Brigade. The 116th Mechanized Infantry Brigade experienced similar destruction.[119]

The five days of intense fighting from 14 to 18 October finally took their toll on the Egyptian Army. The 21st Armored Division was down to forty tanks; the 16th Infantry Division's tank force had dwindled to only twenty from a prewar figure of 124. Among the killed or wounded were two division (23d and 16th) and two brigade (116th and 23d) commanders. Not everything spelled tactical defeat for the Egyptians, however. The commitment of the 23d Armored Brigade,

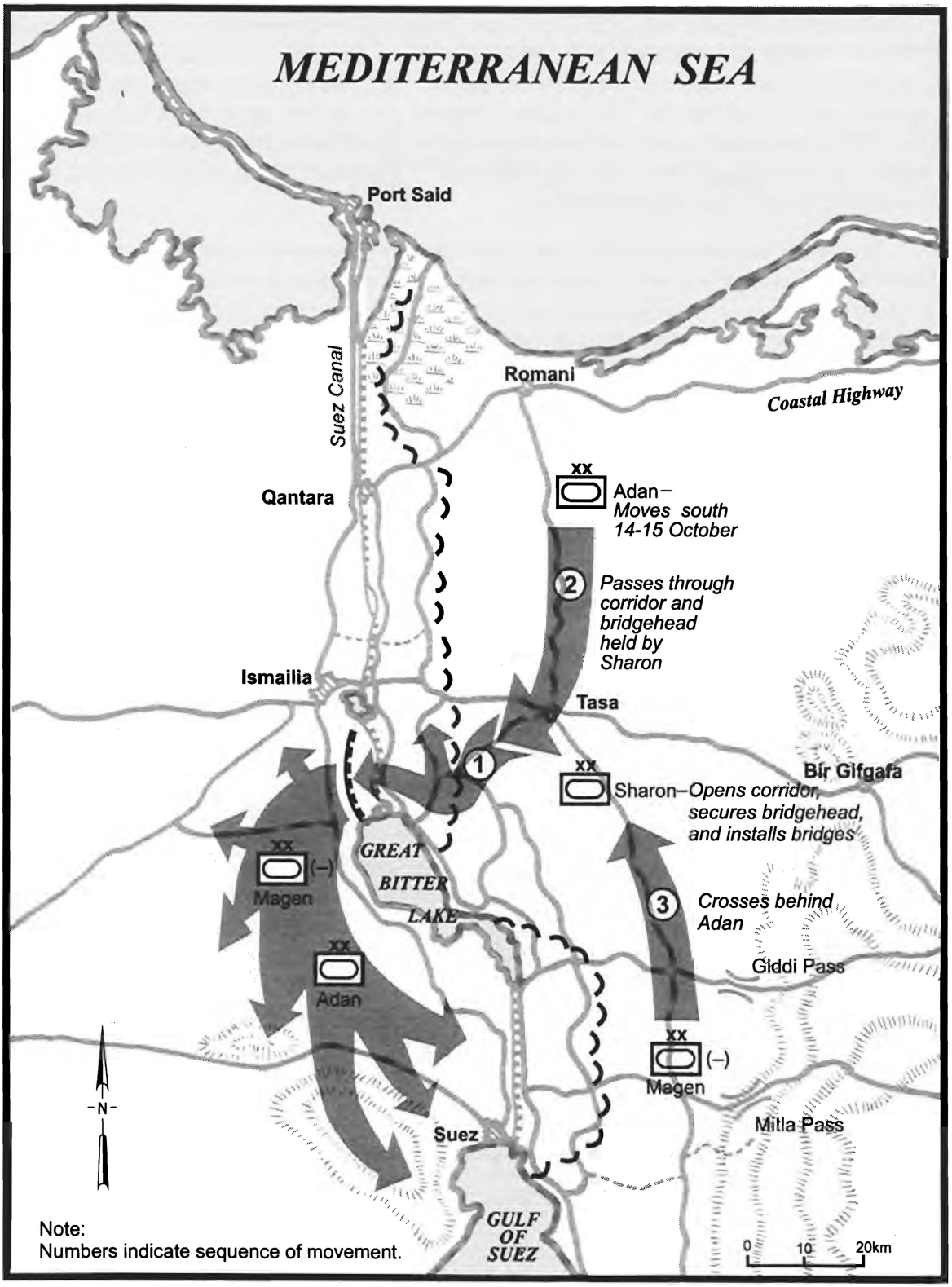
150th Paratroop Brigade, and 139th Commando Group—all from the strategic reserve—stopped Sharon's attempt to push north and capture Ismailia, a feat that would have threatened the logistical lifeblood of Second Army. But on the east bank, the Egyptians experienced a major setback. On 18 October, the 16th Infantry Brigade, now heavily depleted in both men and ammunition and outgunned and outmanned to boot, finally abandoned its positions in the Chinese Farms, thus opening up Tirtur and Akavish Roads.[120] The Israeli forces on the west bank were no longer seriously threatened with defeat.

Southern Command moved to exploit this situation. During the night of 17–18 October, Adan's division finally crossed to the west bank, three days behind schedule.[121] (See map 7.) The first unit set foot on the African continent at 2330 on 18 October; by 0530, both Amir and Nir had completed the move of their armored brigades to the west bank. At 1305 on 18 October, Southern Command decided to send Keren's Armored Brigade and half of Magen's division to the west bank, but with another change in plans. Adan now would spearhead the drive to Suez City, with Magen protecting his right flank instead of Sharon as originally planned. Sharon was now to maintain the bridgehead on the west bank, push north to Ismailia, and attempt to capture Missouri on the east bank. The expectation of a quick and decisive defeat of the Egyptian Armed Forces was nowhere implicit in this plan. After Adan had crossed to the east bank on 18 October, Elazar appeared before the cabinet at 2100 and provided a more sober evaluation of the operation: "a battle is not being conducted according to the more optimistic model—the one that predicts

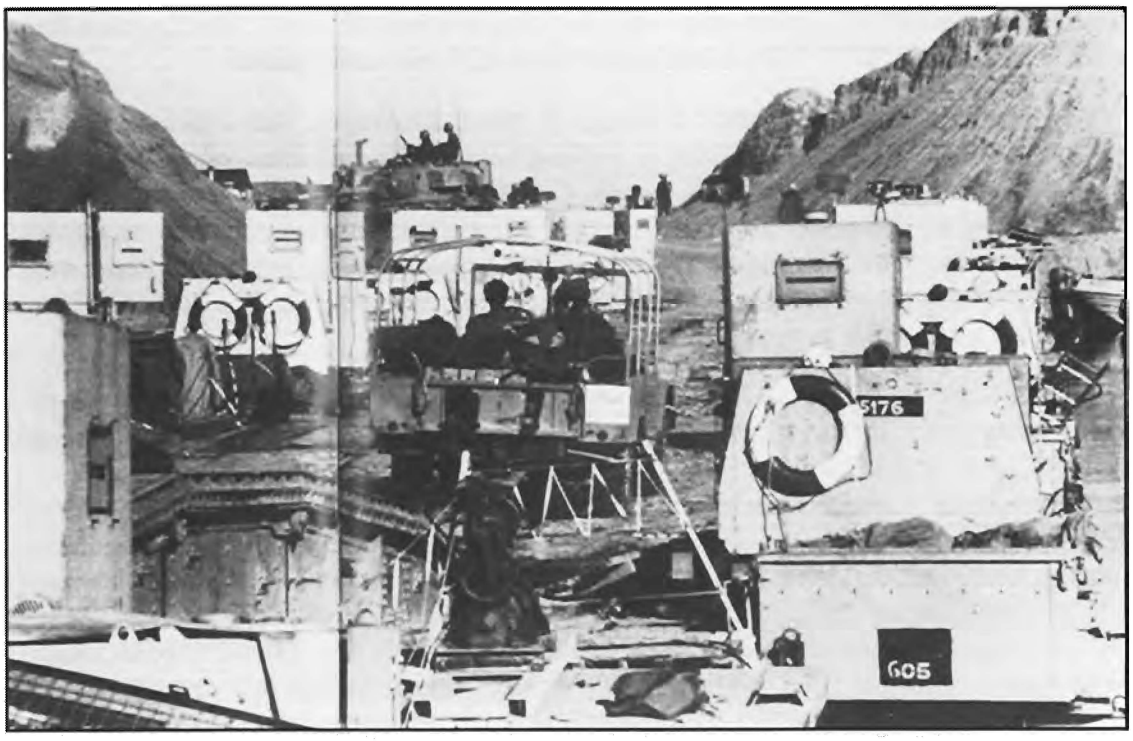


Mid-East Wars: The Yom Kippur War

Disabled Egyptian T-54s in the zone west of the Suez Canal



Map 7. Sinai front, Operation Plan Gazelle



Israeli Tank Battles

Israelis moving to cross the canal on 17 October



The War of Atonement: October, 1973

Israeli tanks crossing a pontoon bridge onto the canal's west bank

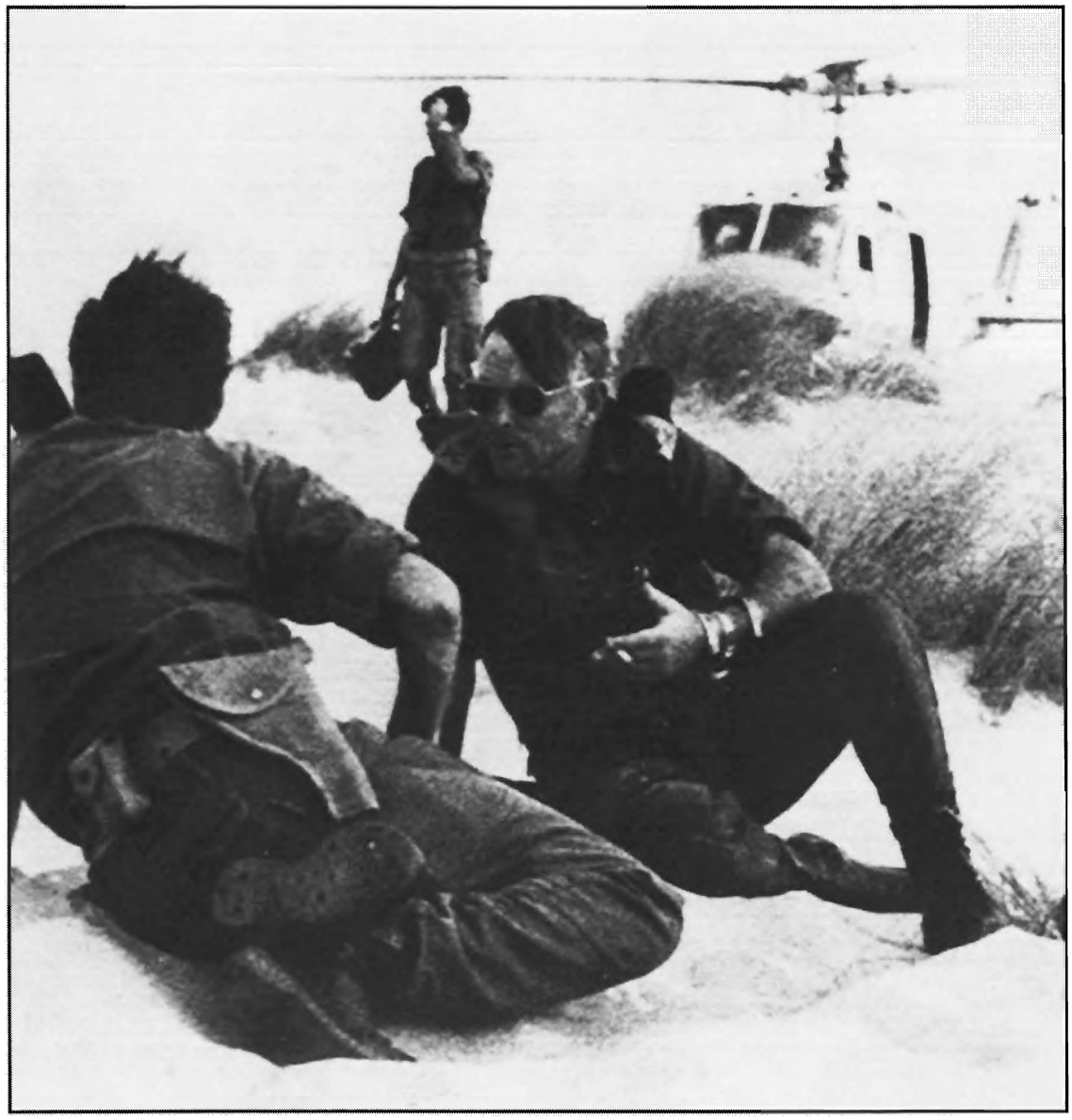
the total collapse of the Egyptian army—but according to a realistic one . . . The Egyptian army is not what it was in '67."[122] His words echoed those of Gonen on 8 October.

Egyptian resistance had forced a change in Israeli thinking in that a new factor now influenced the planning of operations: a growing concern for casualties, especially of elite infantry, which was always in short supply. Consequently, commanders found themselves gravitating toward operations that would favor armor tactics without a heavy reliance on infantry support. As Adan noted after the war, "The longer the war went on, the greater our losses were. Now after two weeks of fighting, we considered and reconsidered each step in terms of how many losses it was liable to cause."[123]

Elazar's realism proved well-founded. As Israeli ground troops destroyed surface-to-air-missile bases west of the Suez Canal, the gap in the Egyptian air defense system widened enough for exploitation by the Israeli Air Force. To plug the air corridor, Center Ten in Cairo committed its own air force, but Israeli pilots were able to win the dogfights and gain control of the air. Despite the reassertion of Israeli air power, Adan still required five days of virtually continuous fighting (19–23 October) to encircle, but not seize, Suez City. This "dash" to Suez City averaged only 20 kilometers per day, a far cry from the lightning pace of the Six Day War when Israeli armor traversed over 200 kilometers in four days, with the first day devoted to breakthrough assaults on fortified Egyptian positions.[124] Most important for Sadat's war strategy, the IDF continued to suffer high casualties throughout the countercrossing operation.

Despite their slow progress, the Israelis slowly turned the tide of war in their favor, thereby dulling much of the luster achieved by the Egyptian Armed Forces in the first part of the war. Numerous problems now plagued the Egyptian military. First, Second Army headquarters had failed to take decisive action when the word that the Israelis were on the west bank had first reached it at 0130 on 16 October. Then, based on erroneous intelligence estimates, Second Field Army Command mistakenly sent insufficient forces, in piecemeal fashion, into the Deversoir area. General Command made the same mistake when it tried to take command of the situation from the comfort of Cairo. The Israelis had defeated all Egyptian forces during the first forty-eight hours of the countercrossing operation. Later, over the next week of continuous, heavy fighting, senior Egyptian commands were unable to coordinate sufficient combat power to destroy Israeli forces on the west bank. Piecemeal, uncoordinated, and dilatory counterattacks characterized the Egyptian responses, although the Egyptians fought well on the defensive. The Egyptian Armed Forces clearly suffered from an overly centralized command system that retarded reaction times to the point of being far too slow for maneuver warfare.

The Israeli countercrossing eventually created a serious command crisis in Cairo.[125] On 18 October, Ahmad Ismail dispatched Shazli to the front to assume command of Second Army and defeat the Israeli effort on the west bank. After spending forty-four hours with Second Army, Shazli returned to Center Ten during the evening of 20 October and filed a pessimistic report, evaluating the military situation as critical. He insisted on the withdrawal of four armored brigades from the east bank to the west bank within twenty-four hours to prevent the Israelis from encircling Egyptian forces on the east bank. Ahmad Ismail, however, refused to withdraw any forces, in keeping with Sadat's insistence on not losing any terrain on the east bank. There was also the fear that withdrawing armored forces from the east bank might spark panic among the troops, as Egyptian soldiers recalled the rout in 1967 when some commanders abandoned



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An impromptu meeting by General Adan with one of his brigade commanders in the field

their units. Unable to budge Ahmad Ismail, Shazli, out of desperation, appealed for Sadat to come to Center Ten to make the critical decision in person and for the historical record.

At 2230 on 20 October, Sadat arrived at Center Ten to solve the impasse among his senior commanders caused by Shazli's intransigence. He first met privately with Ahmad Ismail for nearly an hour. Then, after listening to the various opinions of his senior commanders in a general meeting (except for those of Shazli, who remained silent throughout), Sadat simply decided: "We will not withdraw a single soldier to the west." With these words, he promptly departed without hinting what would be the next step.

This late meeting on 20—21 October left Sadat a troubled man. Upon his return to Tahra Palace at 0210, Sadat called his senior advisers and informed them of his decision to accept a



Israeli medical teams in life-saving operations

cease-fire in place. Asked for an explanation for his sudden change in strategy, Sadat described how his trip to Center Ten had convinced him that the country and the armed forces were in grave peril, and the only option was to seek a cessation of hostilities with the help of both superpowers.[126] Sadat, now shaken in confidence, clearly placed his hope squarely on the diplomatic front.

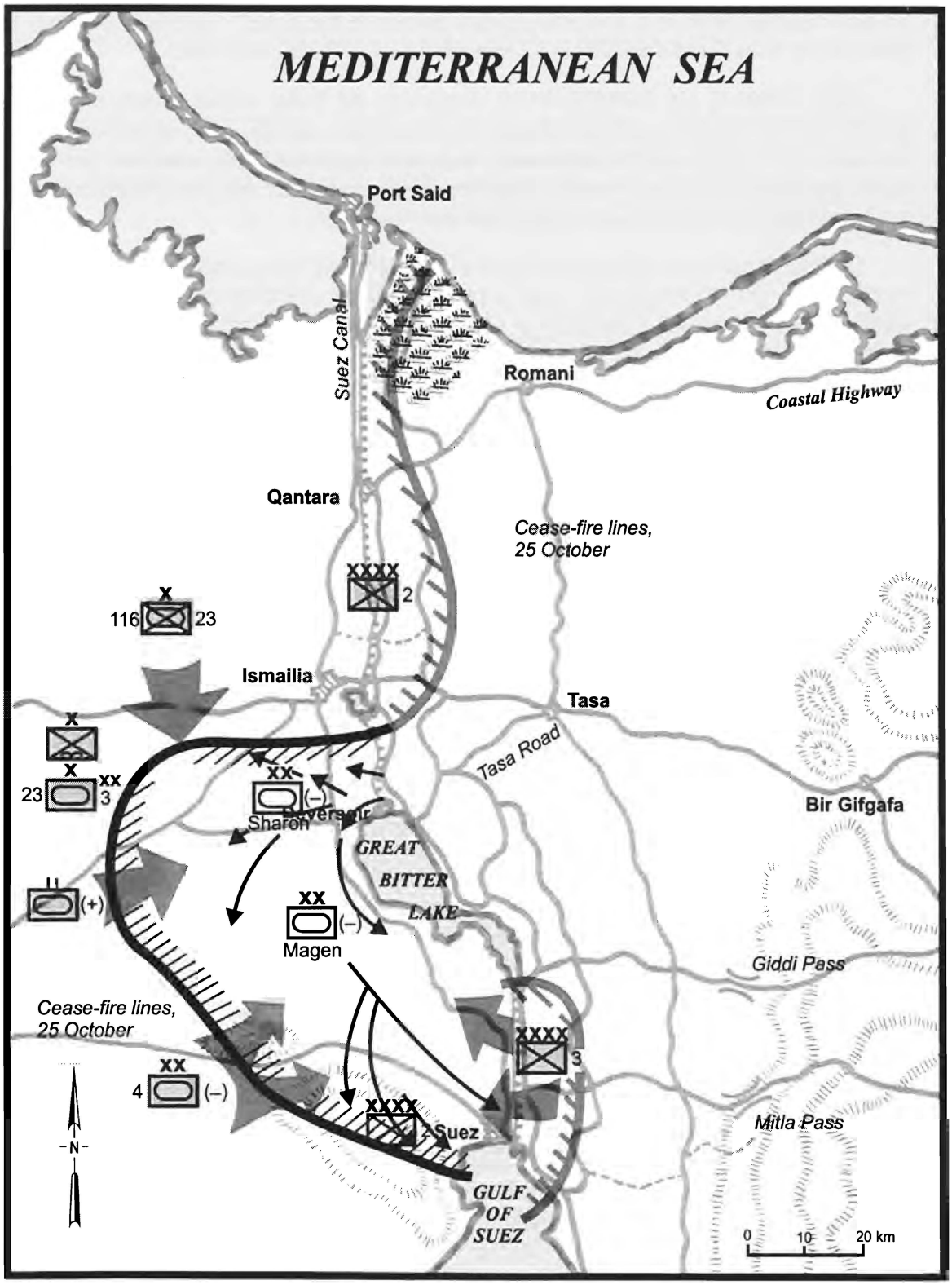
He had expected to be in a favorable military posture at the end of hostilities, but now, he believed, his army faced a possible collapse reminiscent of the Six Day War.

THE ENDING OF HOSTILITIES. Fortunately for Sadat, events outside his control helped save his Third Army from collapse. Soviet pressures and the Arab oil embargo, when combined with Israel's military ascendancy over both Egypt and Syria, convinced the Nixon administration to launch a diplomatic offensive. By the end of the war, the United States had committed itself to work for peace in the Arab-Israeli conflict.

As Egypt's and Syria's fortunes declined on the battlefield, other Arab states moved to help their brethren. On 17 October, the Arab oil-producing states raised the price of oil 70 percent, announced a 5 percent cut in production, and threatened to reduce output 5 percent every month until Israel withdrew from territories seized in the Six Day War. On 18 October, the Saudi government announced a 10 percent cut in output. When, on 19 October, Nixon formally requested from Congress a $2.2 billion emergency aid package for Israel, Saudi Arabia retaliated the next day by placing an oil embargo on the United States; other Arab states quickly followed Riyadh's lead. The military struggle between the Arabs and Israelis now took the added form of economic warfare, which shook stock markets around the world and heightened concerns in western Europe and Japan. The Nixon administration, although besieged by the Watergate scandal, felt pressured to take center stage in an effort to bring a cease-fire to the conflict. Kissinger, who had been waiting for the right moment to intervene with a major diplomatic initiative, began what evolved into a step-by-step process.

While continuing to provide massive military aid to Israel (begun on 13 October), Washington now moved on the diplomatic front to assume the role of honest broker. The United States stood as the only power capable of forcing Israel to cease offensive operations against Egypt. On 19 October, Kissinger accepted a Soviet invitation to visit Moscow to discuss bringing hostilities to an end. He departed the day before the Saudis announced their oil embargo. It was in this context that Sadat went to Center Ten late on 20 October to meet with his senior commanders, knowing that both superpowers were moving to bring about an end to the armed conflict. Hoping for a diplomatic breakthrough, the Egyptian president desperately wanted to keep all his gains on the east bank and thus remained adamant on not withdrawing any forces from the east to the west bank. Meanwhile, in discussions at the Kremlin on 21 October, the Americans and Soviets agreed to sponsor a United Nations resolution for a cease-fire to commence on 22 October at 1820. Before returning to the United States, Kissinger visited Tel Aviv on 22 October to meet personally with Golda Meir and discuss the terms of the cease-fire. Soviet Premier Aleksei Kosygin meanwhile traveled to Cairo to confer with Sadat. Both Egypt and Israel agreed to a cease-fire in place.[127] (See map 8.)

The commencement of the cease-fire on 22 October at 1820 found Israeli forces north of Suez City, short of surrounding Third Army, though the Egyptian situation was becoming precarious. Israeli artillery fire could interdict the Suez to Cairo road, the main artery supplying the two Egyptian divisions on the east bank in Third Army's sector. But only ground troops could effectively cut off Third Army, which required the surrounding of Suez City. Fortunately for Israel, United Nations Resolution 338, which called for a cease-fire in place (sponsored by both superpowers), failed to provide for a peacekeeping force to supervise its implementation. This omission provided Israel with an opportunity to continue its advance southward.



Map 8. Sinai front, 18–24 October 1973

In the evening of 22 October, the Israeli cabinet formally approved continuing military operations if the Egyptians failed to observe the cease-fire.[128] For their part, Israeli field commanders, frustrated because they could only interdict the Suez City to Cairo road with artillery fire, looked for any excuse to resume offensive operations and surround Third Army. Adan, whose division had led the armored advance south toward Suez City, put it this way: "If I were to decide to respond to fire against me not only with fire of my own but with fire *and* movement, would not all levels not welcome such a decision? . . . After pondering the matter for some time, it was with a heavy heart that I came to the decision that we would have to finish off the job the next day."[129] On the morning of 23 October, Golda Meir, who was anxious to encircle Third Army, gave her approval for the commencement of offensive operations, and the Israeli Army continued its attack southward until units reached Adabiyya, a port town south of Suez City.[130]

In response to Sadat's protests of Israeli truce violations, Tel Aviv claimed that Egyptian troops had fired on Israeli forces first, thereby provoking Israel to resume its attack to seal Third Army's fate. Meanwhile, the Israeli Army had surrounded Third Army's forces, some 30,000 to 40,000 troops and 300 tanks from the 7th and 9th Infantry Divisions. Although a second cease-fire went into effect on 25 October, fighting for control of Suez City continued throughout the day. This time, however, a United Nations peace-keeping force arrived in relatively quick order to monitor compliance, and Israel, under pressure from the United States, eventually allowed nonmilitary supplies to reach Suez City and the isolated Third Army. The plight of Third Army, however, remained precarious until the lifting of the encirclement in February 1974.

As the battlefield situation became rather desperate for the Egyptians, Sadat appealed to both the United States and the Soviet Union to send troops to enforce the cease-fire. The Kremlin, determined to stand by its Arab allies, placed seven airborne divisions on alert and implemented other military measures designed to facilitate the rapid transportation of combat troops to the Middle East. Meanwhile, in a letter employing tough language, Brezhnev informed Nixon of the Soviet willingness to dispatch combat troops to the Middle East, unilaterally if necessary. In response, at 2341 (Washington time) on 24 October, the United States began ordering all its armed forces on Defense Condition III, the highest state of readiness in peacetime, the first such global alert since the Cuban missile crisis of 1962. Soviet intelligence no doubt quickly detected this new level of readiness of conventional and nuclear forces around the world. Confronted with the possibility of unwanted escalation, the Soviets backed down from their threat of unilateral intervention, and the international crisis began easing the next day. Despite the brevity of the crisis, both superpowers were becoming deeply immersed in resolving the fourth Arab-Israeli war, and Sadat could find some satisfaction in this development.[131]

Although the battlefield situation had become rather desperate for the Egyptians, all was not lost for Egypt militarily. Despite the confusion in General Command, Egyptian combat units continued to resist with determination. A combined Egyptian commando and paratrooper force, for example, registered a tactical victory of strategic import by stopping Sharon's repeated attempts to capture Ismailia, whose loss would have seriously imperiled the logistical lifeblood to Second Army. Moreover, Egyptian townspeople, militia, and regular troops prevented Israeli forces from capturing Suez City. In its failed assault on the town, Adan's division lost 80 killed and 120 wounded, too heavy a cost for no tactical gain.[132] After the war, grieved Israeli families would question the wisdom of storming a city whose capture was clearly not essential for the



Israeli troops by the sweet-water canal near Ismailia

defeat of Third Army. Moreover, to everyone's surprise, including Sadat and senior officers back in Cairo, surrounded Egyptian forces on the east bank maintained their combat integrity. Finally, and perhaps most important, Second Army's position remained secure on both the east and west banks.

Thus, the final week of the war offered more sobering combat experiences for Israel, despite its operational and tactical successes, thereby undermining any chance of a clear Israeli strategic victory. During this last phase of the war, the Egyptian Armed Forces continued to inflict a heavy toll in Israeli blood and treasure. In this regard, Egyptian field officers and line troops made up for the senior command's seeming paralysis by fulfilling Sadat's strategic objective of inflicting the greatest possible losses in men and equipment on the IDF. Furthermore, by clearly demonstrating a new combat staying power, the Egyptian Armed Forces presented Israel with vivid testimony that a future conflict between Egypt and Israel could exact a heavy price in Jewish lives. The full impact of this lesson would surface only after the war, once the Israelis had time to reflect on the conflict.

IMPACT IN ISRAEL. The 1973 war ended on a high military note for Israel. The IDF had recovered from its initial shock to seize the initiative on both fronts. In the Sinai, the encirclement of Suez City and Third Army undermined Sadat's confidence and provided the Israeli government with a strong bargaining position after the war. On the Golan front, the Israelis had counterattacked to regain all lost territory and even penetrated twenty kilometers into Syria to reach within forty kilometers of Damascus. In light of these Israeli operational and tactical achievements on both fronts, many Western observers have unabashedly awarded Israel a military victory in 1973. In contrast, Israeli society, for the most part, assessed the 1973 War in

rather more negative terms, even though the conflict ended with the IDF possessing the initiative.[133]

A decisive victory on either front had eluded the Israelis. Once the second cease-fire was realized, the Israelis quickly understood how ill prepared their army had been for the war. The outbreak of hostilities had surprised virtually everyone in Israel. Worse, no one expected three weeks of intense fighting with such heavy casualties. During the war, moreover, there were moments of great anguish and peril. When the fighting ended, Israeli losses proved staggering for a small country of over three million people that had come to expect a decisive victory with relatively few casualties in a short war. Over 2,800 Israelis had been killed, at least 7,500 had been wounded, and some 500 Israelis had become prisoners of war. If the United States had experienced equivalent losses in the Vietnam War, it would have suffered 200,000 American dead—a figure four times the actual number.

Furthermore, the Israelis incurred a new type of casualty. For the first time in its modern history, Israeli soldiers suffered a high incidence of combat shock, something for which its medical corps had failed to prepare adequately. Until 1973, few psychiatric cases resulting from battle situations were reported in Israel, in large measure because previous conflicts—with the sole exception of the first Arab-Israeli war—were quick victories with relatively few casualties. In 1973, however, Israeli soldiers fought in a war noted for its lethality and intense, prolonged fighting. Ariel Sharon, one of Israel's most flamboyant and controversial commanders, pointed



The War of Atonement: October, 1973

Defense Minister Dayan and Major General Hofi visit the troops

out the uniqueness of this fourth Arab-Israeli conflict: "I have been fighting for twenty-five years, and all the rest were just battles. This was a real war."[134] The intense fighting in 1973 produced a high ratio of psychiatric cases, with figures ranging from as low as 12.3 to as high as 23.1 percent of all nonfatal casualties. Unprepared to treat such victims of war in 1973, the IDF had to develop a doctrine for treating battle stress victims *after* the war. This involved, for example, the assignment of professional psychiatric teams to medical battalions at division level.[135]

The 1973 conflict was not a short war by Israeli standards, especially in light of the time necessary before Israeli reservists could return to civilian life. Many reservists served much longer than three weeks. In 1967, the IDF began demobilizing major units two days after the cessation of hostilities; but in 1973, Israel faced a very different war termination. Israel signed its disengagement of forces agreement with Egypt on 18 January and with Syria on 31 May 1974. But during the period before each agreement, numerous incidents on both fronts increased Israeli casualty figures. The Egyptians claimed that they killed 187 Israeli soldiers, destroyed forty-one tanks, and downed eleven planes over a period of nearly three months.[136] On the northern front, Israel suffered thirty-seven soldiers killed and 158 wounded between March and May 1974 alone. Owing to the indecisive end of the 1973 war, coupled with the existence of vulnerable salients on both fronts, Israel had to maintain many reservists on active duty, with some reserve units remaining mobilized until as late as April 1974. A number of the reservists who remained on active duty for so long suffered economic hardships.

Rather quickly, the Israelis became obsessed with the question of what went wrong. Many Israelis called for accountability and demanded an impartial inquiry be convened to investigate what became known as *machdal*, or the blunder—that is, the failure of the government and the army to avoid the initial surprise attack and its consequences. A growing avalanche of protests finally compelled Golda Meir to agree to the formation of such a body. On 18 November 1973, the Israeli cabinet set the commission's mandate: first, to investigate the intelligence, assessments, and decisions made prior to the outbreak of the war; and, second, to examine the IDF's deployment, preparedness, and actions up to the point where it contained the Arab forces. On 21 November, the board met under the chairmanship of the Dr. Shimon Agranat, the American-born president of Israel's supreme court. The other esteemed members of what became known as the Agranat Commission were well-respected figures: two former chiefs of the General Staff, a supreme court justice, and the state comptroller. Proceedings began on 25 November.

While the Agranat Commission conducted its secret probe, a number of Israeli generals joined the public debate by criticizing each other's performances, spawning what became known as "the war of the generals." Part of the controversy revolved around the countercrossing to the west bank. During the first critical days of the operation, Sharon had pushed for the transfer of more troops to the west bank and would later recommend a push north to Ismailia to cut off Second Army. Elazar, Bar-Lev, and Gonen had instead opted for assigning priority to widening the corridor on the east bank to Deversoir, fearing that the Egyptians might cut the logistic line to Sharon. This controversy in the midst of war replayed itself in peacetime. While a number of generals publicly fired salvos at each other, soldiers wrote letters to newspapers offering their own complaints and criticisms, and many veterans from the war joined protest demonstrations against the government, in particular singling out Golda Meir and Moshe Dayan for special attacks.[137] Never before had the IDF experienced such heavy criticism and soul-searching.



Israeli Tank Battles

IDF forces pulling back from the canal following disengagement talks. The banner reads: "From the war of the Egyptians to the war of the Jews"—an allusion to the heated political environment in Israel after the end of the war fighting

The national turmoil also affected politics. In late December, Israel held national elections, originally scheduled for 30 October but postponed owing to the outbreak of war. Golda Meir and the Labor Party returned to power, but at a loss of six seats. The new Labor coalition government held only 51 seats out of a total of 120 in the Knesset, and Meir took until 10 March 1974 to form her coalition cabinet. But this achievement proved short-lived, for on 2 April 1974, after holding 140 meetings and hearing fifty-eight witnesses, the Agranat Commission presented an interim report, in large measure to provide a demanding public with some concrete answers. The initial revelations proved damaging enough to cause a major tumult throughout Israeli society and its armed forces.

Commission members castigated Israeli Military Intelligence for failing to assess accurately the available information that clearly pointed to a high probability for war.[138] Senior intelligence officers discovered their error too late and therefore failed to deliver on their contract of a forty-eight-hour advance warning. In light of this serious failure, the report recommended the termination of the careers of the director of Military Intelligence, his assistant in charge of research, the head of the Egyptian research section, and the chief intelligence officer for Southern Command. All these senior officers—one major general, one brigadier general, and two lieutenant colonels—quickly left military service.

Commission members also found David Elazar seriously negligent in several areas. The chief of the General Staff had suffered from "an overconfidence in the I.D.F.'s ability to repulse under any circumstances an all-out attack by the enemy on two fronts."[139] Consequently, the

Israeli Army lacked a "detailed" plan based on realistic assessments of their adversaries' capabilities in the event of a surprise Arab attack. Moreover, the commission concluded that Elazar should have ordered a partial mobilization by the morning of 5 October as a precautionary measure, given the unusually large number of Arab troops massing on both the northern and southern fronts. Finally, the High Command erred in failing to provide clear instructions for deployment, according to war plans, once it became certain the Arabs would attack that same day. While recognizing the chief of the General Staff for his invaluable leadership during the war, the commission still recommended that Elazar resign in light of his grievous mistakes. Elazar, surprised and shocked by this part of the report, left the military with bitter feelings. Many say he died of a broken heart in 1976 while writing his memoirs to vindicate himself.

The Agranat Commission's other major casualty was the front commander. Shmuel Gonen had emerged a hero from the Six Day War as commander of the elite 7th Armored Brigade that had led ground forces in their lightning advance across the Sinai. In only four days, his brigade had captured Rafah and al-Arish on the northern route, then pushed through Egyptian defenses in the Bir Gifgafa area, before reaching the Suez Canal. In the 1973 War, however, fortune failed to shine on Gonen, now a major general. During the first few days of the war, he proved ineffective in command and suddenly found himself relieved on 10 October, remaining as a deputy to the new front commander. After the Agranat's negative evaluation of his performance, Gonen left the army in disgrace and went into an eventual self-imposed exile abroad.

While recommending the dismissal of key senior officers, the Agranat Commission failed to indict the country's political leadership. This part of the report sparked outrage and protests throughout the country. The public, already reeling from the impact of high war casualties and shocked by the revelations of the army's serious failings, felt that the commission had turned the senior military leadership into scapegoats for the failures of the politicians. Many Israelis felt that Golda Meir and Moshe Dayan should have borne some responsibility for the state of the military's unpreparedness before the war. News leaks describing Dayan's erratic behavior during the war ignited a powerful wave of criticism fueled by intellectuals, the press, and opposition parties. Dayan's refusal to step down when confronted with calls for his resignation ignited a further crisis for Meir's fragile coalition government.

Rather than adopt a siege mentality, Meir bowed to the growing public furor and resigned on 11 April 1974. On 3 June, Yitzak Rabin, the chief of the General Staff in the Six Day War, became Israel's fifth prime minister and the first native-born Israeli to hold the position. The Labor party thus managed to retain the reigns of government, but the ruling elite suffered a serious blow. Eventually, the 1977 elections ushered in a new era in Israeli politics when Menachem Begin and the Likud party came to power, ending the Labor party's continuous reign since the establishment of Israel in 1948.

The Agranat Report shattered two popular notions in Israeli society: the infallibility of the intelligence community and the invincibility of the armed forces. Both beliefs drew sustenance in large measure from the blitzkrieg-type victory of the Six Day War. In 1973, that triumph came to haunt the IDF as an albatross: a less than stellar performance would fail to meet Israeli society's high expectations. The periods of shock, uncertainty, and peril that had ripped through the armed forces and society during the first days of the war became indelibly ingrained on the national psyche. The overall experience of the 1973 war humbled the Israelis and altered the Israeli

political landscape. It spawned, moreover, a willingness in the Israelis to negotiate with the Arabs. The Israelis now needed an Arab statesman courageous enough to shatter the iron curtain that hindered serious diplomatic dialogue between Israel and the Arab world.

Sadat boldly stepped into that role, offering Israel an olive branch of peace. At first, a great deal of skepticism emanated from the Israeli leadership toward this Arab leader who had recently started a war with Israel. Cracking the barrier of suspicion and mistrust between the two worlds required the involvement of the United States, an intercession that began in earnest on 6 November 1973 with Kissinger's first visit to Egypt. Subsequent discussions between Egypt and Israel dragged along through several phases until American diplomatic pressures and monetary incentives finally resulted in the Camp David Accords of September 1978, followed by a peace treaty signed by Sadat and Begin on 26 March 1979. Through diplomacy, Sadat thus managed to gain the return of the entire Sinai to Egypt without another major conflict. Furthermore, by the 1980s, Egypt had become America's main recipient of foreign aid after Israel. Before his assassination on 6 October 1981, Sadat could claim that he had reestablished Egyptian national pride, regained the Sinai, and attracted Western capital. For this, however, he paid an unexpectedly high price—Egypt's temporary isolation in the Arab world and his own life.

While the political landscape changed dramatically in the Middle East, the IDF also underwent significant changes as a direct result of the 1973 war. Instead of cutting down the requirement for national service, as planned before the war, the government doubled the size of its standing army by 1982, as the Israelis learned the importance of quantity, not just quality, in conventional warfare. Additionally, Arab tactical successes with antitank and surface-to-air missiles exposed doctrinal flaws in the IDF. Israeli doctrine consequently lessened its preponderant emphasis on armor and addressed combined arms more attentively—although tanks still remained central to the Israeli way of war. This doctrinal shift caused a significant increase in the number of self-propelled artillery pieces, which would strengthen maneuver through more firepower on the ground, thereby diminishing the army's previous reliance on the air force in the role of flying artillery. In addition, new military budgets included funds for the purchase of modern armored personnel carriers. These would provide greater protection to infantry and engineers on the new, lethal battlefield. The Israeli Air Force, for its part, devoted more attention to the air defense threat, including the purchase of airborne warning and air control system (AWACS) equipment and the manufacture of drone planes.[140] By 1982, the IDF had undergone significant changes in doctrine, force structure, and mindset. The Israelis realized that future wars could turn into long and bloody affairs requiring both large numbers in men and materiel and quality; the Egyptians had taught the world an important lesson in this regard.

Anwar Sadat clearly offers an excellent example of Carl von Clausewitz' dictum that war is an extension of policy by another means. By employing the Egyptian Armed Forces within their capabilities to achieve a limited military success, the Egyptian leader established the conditions for postwar negotiations. Admittedly, the Egyptians had some luck on their side. They had lost the initiative on 14 October, allowing the IDF to exploit Egyptian weaknesses and mistakes to surround Third Army. Fortunately for Sadat, superpower intervention averted a major defeat of the Third Army. No one in Egypt could have predicted the American response and the cease-fire's timing. Luck thus proved an important ingredient aiding Sadat in his statesmanship during the war. After the war and until 1979, Sadat employed various diplomatic tactics before gaining an Israeli commitment to return the Sinai.



President Anwar Sadat and Secretary of State Henry Kissinger during postwar negotiations

A weaker adversary thus proved capable of forcing a more powerful opponent and two superpowers to change their attitude toward the Middle East—this was no mean accomplishment. The Egyptians made this political victory possible in large measure because of the much-improved performance of their military in the 1973 war. The Israelis, for their part, realized painfully that any future conflict with the Arabs carried the unwelcome prospect of a heavy toll in Israeli lives. Military power thus had its limits in forcing a stable peace. Without the Egyptians' successful crossing operation, their establishment of secure bridgeheads, and the high casualties inflicted by the Arabs on the Israeli armies on both fronts, Israel would have had little incentive to sign a peace treaty with Egypt. The Egyptians achieved their success by beginning the war with a surprise offensive; by challenging the Israeli Air Force for control of the air with an

integrated air defense system; and by enticing the Israelis into launching premature attacks against prepared defensive positions. The limited nature of the conflict, as defined by Sadat's war strategy, favored the defense and attrition warfare. The IDF eventually gained the initiative and turned the tide of the war—but at a great cost in men and materiel and without achieving a decisive victory. The Israeli military success at the end proved hollow, indeed, given all the loss in lives, and it could not hide the fact that the IDF had fallen far short of its self-proclaimed military of excellence.

RELEVANCE FOR TODAY. The 1973 war had an immediate and profound impact on the U. S. Army after Vietnam. Drawing upon several studies of that conflict, General William E. DePuy, the first commander of the U.S. Army Training and Doctrine Command, published a new military doctrine in 1976 called "Active Defense." This field manual drew upon the example of the 1973 War to emphasize the new lethality of the battlefield, the importance of combined arms, and the mutual interdependence of air and ground forces.[141] These tactical "lessons" provided clear direction for modernizing and professionalizing the U.S. armed forces that fought Desert Storm. Today, the strategic message of the 1973 war carries perhaps even greater relevance for the armed forces of the United States.

The demise of the Cold War has catapulted the United States into sole possession of superpower status, making this country's armed forces seemingly invincible before any conventional military threat. The success of U.S. forces in Desert Storm remains among the American people a vivid memory of a quick and overwhelming military victory achieved with remarkably few American casualties. The end of the Cold War and Desert Storm thus contain within them the seeds for a potentially dangerous situation, analogous to the experience of Israel after its dramatic triumph over the Arabs in 1967, when no Arab army or combination of Arab armies appeared capable of challenging the IDF in open battle. The Israelis could confidently claim a distinct edge in intelligence, air force, and maneuver (armored) warfare. Today, the United States armed forces can make a similar claim and for similar reasons.

The United States rightly deserves to take pride in its armed forces and their coalition partners for virtually destroying the fighting power of the Iraqi military in a mere 100 hours. A repeat of this exemplary performance now has turned into an imperative, as proclaimed in 1992 by General Gordon Sullivan, the Army Chief of Staff: "The standard for America's Army must be 'decisive victory.'"[142] The current FM 100-5, *Operations*, the capstone manual of the U. S. Army published in June 1993, reiterates Sullivan's litmus test for military excellence, defining decisive victory as "to win quickly with minimum casualties."[143] Nothing less is acceptable.

To achieve such a victory in the next war, the U.S. military is relying on technological superiority—America's strong suit in the twentieth century. Desert Storm validated this article of faith. Television footage captured the image of a missile descending the shaft of the headquarters of the Iraqi Air Force and underscored the dawn of a new era in warfare—what many contemporary military writers refer to variously as a revolution in military affairs, information war, or space war in the twenty-first century.

Technological advances now allow an armed force to make exact strikes of military targets with minimal collateral damage. In the future, armed forces will conduct war using highly sophisticated sensory equipment, precision guided weapons, and stealth delivery systems. Today, the United States armed forces maintain a clear advantage in the three critical areas of

intelligence, air power, and maneuver warfare—the latter centered on sophisticated tanks and attack helicopters employing night-vision technology. All this technological wizardry appears highly impressive, and there is a pervasive belief that sophisticated simulation will prepare American soldiers and commanders for war by replicating "virtual combat" in training exercises. Yet the 1973 war precisely demonstrates the limits of superior military power in the face of a skillful and lucky adversary who can find effective countermeasures to transform war into a bloody affair filled with uncertainty, confusion, and human frailty.

In the final analysis, the October War holds a critical lesson for the United States. The dramatic Israeli victory in the Six Day War created an albatross in Israel. The Israelis expected that their superior armed forces would win the next war quickly, decisively, and with relatively few casualties, and the Israeli military felt compelled (perhaps unconsciously) to plan for a repeat performance. When the next war proved exceedingly difficult and costly, Israeli passions became inflamed after the conflict, and the public forced the prime minister to form an impartial commission of inquiry whose findings tarnished the image of the IDF and ended the successful careers of a number of senior officers. Eventually, the ruling party itself fell from power, initiating a new era in Israeli politics followed by a peace treaty with Egypt that included the return of the Sinai. Ironically, Sadat had achieved a political victory even though the IDF had operationally and tactically defeated his armed forces.

With this example in mind, political and military leaders in the United States should take heed of the fourth Arab-Israeli war lest the legacy of Desert Storm should also become an albatross in the form of a tacit promise to the American people to deliver another quick, decisive, and relatively bloodless victory through superior intelligence, air power, and maneuver forces on the ground. A clever adversary, perhaps blessed with luck, can turn this pledge into a rude awakening as happened to Israel in October 1973.

Notes



1. Avraham Adan, *On the Banks of the Suez* (Novato, CA: Presidio Press, 1980), xii.

2. Gordon R. Sullivan, "Delivering Victory: Improving Synchronization," *Military Review* (September 1992):3.

3. For Dayan's strategic thinking, Israel Tal, interview with the author, 3 July 1994, Tel Aviv, Israel. On Dayan widening the military objectives, Avraham Adan, interview with the author, 30 June 1994, Tel Aviv, Israel; Yitzak Rabin, *The Rabin Memoirs* (Boston: Little, Brown, 1979), 72, 84–86, 97–98; Moshe Dayan, *Moshe Dayan: The Story of My Life* (New York: William Morrow, 1976), 339–41, 347, 359–62.

4. For a detailed analysis comparing the 1956 and 1967 Sinai campaigns, see George W. Gawrych, *Key to the Sinai: The Battles for Abu Ageila in the 1956 and 1967 Arab-Israeli Wars* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1990).

5. Samir A. Mutawi, *Jordan in the 1967 War* (Cambridge, MA: Cambridge University Press, 1987), 164. Statistics for Syria are still unreliable.

6. André Beaufre, "Une Guerre Classique Moderne: La Guerre Israelo-Arabe," *Strategie* (July-August 1967):19.

7. Michael Howard and Robert Hunter, *Israel and the Arab World: The Crisis of 1967* (London: The Institute for Strategic Studies, 1967), 39.

8. For a brief analysis of Israel's triumph over Egypt, see Gawrych, *Key to the Sinai*, 67–127.

9. It remains rather difficult to separate fact from fiction about the Israeli intelligence community. For a recent popular treatment of the role of military intelligence during this period, see Samuel M. Katz, *Soldier Spies: Israeli Military Intelligence* (Novato, CA: Presidio, 1992), 153–201.

10. Muhammad Hassanayn Heikal, "Kana al-'adw yu'rafa aktar mimma yanbaga," *al-Ahram*, 28 June 1968, 3.

11. Some sources claim that the advance warning was only twenty-four hours. See Eliot A. Cohen and John Gooch, *Military Misfortunes: The Anatomy of Failure in War* (New York: The Free Press, 1990), 102, endnote 26.

12. "The Agranat Report: The First Partial Report," *The Jerusalem Journal of International Relations* 4 (1979):74. Israeli intelligence also assumed Syria would not launch an all-out attack against Israel without Egyptian cooperation.

13. Adan, *On the Banks of the Suez*, xii.

14. For a recent, detailed treatment of this three-year period, see David S. Korn, *Stalemate: The War of Attrition and Great Power Diplomacy in the Middle East, 1967–1970* (Boulder, CO: Westview Press, 1992).

15. Muhammad Hassanayn Heikal, "al-Jaysh al-Israeli wa al-dawa'i al-mulha li-hazima fi ma'arka," *al-Ahram*, 11 April 1969, 1, 3. An English translation appears as "The Strategy of Attrition" in *The Israel-Arab Reader*, edited by Walter Laqueur and Barry Rubin, 4th ed. (New York: Facts on File, 1985), 423–24.

16. Henry Kissinger, *Years of Upheaval* (Boston: Little, Brown, 1982), 196, 203.

17. Ibid., 210.

18. Sa'ad al-Shazli, *The Crossing of the Suez* (San Francisco, CA: American Mideast Research, 1980),127–29; Muhammad Hassanayn Heikal, *Oktobir 1973: al-Silah wa al-Siyasat* (Cairo, Egypt: al-Ahram, 1993), 248–51.

19. On this second meeting, see Anwar Sadat, *In Search of Identity* (New York: Harper and Row, 1977), 234–36; Shazli, *Crossing of the Suez*, 172–81; Muhammad 'Abd al-Ghani al-Gamasi, *Mudhakirat al-Gamasi: Harb Oktobir 1973* (Paris: Shirka al-Tayb, 1990), 225–27; Musa Sabri, *Watha'iq Harb Oktobir* (Cairo, Egypt: al-Maktab al-Misri, 1974), 17–18.

20. Sayyid Mar'i, *Awraq Siyasiyah*, 3 vols. (Cairo, Egypt: al-Maktab al-Misri al-Hadith, 1979), 3:699–703. Sadat used Mar'i to conduct these talks with various leaders in the year before the war.

21. Sadat, *In Search of Identity*, 327; Muhammad Hafiz Ismail, *Amn Misr al-Qawmi fi 'Asr al-Tahaddiyat* (Cairo, Egypt: Markaz al-Ahram al-Targama wa al-Nashr, 1987), 303–4; Gamasi, *Mudhakirat*: 276–79, 444; Heikal, *Oktobir 1973*, 312.

22. Gamasi *Mudhakirat*, 282.

23. Sadat, *In Search of Identity*, 328; Ismail, *Amn Misr al-Qawmi*, 304; Gamasi, *Mudhakirat,* 281, 444–45; Heikal, *Oktobir 1973*, 312–13; Gamal Hamad, *al-Ma'arik al-Harbiyya 'ala al-Jabha al-Misriyya* (Cairo, Egypt: al-Zahra' lil-I'lam al-'Arabi, 1989), 81.

24. "Anwar Sadat's Uncertain Trumpet," *Newsweek*, 9 April 1973, 43–45, 49.

25. Mar'i, *Awraq Siyasiyah*, 3: 698–703; Ismail, *Amn Misr al-Qawmi*, 266–67, 297; Bassam Tibi, *Conflict and War in the Middle East, 1967–1991: Regional Dynamic and the Superpowers* (New York: St. Martin's Press, 1993), 136.

26. "Saudis Tie Oil to U.S. Policy," *Washington Post*, 19 April 1973, 1, 25; "The New Politics of Mideast Oil," *Newsweek*, 10 September 1973, 34–37; "Oil: The Miller Letter," *Newsweek*, 20 August 1973, 56–57. For a general discussion, see Donald Neff, *Warriors Against Israel: How Israel Won the Battle to Become America's Ally, 1973* (Brattleboro, VT: Amana, 1988), 110–14.

27. Trevor N. Dupuy, *Elusive Victory: The Arab-Israeli Wars, 1947-1974* (Fairfax, VA: Hero Books, 1984), 395–96.

28. For a general discussion of Israeli war plans, see Adan, *On the Banks of the Suez*, 57–58; Hanoch Bartov, *Dado: 48 Years and 20 Days* (Tel Aviv, Israel: Ma'ariv, 1981), 283–84, and map 2, "Dovecoat ."

29. The concept of "stop line" comes from Amnon Reshef, interview with author, 30 June 1994, Tel Aviv, Israel; Aryeh Keren, interview with author, 4 July 1994, Armor Museum, Israel. Both men commanded armored brigades in the Sinai during the 1973 war.

30. Arnold Sherman, *In the Bunkers of the Sinai* (New York: Sabra Books, 1971), 23.

31. Shazli, *Crossing of the Suez*, 52–53.

32. Ibid., 106. For a similar quote, see 'Abd al-Mun'im Khalil, *Hurub Misr al-Mu'asirah fi Awraq Qa'id Maydani: 1939–1945, 1956, 1962–1967, 1968–1970, 1973* (al-Qahirah: Dar al-Mustaqbal al-'Arabi, 1990), 261.

33. Muhammad Ali Fahmi, interview with author, 22 June 1994, Cairo, Egypt.

34. 'Adil Yusri, *Rihla al-Shaq al-Mu'alaqa: min Ras al-'Ush ila Ras al-Qubra* (Cairo, Egypt: Dar al-Mu'arif bi-Misr, 1974), 184. Yusri lost a leg on the third day of the war.

35. Material on the war plan comes from various sources. Hasan al-Badri, Taha al-Mandub, Ziya' al-Din Zohdi, *Harb Ramadan: al-Jawla al-'Arabiyya-al-Isra'iliyya al-Rabi'a, Oktobir 1973* (Cairo, Egypt, 1974), 34; Gamasi, *Mudhakirat*, 211, 382–84, 387–95; Muhammad 'Abd al-Ghani al-Gamasi, interviews with the author, 31 October 1993, and 25 June 1994, Cairo, Egypt; Fahmi, interview; and Murad Ibrahim al-Dessouki, interview with author,

28 June 1994, Cairo. In the 1973 war, Fahmi commanded the Air Defense Forces, and Dessouki, currently chief of the military section at the al-Ahram Strategic Studies Institute, led a mechanized infantry battalion in the 19th Infantry Division. For a recent study by an Egyptian military historian, see Hamad, *al-Ma'arik al-Harbiyya*, 68–70, 84, 101, 278.

36. Shazli, *Crossing of the Suez*, 27–39; Ismail, *Amn Misr al-Qawmi*, 323. Muhammad Hafiz Ismail was Sadat's national security adviser during this period. In his memoirs, however, Sadat suggests the plan called for a definite move to the passes with or without an operational pause, but this could be an attempt by Sadat to lay blame for the failure of reaching the passes on 14 October on the shoulders of the military. See Sadat, *In Search of Identity*, 289, and Gamasi's book cited in footnote 19.

37. Sa'ad al-Din al-Shazli, "al-Makal allathi 'arsul ila majjalla *Oktobir* fi 31/3/87: Hal 'arid al-qada al-'askariyun iqtirah al-Shazli bisahb al-alwiya al-mudarra'a," *al-Jabha* 75 (1988):9. The author received a copy of this article from Shazli, whose account was confirmed by Gamasi, interview, 31 October 1993. See also Shazli's letter published in Hamad, *al-Ma'arik al-Harbiyya*, 910–11.

38. Shazli, *Crossing of the Suez*, 244; Hamad, *al-Ma'arik al-Harbiyya*, 102–4, 359–60.

39. Numerous sources discuss the Egyptian deception plan. See Salah al-Din al-Hadidi, *Harb Oktobir fi al-Mizan al-Askari* (Cairo, Egypt: Madbuli, 1974), 53–58; Yusri, *Rihla al-Shaq al-Mu'alaqa*, 271–73; Muhummad Hassanayn Heikal, *The Road to Ramadan* (New York: Quadrangle, 1975), 16–17, 32; Shazli, *Crossing of the Suez*, 206–7; Gamasi, *Mudhakirat,* 285–88; Hasan Mustafa, *Ma'arik al-Jabhah al-Misriyya fi Harb Ramadan* (Baghdad, Iraq: no publisher, 1982), 209–32.

40. Shazli, *Crossing of the Suez*, 205.

41. Ibid., 211.

42. Shazli, *Crossing of the Suez*, 211–12; Gamal Hamad, *Min Sina 'ila al-Golan* (Cairo, Egypt: al-Zuhra' lil-'Ilam al-'Arabi, 1988), 533–34; Heikal, *Road to Ramadan*, 29–31, and *Oktobir* 1973, 313; Gamasi, *Mudhakirat*, 280.

43. Sadat, *In Search of Identity*, 246–47; Ismail, *Amn Misr al-Qawmi*, 306.

44. Alvin Z. Rubinstein, *Red Star on the Nile: The Soviet-Egyptian Influence Relationship Since the June War* (Princeton, NJ: Princeton University Press, 1977), 261.

45. Dayan, *Moshe Dayan*, 470–72; Bartov, *Dado*, 240–43.

46. Bartov, *Dado,* 258–66.

47. On the reaction of Israel's leadership during the critical hours before war, see Golda Meir, *My Life* (New York: Putnam's, 1975), 425–27; Bartov, *Dado,* 273–92; Chaim Herzog, *The War of Atonement, October 1973* (Boston: Little, Brown and Company, 1975), 52–54; Dayan, *Moshe Dayan*, 459–61; Michael Brecher, *Decisions in Crisis: Israel, 1967 and 1973* (Berkeley, CA: University of California Press, 1980), 171–203 passim; and "The Agranat Report," 74, 76–78.

48. Meir, *My Life*, 427–28.

49. Dayan, *Moshe Dayan*, 465.

50. Adan, *On the Banks of the Suez*, 4.

51. Dayan, *Moshe Dayan*, 463.

52. Adan, *On the Banks of the Suez*, 41; discussions with Israeli veterans at the U.S. Army Cornmand and General Staff College.

53. Adan, *On the Banks of the Suez*, 20, 81–82; Bartov, *Dado*, 293–94, 297; Chaim Herzog, *The Arab-Israeli Wars: War and Peace in the Middle East from the War of Independence Through Lebanon* (New York: Vintage Books, 1982), 245.

54. Arnold Sherman, *When God Judged and Men Died: A Battle Report of the Yom Kippur War* (New York: Bantam Books, 1973), 37.

55. Gabi Amir, interview with author, 6 July 1994, Tel Aviv, Israel.

56. Bartov, *Dado*, 302–4, 317–18; Herzog, *War of Atonement*, 157; Adan, *On the Banks of the Suez*, 92; Herzog, *The Arab-Israeli Wars*, 249–50.

57. Adan, *On the Banks of the Suez*, 82; Ariel Sharon, *Warrior: An Autobiography of Ariel Sharon* (New York: Simon and Schuster, 1989), 294–95.

58. Shazli, *Crossing of the Suez*, 51–52, 223, 225–26, 234–35; Hamad, *al-Ma'arik al-Harbiyya*, 156–60, 837–41; Hasan al-Badri, Taha al-Magdub, Muhammad Zia al-Din Zohdi, *The Ramadan War*, 1973 (New York: Hippocrene, 1978), 67; Herzog, *War of Atonement*, 161–62.

59. Eliezer Cohen, *Israel's Best Defense: The Full Story of the Israeli Air Force* (New York: Orbis, 1993), 342.

60. Hamad, *al-Ma'arik al-Harbiyya*, 154, 794–96; Badri, *Ramadan War*, 78–79; Bartov, *Dado*, 319; Adan, *On the Banks of the Suez*, 35; Edgar O'Ballance, *No Victor, No Vanquished* (San Rafael, CA: Presidio Press, 1978), 89–91, 97; Cohen, *Israel's Best Defense,* 333–42.

61. Adan, *On the Banks of the Suez*, 95.

62. Yuval Dvir, interview with author, Israel, Armor Museum, Israel, 4 July 1994. In the 1973 war, Dvir, then a captain, was the deputy commander of the reconnaissance battalion in the Sinai.

63. Cohen, *Israel's Best Defense*, 354.

64. Dayan, *Moshe Dayan*, 476–78; Bartov, *Dado*, 306–8; Brecher, *Decisions in Crisis,* 203–4.

65. Kissinger, *Years of Upheaval*, 471–73; William B. Quandt, *Peace Process: American Diplomacy and the Arab-Israeli Conflict Since 1967* (Washington, DC: The Brookings Institute, 1993), 152–56.

66. Shazli, *Crossing of the Suez*, 232–33; Gamasi, *Mudhakirat*, 332, 342.

67. Bartov, *Dado*, 314; Herzog, *The Arab-Israeli Wars*, 248, 250.

68. Adan, *On the Banks of the Suez*, 92, 109; Bartov, *Dado*, 318.

69. Bartov, *Dado*, 332.

70. Sharon, *Warrior*, 295.

71. Bartov, *Dado*, 324–28; Meir, *My Life*, 428–29.

72. Bartov, *Dado*, 332; Eliezer Cohen, *Israel's Best Defense*, 353–54; Martin van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 210.

73. For a discussion of this important meeting, see Adan, *On the Banks of the Suez*, 95–100; Bartov, *Dado,* 334–36; Sharon, *Warrior*, 298–300; Herzog, *War of Atonement,* 183–84; van Creveld, *Command in War,* 211–15; David Eshel, "Counterattack in the Sinai, 8 October 1973," *Military Review* (November 1993):56–57.

74. For a detailed critical analysis of the day's events and the background to them from an Israeli perspective, see Adan, *On the Banks of the Suez*, 91–164; Bartov, *Dado,* 334–72; Sharon, *Warrior*, 301–6; van Creveld, *Command in War*, 203–31; Eshel, "Counterattack in the Sinai," 54–66. See, also, Edwin L. Kennedy, "Failure of Israeli Armored Tactical Doctrine, Sinai, 6–8 October 1973," *Armor* (November-December 1990):28–31.

75. Adan, *On the Banks of the Suez*, 118–19.

76. Ibid., 107–13.

77. Ibid., 218.

78. Hamad, *al-Ma'arik al-Harbiyya*, 194.

79. Adan, *On the Banks of the Suez*, 119.

80. Hamad, *al-Ma'arik al-Harbiyya*, 195–200.

81. Bartov, *Dado*, 353–57; van Creveld, *Command in War*, 221–23. Elazar apparently gave the green light for the countercrossing during the third interruption.

82. Adan, *On the Banks of the Suez*, 120–29; Eshel, "Counterattack in the Sinai," 63.

83. Adan, *On the Banks of the Suez*, 136; van Creveld, *Command in War*, 224.

84. For material from the Israeli side on this second attack, see Keren, interview; Amir, interview; Elyashiv Shemshi, interview with author, 7 July 1994, Tel Aviv, Israel; Ariel Sharon, interview with author, 7 July 1994, Tel Aviv; Elyashiv Shemshi, *Storm in October* (in Hebrew) (Tel Aviv: Ma'arachot, 1986); Adan, *On the Banks of the Suez*, 137–40; Sharon, *Warrior,* 301–2; Bartov, *Dado*, 360; Herzog, *War of Atonement,* 188–90; van Creveld, *Command in War*, 224–25. Egyptian perspectives appear in Musa Sabri, *Watha'iq Harb Oktobir* (Cairo, Egypt: al-Maktab al-Misri al-Hadis, 1974), 530–35; Hamad, *al-Ma'arik al-Harbiyya*, 198–201; Mustafa, *Ma'arik al-Jabhah al-Misriyya*, 327–31.

85. Yusri, *Rihla al-Shaq al-Mu'alaqa*, 175; Hamad, *al-Ma'arik al-Harbiyya*, 203; discussions with several Egyptian officers in attendance at the U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1984–94.

86. Hamad, *al-Ma'arik al-Harbiyya*, 203–9; Yusri, *Rihla al-Shaq al-Mu'alaqa*, 163–85; Sabri, *Watha'iq Harb Oktobir*, 552–55.

87. Adan, *On the Banks of the Suez*, 146–48; Bartov, *Dado*, 371–72; van Creveld, *Command in War*, 226.

88. Adan, *On the Banks of the Suez*, 152.

89. Bartov, *Dado*, 367.

90. Ibid., 365–66; Terence Smith, "Fighting Is Bitter," *The New York Times,* 9 October 1973, 1; "Excerpts From Israel's News Parley," ibid.,17.

91. Adan, *On the Banks of the Suez*, 249–50.

92. Ze'ev Schiff, *October Earthquake: Yom Kippur* 1973 (Tel Aviv, Israel: University Publishing Projects, 1974), 113.

93. Gamasi, *Mudhakirat*, 353, 358.

94. Shazli, *Crossing the Suez*, 235–40.

95. Gamasi, interview, 25 June 1994; Fahmi, interview.

96. Bartov, *Dado*, 369–72; Adan, *On the Banks of the Suez*, 169–72.

97. Heikal, *Oktobir 1973*, 392–94, and *Road to Ramadan*, 220.

98. Gamasi, interview, 31 October 1993; Fahmi, interview; Gamasi, *Mudhakirat*, 382–84; Heikal, *Oktobir 1973*, 438.

99. Heikal, *Oktobir 1973*, 376–81.

100. Mahmut Gareev, interviews with author, 12 and 14 September 1995, Moscow, Russia; "Gareyev and et al. Comment on Yom Kippur War," *Foreign Broadcast Information Services, JPRS-UMA,* 11 January 1989, 102.

101. For the Egyptian side, see Hamad, *al-Ma'arik al-Harbiyya*, 222–26; Yusri, *Rihla al-Shaq al-Mu'alaqa,* 198; Mustafa, *Ma'arik al-Jabhah al-Misriyya*, 331–32. Israeli accounts include Bartov, *Dado*, 385–87; Adan, *On the Banks of the Suez,* 185–91; Sharon, *Warrior*, 306–9; Reshef, interview; Herzog, *War of Atonement*, 193–95.

102. Bartov, *Dado*, 389.

103. Gamasi, *Mudharikat,* 385; Heikal, *Oktobir 1973*, 377–78.

104. Shazli, *Crossing of the Suez*, 246–47; Gamasi, *Mudharikat*, 385–86; Gamasi, interview, 25 June 1994; Heikal, *Oktobir 1973*, 432; Hamad, *al-Ma'arik al-Harbiyya,* 289–90.

105. Bartov, *Dado*, 423.

106. Shazli, *Crossing of the Suez*, 244.

107. Hamad, *al-Ma'arik al-Harbiyya*, 303, 373–74.

108. Ibid., 282–89; This is in reference to author's discussion with an Egyptian officer from that brigade. I have been unable to find any figures on human casualties.

109. Meir, *My Life*, 432.

110. Bartov, *Dado*, 473.

111. "Israel Reports 656 Killed in War," *The New York Times*, 15 October 1973, 18.

112. Adan, *On the Banks of the Suez*, 252–54, 334; Bartov, *Dado*, 471, 476–79; Sharon, *Warrior*, 311–13; Herzog, *War of Atonement*, 209–10.

113. Material for the battle for Deversoir comes mainly from Herzog, *War of Atonement*, 210–22; Adan, *On the Banks of the Suez*, 263–73; Sharon, *Warrior*, 313–24; Reshef, interview; Dani Matt, interview with author, 6 July 1994, Tel Aviv, Israel.

114. Reshef, interview.

115. Sharon, *Warrior*, 316.

116. Adan, *On the Banks of the Suez*, 274–97; Herzog, *War of Atonement*, 223–30; Bartov, *Dado*, 482–95.

117. Dayan, *Moshe Dayan*, 534–35.

118. Hamad, *al-Ma'arik al-Harbiyya*, 345–48, 360–64, 373–75.

119. Shazli, *Crossing the Suez*, 254–60; Gamasi, *Mudharikat*, 416–17; Khalil, *Hurub Misr al-Mu'asirah,* 206; Hamad, *al-Ma'arik al-Harbiyya*, 396–413, 426–30.

120. For Egyptian accounts of this last part of the war, see Shazli, *Crossing the Suez*, 260–70; Gamasi, *Mudharikat*, 417–31; Khalil, *Hurub Misr al-Mu'asirah*, 208–31; Hamad, *al-Ma'arik al-Harbiyya*, 434–41, 469–82.

121. Israeli sources on the last part of the war include Adan, *On the Banks of the Suez*, 308–438; Bartov, *Dado*, 514–79; Herzog, *War of Atonement*, 234–50.

122. Bartov, *Dado*, 515.

123. Adan, *On the Banks of the Suez*, 368. See also Bartov, *Dado*, 557.

124. Adan, *On the Banks of the Suez*, 437.

125. Shazli, *Crossing of the Suez*, 265–67; Gamasi, *Mudhakirat*, 419–21; Gamasi, interview, 25 June 1994; Fahmi, interview; Khalil, *Hurub Misr al-Mu'asirah*, 211; and Hamad, *al-Ma'arik al-Harbiyya*, 641–42, 665. In his memoirs, Shazli wrongly identifies the meeting as taking place on the evening of 19–20 October.

126. Heikal, *Oktobir 1973*, 511; Ismail, *Amn Misr al-Qawmi*, 344–45.

127. Kissinger, *Years of Upheaval*, 532–68; Quandt, *Peace Process*, 166–71; Dayan, *Moshe Dayan*, 537–38; Neff, *Warriors Against Israel*, 241–74.

128. Dayan, *Moshe Dayan*, 538–39.

129. Adan, *On the Banks of the Suez*, 401–2.

130. Brecher, *Decisions in Crisis*, 173, 223–24.

131. Kissinger, *Years of Upheaval*, 568–611; Quandt, *Peace Process*, 171–77; Barry M. Blechman and Douglas M. Hart, "The Political Utility of Nuclear Weapons: The 1973 Middle East Crisis," *International Security* 7 (Summer 1982):132–56; Neff, *Warriors Against Israel*, 274–89.

132. For treatments of the battle for Suez City from different perspectives, see Adan, *On the Banks of the Suez*, 409–25; Hamad, *al-Ma'arik al-Harbiyya*, 535–86; Glenn F. Rogers, "The Battle for Suez City," *Military Review* (November 1979):27–33.

133. For an analysis of this paradox, see Charles S. Lieman, "The Myth of Defeat: The Memory of the Yom Kippur War in Israeli Society," *Middle Eastern Studies* 29 (July 1993):399–418.

134. Insight Team (Sunday Times, London), *Insight on the Middle East War* (London: Times Newspaper Limited, 1974), 228.

135. Reuven Gal, interview with author, 3 July 1994, Israel; Reuven Gal, *A Portrait of the Israeli Soldier* (New York: Greenwood Press, 1986), 209–19. Gal served for five years as chief psychologist in the Israel Defense Forces, including the period under discussion.

136. Mahmud Riyad, *Mudhakirat Mahmud Riyad I: al-Bahth 'an al-Salam wa al-Sina' al-Sharq al-'Ust* (Beirut, Lebanon: al-Mu'essah al-'Arabiyya lil-Dirasat wa al-Nashr, 1987), 477.

137. Eric Marsden, "Israel's Battle of the Generals Hots Up," *The (London) Sunday Times*, 10 February 1974, 7.

138. For a published version in English, see "The Agranat Report: The First Partial Report," *The Jerusalem Journal of International Relations* 4/1 (1974), 69–90. See also next note.

139. "Excerpts from Israeli Report and Elazar Letter," *The New York Times*, 4 April 1974, 12. The sins of overconfidence and arrogance have been admitted by many Israeli officers in attendance at the U.S. Army Command and General Staff College, Fort Leavenworth, 1985–94.

140. For brief discussions of these military changes after the 1973 war, see Anthony H. Cordesman and Abraham R. Wagner, *The Lessons of Modern War, Volume I: The Arab-Israeli Conflicts, 1973–1989* (Boulder, CO: Westview Press, 1990), 109–14; Gunther E. Rothenberg, *The Anatomy of the Israeli Army: the Israel Defence Force, 1948–1978* (New York: Hippocrene Books, 1979), 213–24.

141. Paul H. Herbert, *Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5,* Operations (Fort Leavenworth, KS: Combat Studies Institute, 1988), 25–36, 68–72.

142. See endnote number two.

143. Headquarters of the Army, FM 100-5, *Operations* (Washington, DC: Department of the Army, June 1993), chapter 1, 5.

Bibliography



Unpublished Sources

Adan, Avraham. Interview with the author. Tel Aviv, Israel, 30 June 1994. (Adan commanded the 162d Armored Division.)

Amir, Gabi. Interview with the author. Tel Aviv, Israel, 6 July 1994. (Amir commanded the Armor School's armored brigade.)

al-Dessouki, Murad Ibrahim. Interview with the author. Cairo, Egypt, 28 June 1994. (al-Dessouki commanded a mechanized infantry battalion.)

Dvir, Yuval. Interview with the author. Armor Museum, Israel, 4 July 1994. (Dvir was the deputy commander of a reconnaissance battalion.)

Fahmi, Muhammad Ali. Interview with the author. Cairo, Egypt, 22 June 1994. (Fahmi was commander of the Egyptian Air Defenses, 1968–74.)

Gal, Reuven. Interview with the author. Israel, 3 July 1994. (Gal was the chief psychologist in the Israeli Army during the 1973 War.)

al-Gamasi, Muhammad 'Abd al-Ghani. Interviews with the author. Cairo, Egypt, 31 October 1993 and 25 June 1994. (al-Gamasi was the Egyptian director of operations.)

Gareev, Mahmut. Interviews with the author. Moscow, 12 and 14 September 1995. (Gareev was the chief of staff of the Soviet military mission in Egypt, 1969–72.)

Keren, Aryeh. Interview with the author. Armor Museum, Israel, 4 July 1994. (Keren commanded an armored [reserve] brigade.)

Matt, Danni. Interview with the author. Tel Aviv, Israel, 6 July 1994. (Matt commanded the paratroop brigade in the countercrossing operation.)

Reshef, Amnon. Interview with the author. Tel Aviv, Israel, 30 June 1994. (Reshef commanded an armored brigade.)

Sharon, Ariel. Interview with the author. Tel Aviv, Israel, 7 July 1994. (Sharon commanded the Israeli 143d Armored Division.)

Shemshi, Elyashiv. Interview with the author. Tel Aviv, Israel, 7 July 1994. (Shemshi commanded an armored [reserve] battalion.)

Tal, Israel. Interview with the author. Tel Aviv, Israel, 3 July 1994. (Tal commanded an armored division in the 1967 war and was director of operations in the 1973 war.)

Arabic Sources

al-Badri, Hasan, Taha al-Magdub, and Muhammad Zia al-Din Zohdi. *Harb Ramadan: al-Gawla al-'Arabiyya -al-Isra'iliyya al-Rabia, Oktobir 1973* (The Ramadan War: the fourth Arab-Israeli conflict, October 1973). Cairo, Egypt, 1974.

al-Gamassi, Muhammad 'Abd al-Ghani. *Mudhakirat al-Gamassi: Harb Oktobir 1973* (The memoirs of Gamassi: The War of October 1973). Paris: al-Munshurat al-Sharqiyya, 1990. (al-Gamassi was the Egyptian director of operations.)

al-Hadidi, Salah al-Din. *Harb Oktobir fi al-Mizan al-'Askari* (The October War in the military balance). Cairo, Egypt: al-Nashr Maktabah Madbuli, 1974. (al-Hadidi was the commandant of the Nasir Higher Academy and commander of the Central Military District, Cairo, Egypt.)

Hamad, Gamal. *Min Sina 'ila al-Golan* (From Sina to the Golan). Cairo, Egypt: al-Zuhra' lil'I'lam al-'Arabi, 1988.

_____. *al-Mu'arik al-Harbiyya 'ala al-Jebha al-Misriyya: Harb Oktobir 1973 al-Ashr min Ramadan* (Military battle on the Egyptian front: The October War of 10 Ramadan). Cairo, Egypt: al-Zuhra' lil-'Ilam aal-Arabai, 1989.

Heikal, Muhammad Hassanayn. *Oktobir 1973: al-Silah wa al-Siyasat* (The October War: weapons and politics). Cairo, Egypt: al-Ahram, 1993.

Ismail, Muhammad Hafez. *Amn Misr al-Qawmi fi 'Asr al-Tahaddiyat* (Egypt's national security in the age of limitations). Cairo, Egypt: Markaz al-Ahram lil-Targama wa al-Nashr, 1987. (Ismail was Sadat's national security adviser before and during the 1973 war.)

Khalil, 'Abd al-Mun'im. *Hurub Misr al-Mu'asirah fi Awraq Qa'id Maydani: 1939–1945, 1956, 1962–1967, 1968–1970, 1973* (Wars of contemporary Egypt from the papers of a field commander). al-Qahirah: Dar al-Mustaqbal al-'Arabi, 1990. (Khalil was an Egyptian major general who assumed command of the Second Field Army on 16 October 1973.)

Mar'i, Sayyid. *Awraq Siyasiyah* (Political papers). Three vols. Cairo, Egypt: al-Maktab al-Misri al-Hadith, 1979. (Mar'i was a senior Egyptian official in both the Nasser and Sadat regimes.)

Mustafa, Hasan. *Ma'arik al-Jabhah al-Misriyya fi Harb Ramadan* (Battles on the Egyptian front in the Ramadan War). Baghdad, Iraq, 1982.

Riyad, Mahmud. *Mudhakirat Mahmud Riyad 1948–1978, I, al-Bahth 'an al-Salam wa al-Sira' al-Sharq al-'wst* (Memoirs of Mahmud Riyad 1948–78, 1, the search for peace and the struggle in the Middle East). Beirut, Lebanon: al-Mu'essah al-'Arabiyya lil-Dirasat wa al-Nashr, 1987. (Riyad was Egypt's foreign minister, 1964–72.)

Sabri, Musa. *Watha'iq al-Harb Oktobir* (Documents of the October War). Cairo, Egypt: al-Maktab al-Misri, 1974.

Yusri, Adil. *Rihla al-Shaq al-Mu'alaqa: min Ras al-'Ush ila Ras al-Qubra* (Journey of the cut leg: From Ras al-'Ush to the bridgehead). Cairo, Egypt: Dar al-Mu'arif bi-Misr, 1974. (Yusri was the Egyptian brigadier general in command of the 112th Infantry Brigade from the 16th Infantry Division.)

Other Languages

Adan, Avraham. *On the Banks of the Suez*. Novato, CA: Presidio Press, 1980. (Adan was the commander of Israeli 162d Armored Division.)

"The Agranat Report: The First Partial Report." *The Jerusalem Journal of International Relations* 4 (1979):69–90.

al-Badri, Hasan, Taha al-Magdub, and Muhammad Zia al-Din Zohdi. *The Ramadan War, 1973*. New York: Hippocrene Books, 1976. (This is the Egyptians' semiofficial history of the war.)

Bartov, Hanoch. *Dado: 48 Years and 20 Days*. Tel Aviv, Israel: Ma'ariv, 1981.

Beaufre, André. "Une Guerre Classique Moderne: La Guerre Israelo-Arabe." *Strategie* (July-August 1967):7–25.

Blechman, Barry M., and Douglas M. Hart. "The Political Utility of Nuclear Weapons: The 1973 Middle East Crisis." *International Security* 7 (Summer 1982):132–56.

Brecher, Michael, with Benjamin Geist. *Decisions in Crisis: Israel, 1967 and 1973*. Berkeley, CA: University of California Press, 1980.

Cohen, Eliot A., and John Gooch. *Military Misfortunes: The Anatomy of Failure in War*. New York: The Free Press, 1990.

Cohen, Eliezer. *Israel's Best Defense: The Full Story of the Israeli Air Force*. New York: Orbis, 1993. (Cohen was the commander of the Israeli air base in Bir Gifgafa.)

Cordesman, Anthony H., and Abraham R. Wagner. *The Lessons of Modern War, Volume I: The Arab-Israeli Conflicts, 1973–1989*. Boulder, CO: Westview Press, 1990.

Dayan, Moshe. *Moshe Dayan: The Story of My Life*. New York: William Morrow, 1976.

Dupuy, Trevor. *Elusive Victory: The Arab-Israeli Wars, 1947–1973*. Reprint, 1978. Fairfax, VA: Hero Books, 1984.

Eshel, David. "Counterattack in the Sinai: 8 October 1973." *Military Review* (November 1993):54–66.

Gal, Reuven. *A Portrait of the Israeli Soldier*. New York: Greenwood, 1986. (Gal was the chief psychiatrist of the Israel Defense Forces.)

"Gareyev and et al. Comment on Yom Kippur War." *Foreign Broadcasting Information Service, JPRS-UMA,* 11 January 1989:99–102.

Gawrych, George W. *Key to the Sinai: The Battles of Abu Ageila in the 1956 and 1967 Arab-Israeli Wars*. Fort Leavenworth, KS: Combat Studies Institute, 1990.

Heikal, Muhammad Hassanayn. *The Road to Ramadan*. New York: Quadrangle, 1975.

_____. "The Strategy of Attrition." In *The Arab-Israeli Reader.* Ed.Walter Laqueur and Barry Rubin. 4th ed. New York: Facts on File, 1985, 414–27.

Herbert, Paul H. *Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5,* Operations. Fort Leavenworth, KS: Combat Studies Institute, 1988.

Herzog, Chaim. *The Arab-Israeli Wars: War and Peace in the Middle East from the War of Independence Through Lebanon*. New York: Vintage Books, 1982.

_____. *The War of Atonement, October 1973*. Boston: Little, Brown and Company, 1975.

Howard, Michael, and Robert Hunter. *Israel and the Arab World: The Crisis of 1967*. London: The Institute for Strategic Studies, 1967.

Insight Team. *Insights on the Middle East War*. London: Sunday Times, 1974.

Kennedy, Edwin L. "Failure of Israeli Tactical Doctrine, Sinai, 6–8 October 1973." *Armor* (November-December 1990):28–31.

Katz, Samuel M. *Soldier Spies: Israeli Military Intelligence*. Novato, CA: Presidio, 1992.

Kissinger, Henry. *Years of Upheaval*. Boston: Little, Brown, 1982.

Korn, David A. *Stalemate: The War of Attrition and Great Power Diplomacy in the Middle East, 1967–1970*. Boulder, CO: Westview Press, 1992.

Liebman, Charles. "The Myth of the Yom Kippur War in Israeli Society." *Middle Eastern Studies* (July 1993):399–418.

Meir, Golda. *My Life*. New York: Putnam's, 1975. (Meir was the Israeli prime minister during the 1973 war.)

Mutawi, Samir A. *Jordan in the 1967 War*. Cambridge, MA: Cambridge University Press, 1987.

Neff, Donald. *Warriors Against Israel: How Israel Won the Battle to Become America's Ally, 1973*. Brattleboro, VA: Amana, 1988.

O'Ballance, Edgar. *No Victor, No Vanquished: The Yom Kippur War*. San Rafael, CA: Presidio Press, 1978.

Quandt, William B. *Peace Process: American Diplomacy and the Arab-Israeli Conflict Since 1967*. Washington, DC: Brookings Institution, 1993. (Quandt was a member of the National Security Council during the 1973 war.)

Rabin, Yitzak. *The Rabin Memoirs*. Boston: Little, Brown, 1979. (Rabin was the Israeli chief of the General Staff in the 1967 war.)

Rogers, Glenn F. "The Battle for Suez City." *Military Review* (November 1979):27–33.

Rothenberg, Gunther E. *The Anatomy of the Israeli Army: The Israel Defence Force, 1948–78.* New York: Hippocrene Books, 1979.

Rubinstein, Alvin Z. *Red Star on the Nile: The Soviet-Egyptian Influence Relationship Since the June War.* Princeton, NJ: Princeton University Press, 1977.

Sadat, Anwar. *In Search of Identity.* New York: Harper and Row, 1977.

Schiff, Ze'ev. *October Earthquake: Yom Kippur 1973.* Tel Aviv, Israel: University Publishing Projects, 1974.

Sharon, Ariel. *Warrior: The Autobiography of Ariel Sharon.* New York: Simon and Schuster, 1989. (Sharon commanded the Israeli 143d Armored Division.)

al-Shazli, Sa'ad. *The Crossing of the Suez.* San Francisco: American Mideast Research, 1980. (al-Shazli was the Egyptian chief of the General Staff.)

Shemshi, Elyashiv. *Storm in October* (in Hebrew). Tel Aviv, Israel: Ma'arachot, 1986. (Shemshi commanded an Israeli armored [reserve] battalion.)

Sherman, Arnold. *In the Bunkers of the Sinai.* New York: Sabra Books, 1971.

_____. *When God Judges and Men Died: A Battle Report of the Yom Kippur War.* New York: Bantam Books, 1973.

Tibi, Bassam. *Conflict and War in the Middle East, 1967–1991: Regional Dynamic and the Superpowers.* New York: St. Martin's Press, 1993.

van Creveld, Martin. *Command in War.* Cambridge, MA: Harvard University Press, 1985.

Newspapers and Magazines

al-Ahram (Cairo).

London Times.

New York Times.

Newsweek.

Washington Post.

Sources Used but Not Cited

Amos, John W. *Arab-Israeli Military/Political Relations: Arab Perceptions and the Politics of Escalation.* New York: Pergamon Press, 1979.

Armstrong, G. P. "Egypt." In *Fighting Armies: Antagonists in the Middle East.* Ed. Richard A. Gabriel. Westport, CT: Greenwood Press, 1983, 147–65.

Avidor, Gideon. "From Brigade to Division." *Military Review* 58 (October 1978):64–71.

Barnett, Michael N. *Confronting the Costs of War: Military Power, State, and Society in Egypt and Israel.* Princeton, NJ: Princeton University Press, 1992.

Bar-Siman-Tov, Ya'acov. "The Bar Lev Line Revisted." *Journal of Strategic Studies* 11 (June 1988):149–76.

_____. *Israeli-Egyptian War of Attrition, 1969–1970: A Case Study in Limited Local War.* New York: Columbia University Press, 1980.

Eshel, David. *Chariots of Fire: The Story of the Israeli Armor Corps.* London: Brassey's, 1989.

Gawrych, George W. "The Egyptian High Command in the 1973 War." *Armed Forces and Society* 13 (Summer 1987):535–46.

_____. "The Egyptian Military Defeat of 1967." *Journal of Contemporary History* 26 (1991):277–305.

Glassman, Jon. *Arms for Arabs: The Soviet Union and War in the Middle East.* Baltimore, MD: The Johns Hopkins University Press, 1975.

Laqueur, Walter. *Confrontation: The Middle East and World Politics.* New York: Bantam Books, 1974.

Luttwak, Edward N., and Dan Horowitz. *The Israeli Army.* New York: Harper and Row, 1975.

Peri, Yoram. *Between Ballots and Bullets: Israeli Military in Politics.* London: Cambridge University Press, 1983.

Ramadan, 'Abd al-'Aziz. *Harb Oktobir fi Mahkama al-Tarih* (The October War in the judgment of history). Cairo, Egypt: Madbuli, 1984.

Riad, Mahmud. *The Struggle for Peace in the Middle East.* New York: Quartet Books, 1981. (Riad was the Egyptian foreign minister 1964–72.)

Schiff, Ze'ev. *A History of the Israeli Army: 1874 to the Present.* New York: Macmillan, 1985.

Seale, Patrick. *Asad of Syria: The Struggle for the Middle East.* Berkeley, CA: University of California Press, 1988.

Sheehan, Edward R. F. *The Arabs, Israelis, and Kissinger: A Secret History of American Diplomacy in the Middle East.* New York: Reader's Digest Press, 1976.

Ulanoff, Stanley M., and David Eshel. *The Fighting Israeli Air Force.* New York: Arco, 1985.

Weizman, Ezer. *Battle for Peace.* New York: Bantam, 1981. (Weizman was the Israeli director of operations in the 1967 war and the defense minister present at Camp David.)

Weller, Jac. "Infantry and the October War: Foot Soldiers in the Desert." *Army* (August 1974):21–26.

Whetton, Lawrence L. *The Canal War: Four-Power Conflict in the Middle East.* Cambridge, MA: MIT Press, 1974.

Yonay, Ehud. *No Margin for Error: The Making of the Israeli Air Force.* New York: Pantheon Books, 1993.



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SYNOPSIS OF LEAVENWORTH PAPER 21

Armies appear to learn more from defeat than victory. In this regard, armed forces that win quickly, decisively, and with relative ease face a unique challenge in attempting to learn from victory. The Israel Defense Forces certainly fell into this category after their dramatic victory over the combined armies of Egypt, Jordan, and Syria in the Six Day War of June 1967.

This study analyzes the problems that beset Israel in the aftermath of its decisive victory in the Six Day War over the Arabs. In the 1973 War, Anwar Sadat, Egypt's president, was able to exploit Israeli vulnerabilities to achieve political success through a limited war. An important lesson emerges from this conflict. A weaker adversary can match his strengths against the weaknesses of a superior foe in a conventional conflict to attain strategic success. Such a strategic triumph for the weaker adversary can occur despite serious difficulties in operational and tactical performance.

The author suggests a striking parallel between the military triumphs of Israel in 1967 and the United States in 1991. In both cases, success led to high expectations. The public and the armed forces came to expect a quick and decisive victory with few casualties. In this environment, a politically astute opponent can exploit military vulnerabilities to his strategic advantage. Sadat offers a compelling example of how this can be done.