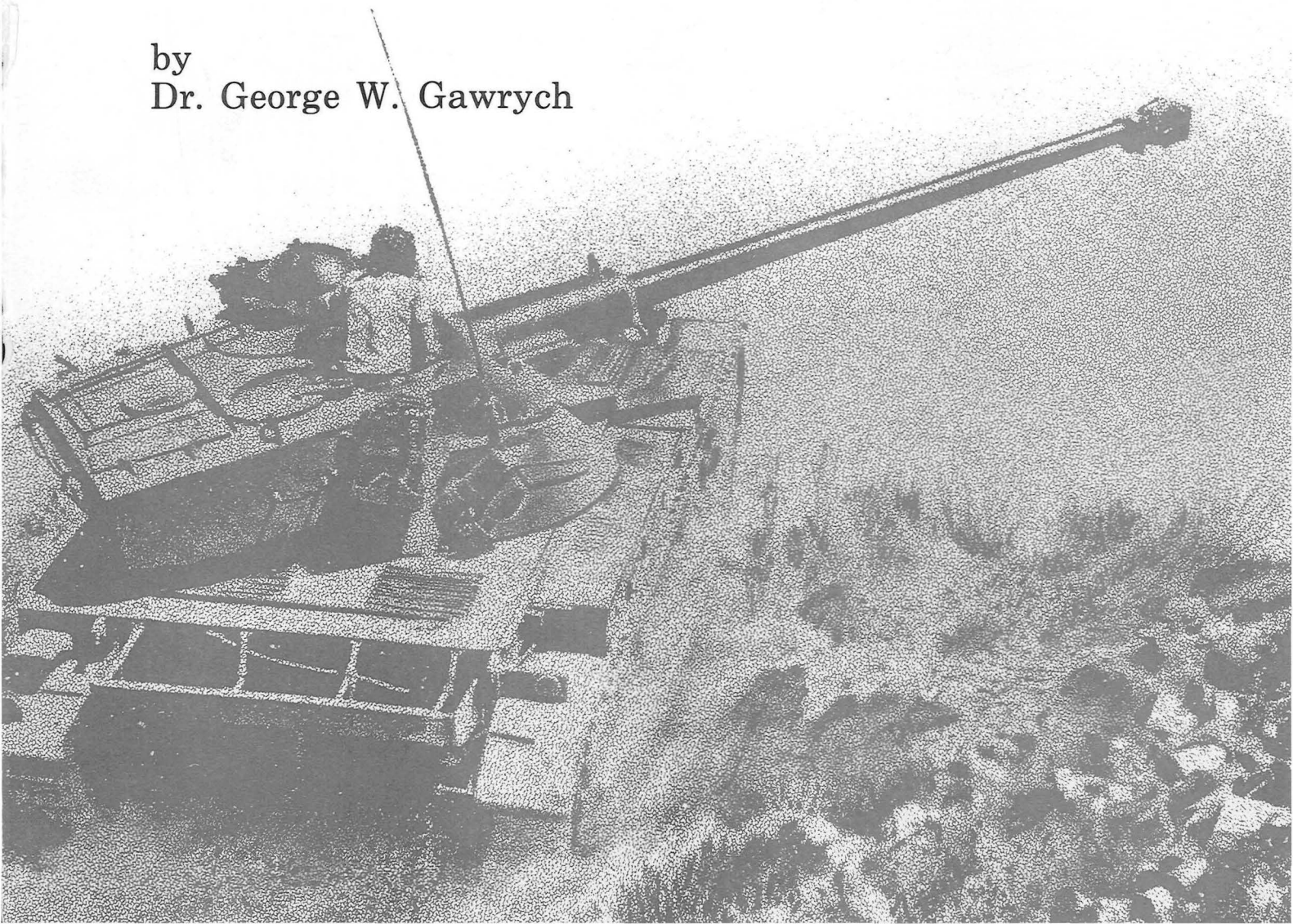
COMBAT STUDIES INSTITUTE
Research Survey No. 7

Key to the Sinai:

The Battles for Abu Ageila in the 1956 and 1967 Arab-Israeli Wars

by
Dr. George W. Gawrych



FOREWORD

Situated between the Suez Canal and Israel and marked by the harsh environment of the central Sinai lies Abu Ageila, an unprepossessing area of low ridges and hills through which passes the best-surfaced road in the peninsula. Owing to its location on the central route, close to the Israeli-Egyptian border, Abu Ageila became the key to the Sinai in the Arab-Israeli wars of 1956 and 1967. The struggle for this barren land in two wars provides an epic story of battle and reveals the influence of experience on the preparation for and conduct of war.

In both the 1956 and 1967 wars, Abu Ageila was the main gateway to the Sinai for the Israel Defense Forces. Yet, as Dr. George W. Gawrych demonstrates, there were marked differences between Egyptian and Israeli war plans, preparations, operations, and results in the two battles for the area. In 1956, Israel carried the burden of a constricting alliance with Britain and France and faced other extensive military problems. The result was that Israel fought a difficult and costly battle for Abu Ageila. In contrast, in 1967, the Israel Defense Forces developed a brilliant operational plan and achieved effective unit command and control and attained a decisive victory.

Based on extensive research, including personal interviews with Israeli commanders and briefings by Egyptian military historians, *Key to the Sinai* is a crisp battle narrative of desert warfare and a systematic historical analysis of two armies confronting the changing terms of battle. Students of AirLand Battle doctrine will find reading this Research Survey a stimulus to meeting the challenges of modern warfare.



RICHARD M. SWAIN
Colonel, Field Artillery
Director, Combat Studies Institute

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INTRODUCTION

Between the 1956 and 1967 wars, the Israel Defense Forces (IDF) underwent a professionalization and maturation that culminated in the brilliant victory of the Six Day War. In 1956, the IDF had failed to defeat decisively the Egyptian Army in battle: the Egyptians withdrew from the Sinai only after the British and French had commenced their bombardment of Egyptian airfields in support of Israeli operations. Eleven years later, however, the Israelis single-handedly defeated the combined armed forces of Egypt, Jordan, and Syria on three fronts. With the Israeli occupation of the Sinai, Gaza Strip, West Bank, and Golan Heights, Israel increased its size fourfold. In terms of maneuver warfare and deep operations, the most impressive victory occurred on the Sinai front in 1967. There, in only four days, the Israelis defeated an Egyptian force of 100,000 men and 900 tanks by employing a detailed plan based on the synchronization of division and brigade operations.

This study analyzes the reasons behind the stunning Israeli success in the Sinai by focusing on the 1956 and 1967 battles of Abu Ageila. Although scrutiny of these two battles fails to explain everything, a critical analysis of them does provide new insights concerning the IDF's preparedness, operational planning, and tactical execution in each conflict. In both wars, Abu Ageila constituted the key Egyptian defensive position in the eastern Sinai. The Israelis experienced numerous problems at Abu Ageila in the 1956 Sinai campaign and after four days abandoned their assault. Based in part on lessons derived from the 1956 experience, the IDF made numerous changes during the interwar years that led to a dramatically different outcome in 1967. In the second war, the Israelis seized Abu Ageila in less than twenty-four hours in an exemplary night operation that employed combined arms.

Although analysis in this work focuses on the IDF, the Egyptian Army also receives considerable attention. In this regard, the 1967 battle is most instructive, for the Egyptian Army's internal problems came to a head at Abu Ageila, their strongest defensive position in the Sinai.

A Note on Sources

A study of this nature poses certain difficulties for the historian. Although the passage of time is sufficient to permit a reasonable perspective on the events of 1956 and 1967, not enough time has elapsed to persuade Egypt and Israel to open their military archives to foreign researchers. Nonetheless, this study has benefited from the willingness of some officers and scholars to discuss the military past in ways that allow a reexamination of previous analyses of both engagements.

Much of the early published literature on the Arab-Israeli wars and on the battles of Abu Ageila is of an impressionistic, journalistic bent, written in the immediate aftermath of one of the conflicts. Subsequent analyses of the Arab-Israeli wars have tended to echo earlier descriptions and interpretations without critically reevaluating assumptions and data. In short, the field suffers from an acute shortage of serious and intensive studies of military operations concerning the Arab-Israeli wars.

To obtain detailed information on the battles of Abu Ageila, I traveled to Israel and Egypt in late 1986. The IDF, although declining to offer official assistance, permitted me to interview former Israeli commanders, who proved quite willing to discuss their involvement in both battles. I then used primary and secondary Israeli literature to gauge the value of the information I obtained in these interviews—which occurred some twenty to thirty years after the action.

In Egypt, in response to questions I submitted in advance, Egyptian military historians (with the ranks of brigadier general and colonel) briefed me using archival materials as their reference. In a subsequent meeting, we discussed specific points that had emerged during our earlier discussions. The Egyptian senior officers were candid in discussing their major mistakes in the 1956 and 1967 battles, and this candor has allowed me to make a critical and comprehensive examination of the subject.

Egyptian authorities requested that the names of individuals and the organizations involved in the briefings not be divulged in this study. Consequently, the information obtained from the Egyptians appears in the footnotes as "Official Egyptian Military Sources" or "*OEMS.*" Although the Egyptian military declined permission for me to conduct personal interviews with retired senior officers or to visit the site of Abu Ageila, I have profited greatly from the personal accounts of a number of former Egyptian generals, in particular those of the chief of the General Staff and the front commander in the 1967 war. These memoirs, in Arabic, add perspective to the official position of the Egyptian Armed Forces today.

Chapter 1

Toward the 1956 War

> If it were not for the Anglo-French operation, it is doubtful whether Israel would have launched her campaign; and if she had, its character, both military and political, would have been different.
>
> — Moshe Dayan[1]

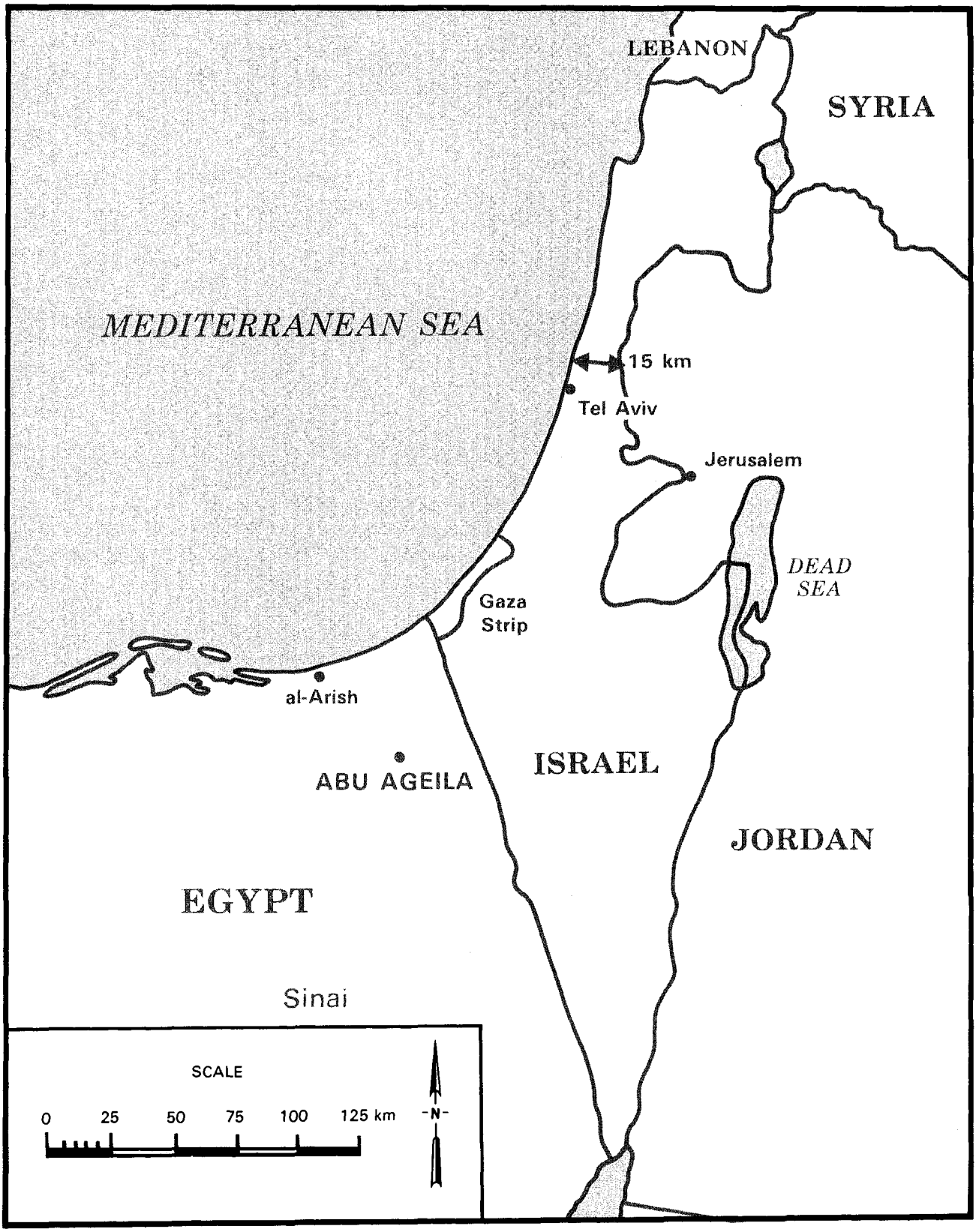
In the 1956 war, Israel's secret agreement with Britain and France for a joint military operation against Egypt virtually guaranteed the Israel Defense Forces (IDF) a victory in the Sinai. The Egyptians would eventually find themselves engaged in a two-front war against three states, two of them European powers. However, the coalition with France and Britain that offered the Israeli high command rich operational and tactical opportunities also forced the Israeli General Staff to alter its initial war plans.

By the terms of the agreement, the IDF was to open the war with the drop of an elite paratroop force at the Mitla Pass, deep behind forward Egyptian defenses in the Sinai. This opening military move forced the IDF to commit sizable forces deep into the Sinai to reinforce the paratroopers isolated at Mitla. Furthermore, political constraints stemming from the secret agreement forced the Israeli high command to adopt a tentative, piecemeal approach to the campaign in other parts of the Sinai. These two factors, coupled with the fact that the IDF remained mired in a major doctrinal debate, led to operational problems at the battle of Abu Ageila.

Abu Ageila as Key Terrain

Lacking strategic depth and facing the prospect of fighting on several fronts (see map 1), the IDF was compelled to develop doctrine that emphasized the offense. Israeli military strategy called for transferring any fight into the opponent's territory as soon as possible. Otherwise, a war could lead to much damage of Israel's population centers. To avoid this occurrence, the Israeli Army developed by 1956 a style of warfare intended to foster an aggressive, offensive-minded spirit throughout its armed forces. Training of officers and soldiers emphasized initiative, improvisation, maintenance of aim, and flexibility as ingredients necessary to defeat the enemy's armies.

On the offense, however, because of economic and demographic factors, Israel could ill afford a conflict lasting weeks. Israel's economy was too fragile for a major war effort on their own, and the Israelis were far outnumbered by the Arabs on their borders. In 1956, for example, Israel's Jewish population numbered only 1.6 million, while Egypt had over 20 million inhabitants. A



Map 1. Israel's geostrategic situation, 1949—67

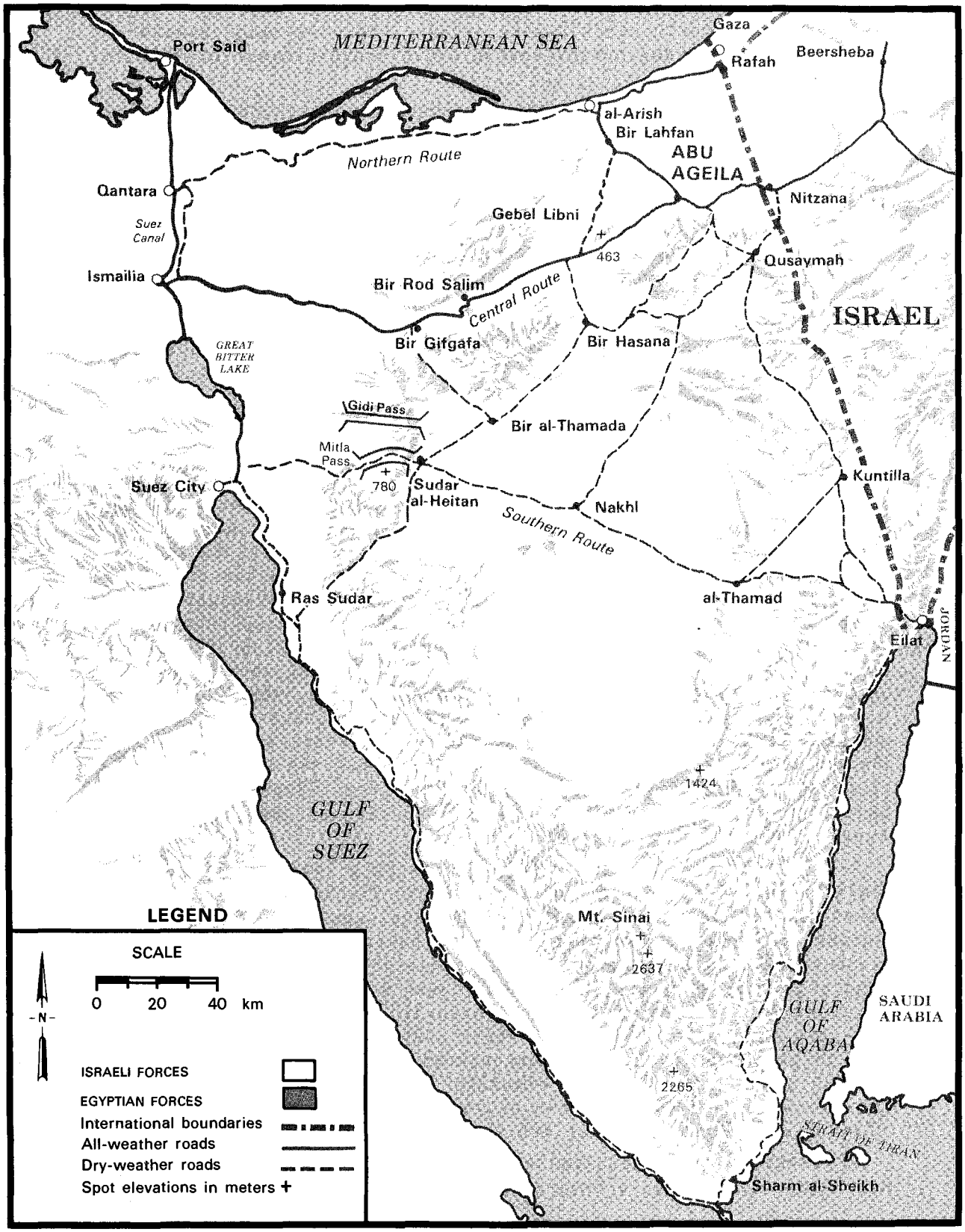
long war would quickly strain Israel's economy and cause many casualties—thereby threatening the cohesiveness of Israeli society. Hence, Israel must defeat her enemies quickly.

Of the three fronts facing Israel, the Sinai offered the Israeli Army the greatest possibility for rapid maneuver warfare. But to win an Arab-Israeli war, the Israelis had to break through the Egyptian defenses that guarded the limited number of avenues of advance in the peninsula. Since Egypt's political leadership wished to avoid abandoning any territory to Israel in the first phase of an armed conflict, the Egyptian high command maintained defensive positions forward in eastern Sinai, close to the Israeli border. In assessing terrain and avenues for maneuver, senior Egyptian officers considered the area around Abu Ageila a key to their static defenses in both the 1956 and 1967 wars (see map 2). If Israel was to accomplish a quick victory in the Sinai, it must seize this critical piece of terrain sitting astride the main avenue of approach to the peninsula.

The Sinai Peninsula, an area of approximately 61,000 square kilometers, consists of a combination of desert and mountain ranges, with a degraded soil surface, sand-dune expanses, and salinized, dry watercourses called wadis. In this harsh desert environment, human habitation is so sparse that demographic factors have never been a major consideration for armies. Estimates of the peninsula's population during the period of this study vary from as low as 100,000 to as high as 400,000, with a good number of the Bedouin inhabitants engaged in their traditional nomadic way of life. The only town of significance was al-Arish, located in the north on the Mediterranean Sea. Functioning as the administrative center and chief commercial point of the peninsula, al-Arish contained a population of around 15,000 in 1956, which rose to 40,000 by 1967. All other settlements, including the town of Qantara on the Suez Canal and a handful of mining and fishing towns and villages in the western and southern areas of the Sinai, lacked any major military significance, for they stood outside the main corridors for maneuver warfare. For any campaign in eastern and central Sinai, only the town of al-Arish presented an urban obstacle, and a minor one at that. Because of the harsh terrain and lack of settlements, war in the Sinai has been largely a battle for routes of advance.

For the purposes of military planners, the Sinai Peninsula forms three distinct regions. The northern sector, which hugs the Mediterranean coast, is desert country, with open stretches of sand and sand dunes. This loose or shifting sand makes many areas impassable for vehicles. Occasional ranges of low hills dot the landscape, offering numerous possibilities for the establishment of good defensive positions. The only road in this northern region runs along the railroad from Gaza to Qantara on the Suez Canal. Once a camel track, this northern route became a surfaced road by 1954, although the surface in some parts was still rather poorly maintained. Because the area between al-Arish and the Suez Canal is vulnerable to choke points that slow down the movement of forces, the Israelis avoided this northern route in their main efforts to reach the canal in the 1956 and 1967 wars.

The southern half of the Sinai is mountainous, barren, and desolate. Steep mountain ranges occupy a large part of the region, the most famous peak



Map 2. The Sinai

being Mount Sinai (Gebel Musa in Arabic), the traditional site where Moses received the Ten Commandments. Over past ages, great watercourses issuing from the mountains have eroded deep, steep-sided ravines that severely limit travel in the area. Existing camel routes and tracks are rough, and the use of motor vehicles is difficult and susceptible to ambushes. Although such inhospitable terrain makes maneuver warfare virtually impossible, both the Israeli and Egyptian Armies have had to develop contingency plans for the southern region because of the strategic importance of Sharm al-Sheikh, which overlooks the Strait of Tiran, the body of water linking Israel with the Indian Ocean by way of the Red Sea. Closing the strait would sever Israel's only direct link with the East through the port of Eilat, an action which to many Israelis would constitute a legitimate cause for war.

Unlike the northern and southern sectors, the central region offers attackers the best opportunities for maneuver and therefore has preoccupied the attention of both the Egyptian and Israeli Armies. This arid country forms a giant, formidable escarpment composed largely of limestone, with patches of loose, heavy sand alternating with hard, rocky surfaces. Compared with the northern region, the central sector has fewer stretches of sand and thus provides the best possibilities for rapid movement across the peninsula from east to west and vice versa. Militating against unrestricted maneuver warfare, the area has numerous, deep, dried-up watercourses and steep hills of jagged stone. In the western part of the peninsula stands a mountain range running north

Photo not available.

and south, and a few narrow defiles allow units to move through this natural barrier, the most important of these being the twenty-four kilometer long Mitla Pass.

Two main routes traverse the central region of the Sinai from east to west. The southern route runs from Eilat in Israel through Nakhl and the Mitla Pass to Port Tewfik on the Suez Canal. Practicing Muslims, on their way to Mecca and Medina to perform their obligatory pilgrimmages, have used this dirt road (known in Arabic as Darb al-Hajj or Pilgrim's Way). In 1956, the road was poor in some places.

The central route has been the best-surfaced road in the entire peninsula. Beginning at the Egyptian-Israeli border, this all-asphalt highway cuts through Abu Ageila, continues on to Bir Gifgafa, and ends up in Ismailia, after crossing the Suez Canal at the Firdan bridge. The Egyptians employed the central route as the main supply route for their forces stationed in the eastern Sinai close to the border with Israel. This made military sense, for the central region afforded the IDF the best possible avenues of attack to the Suez Canal, and the Egyptian military understood the imperative need to react quickly in the area.

Thus, Abu Ageila gained strategic importance because of its location on the central route close to the Israeli-Egyptian border. Here, the Egyptians could develop excellent defensive positions on a number of low ridges and hills that overlooked generally flat terrain. The Egyptian high command developed Abu Ageila into a key link in a defensive system in the eastern Sinai that also included a north-south road network. A good gravel road connected al-Arish with Abu Ageila, while a loose, sandy-surface track just east of Abu Ageila headed south to either Qusaymah or the geographical center of the Sinai near Nakhl. Vehicles with four-wheel drives could negotiate these tracks in 1956—but with some difficulty. If Israel was to make a major thrust to the canal, it must be able to continuously resupply its rapidly advancing combat troops. Thus, Israel must seize Abu Ageila early in the campaign, eliminating an Egyptian threat to the central route. Moreover, in a quick conquest of the Sinai, Israeli military planners had to integrate the tactical battle at Abu Ageila with a series of other coordinated military actions designed to defeat the Egyptian Army.

The Relegation of the Sinai to a Secondary Front

Since the creation of the state of Israel and the consequent 1948 Arab-Israeli War, defense of the Sinai, more than any other front, has been the Egyptian Armed Forces' primary concern. But when President Gamal Abd al-Nasser nationalized the Suez Canal on 26 July 1956, the Egyptian military focused its attention and resources for a brief period on the possibility of an invasion by a European expeditionary force in the Nile Delta. Consequently, Egyptian forces redeployed to the north, leaving no operational reserves in the Sinai. While this move provided the Israelis a golden opportunity to seize Egyptian forward positions quickly, such a scenario did not develop.

Earlier, before the nationalization of the Suez Canal, Egypt had had a large force stationed in the Sinai. The 8th Infantry Division, a force of ques-

tionable ability composed of Palestinians and National Guard units and commanded by Egyptian officers, guarded the Gaza Strip, while the Egyptian 3d Infantry Division was responsible for the al-Arish, Abu Ageila, Rafah triangle. The 2d Infantry Division watched the border area south of Qusaymah to the Gulf of Aqaba. Behind these two regular infantry divisions stood one armored brigade deployed at Gebel Libni and a second at Bir Gifgafa. This deployment gave Egypt a sizable force at the border and a relatively large armored force of 200 T-34 tanks and SU-100 antitank self-propelled guns in the rear.[2]

On 26 July 1956, after the United States had reneged on a crucial loan that would have enabled Egypt to construct the Aswan Dam with Western capital, Nasser nationalized the Suez Canal in retaliation. Before taking this dramatic step, Nasser calculated that little chance existed for an immediate invasion of Egypt by those Western powers whose trade depended in large measure on the canal. He completely ruled out the United States as a threat and felt that France, still smarting from its recent defeat in Indochina, had its hands too full with the Algerian revolution to risk a major military venture. Israel, he reasoned, would not invade the Sinai for fear of provoking attacks on itself by other Arab states in support of Egypt.

Britain, however, loomed as a clear danger. But even the British seemed too preoccupied with domestic and international concerns to undertake such a costly and controversial expedition. Syrian intelligence reinforced Nasser's judgment, providing him with valuable information on the state of British forces on Cyprus, which appeared to pose no immediate danger to Egypt. Moreover, time would work to Egypt's benefit, Nasser calculated, for each passing week would serve as balm soothing national prides wounded by the nationalizaton.[3] Based on these assessments, Nasser felt he risked little in nationalizing the canal.

Immediately after taking over the canal company, however, Nasser took the precaution of placing all Egyptian forces on alert and mobilizing the reserves. Then, at the beginning of August, he met with his senior military commanders to discuss the potential military ramifications of his nationalization act. Nasser wanted Egypt to be prepared to defend itself should Britain or any other European state decide to conduct a military action against Port Said or Alexandria. He therefore directed the high command to redeploy its forces to make the northern region of Egypt—not the Sinai—the main front. Despite objections from some senior officers, Nasser ordered a major withdrawal of forces from the Sinai to bolster defenses around Cairo, Alexandria, and the Suez Canal.[4]

The Egyptian high command, in compliance with Nasser's order, strengthened defenses in the Nile Delta and Suez Canal areas. In addition to the mobilization of the reserves, approximately 30,000 troops were uprooted from the Sinai and moved west of the Suez Canal. Some units relocated along the waterway, while others took up positions in the Cairo and Alexandria areas. After the dust settled from all the desert troop movements, only about 30,000 of the previous 60,000-man force remained in the Sinai.[5] In specific terms, the redeployment meant the withdrawal of the 2d Infantry Division and the two armored brigades. The 3d Infantry Division, headquartered at al-Arish, was left to guard the northern and central routes, with a few small infantry for-

mations of company size to watch the southern region. Israeli military intelligence followed these events closely and provided its General Staff with accurate information of the new Egyptian deployments.[6]

Egypt's withdrawal of a division and two armored brigades had two major effects. First, defenses in the Sinai were dramatically weakened, with only one regular division left to defend a large region. Second, the Egyptian Army in the Sinai lost its counterstrike force of armor. With its redeployment to the west bank, Egyptian armor, in case of attack, would have to cross the canal first and then travel some sixty kilometers before reaching its staging area at Bir Gifgafa and Bir Rod Salim. Consequently, Egyptian defenders in the eastern Sinai would have to hold out for a much longer period—at least two to three days—before the arrival of this large tank force.

So, on the eve of the 1956 war, Nasser had unwittingly placed his armed forces in the Sinai in an unfavorable strategic and tactical posture. He had little choice, however; the strategic and economic importance of the Sinai paled in comparison to that of Cairo, Alexandria, and the Suez Canal. With Egypt's major redeployment of troops, Israel now had gained operational and tactical opportunities in the opening phases of a land campaign—not to mention the advantage of strategic surprise with Nasser's new preoccupation with Britain and France.

Egyptian Command and Control

The Egyptian high command, nonetheless, had developed a system of command and control along with a general war plan in the event Israel invaded the Sinai. Ultimate responsibility for any armed conflict fell on the shoulders of Nasser who, in his capacity of president, functioned as the supreme commander for the Egyptian Armed Forces. Directly subordinate to him, Major General Muhammad Abd al-Hakim Amer—both the commander in chief and minister of war—exercised operational control over combat forces through a general headquarters located in Cairo. Next in the command chain came the Eastern Military District, with its headquarters in the city of Ismailia on the western side of the Suez Canal. The Egyptian Army had created this command in 1954 in anticipation of the withdrawal of all British forces from the Suez Canal (which actually took place in June 1956). The Eastern Military District commander, Major General Ali Ali Amer, was responsible for the defenses in both the Suez Canal and the Sinai (minus Sharm al-Sheikh). Thus, the operational chain of command went from general headquarters in Cairo, through the Eastern Military District, to any division or independent formation stationed in the peninsula.[7]

Brigadier General Anwar al-Qadi commanded the Egyptian 3d Infantry Division, a force composed of regular officers and conscripts.[8] His mission was to maintain static defenses on the northern and central routes near the Israeli border. To accomplish this task, Qadi placed two of his infantry brigades forward, the 5th at Rafah and the 6th at Abu Ageila. These brigades were to provide early warning and then to stop or impede Israeli forces until the arrival of Egyptian reinforcements. The 4th Infantry Brigade, located in al-Arish, was to constitute the divisional reserve and had three possible mis-

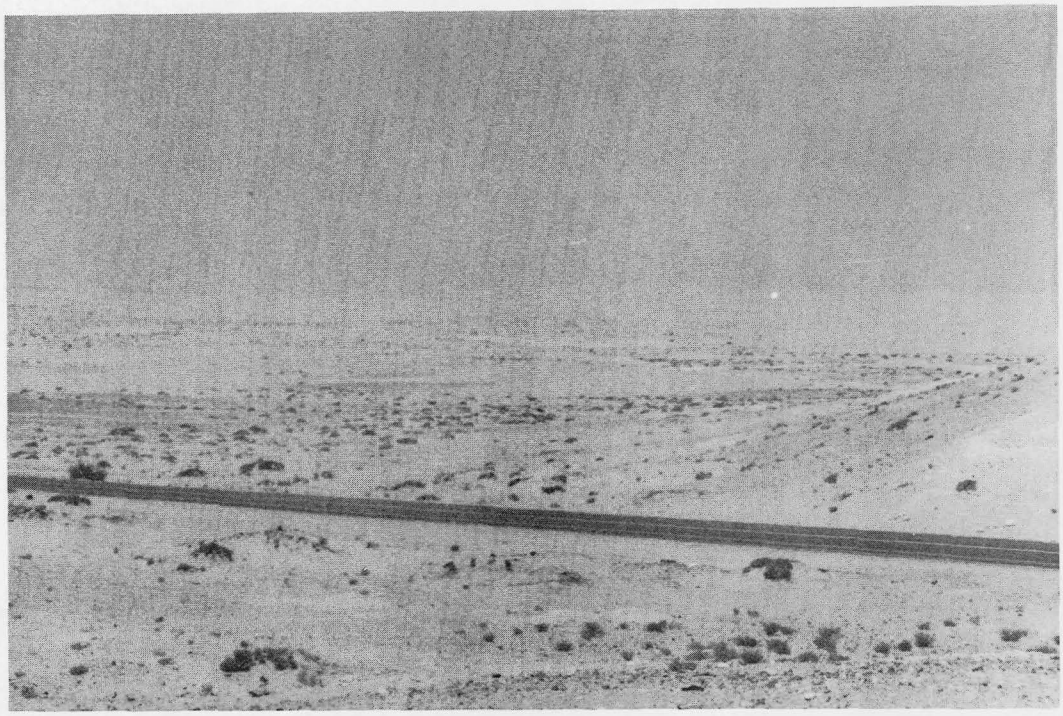
sions: to help the defenders at Abu Ageila; prevent an Israeli advance to al-Arish; or threaten the flanks of any force advancing west.[9]

The Terrain of Abu Ageila

In the Abu Ageila area, the Egyptians anchored their defenses along the central route on three key terrain features (see map 3). First, to the north, stood a sea of shifting sand dunes stretching over forty kilometers to Rafah. Second, south of the central route lay two mountains, Gebel (Mount) Dalfa (418 meters) and Gebel Hilal (914 meters). The Daika Pass, a narrow defile 10 kilometers in length and generally 500 meters in width, cut between these two mountains and offered an invading army the opportunity to move into the rear of Abu Ageila through these otherwise formidable barriers. Third, between the desert to the north and the mountains to the south was the ridge of Umm Qatef.

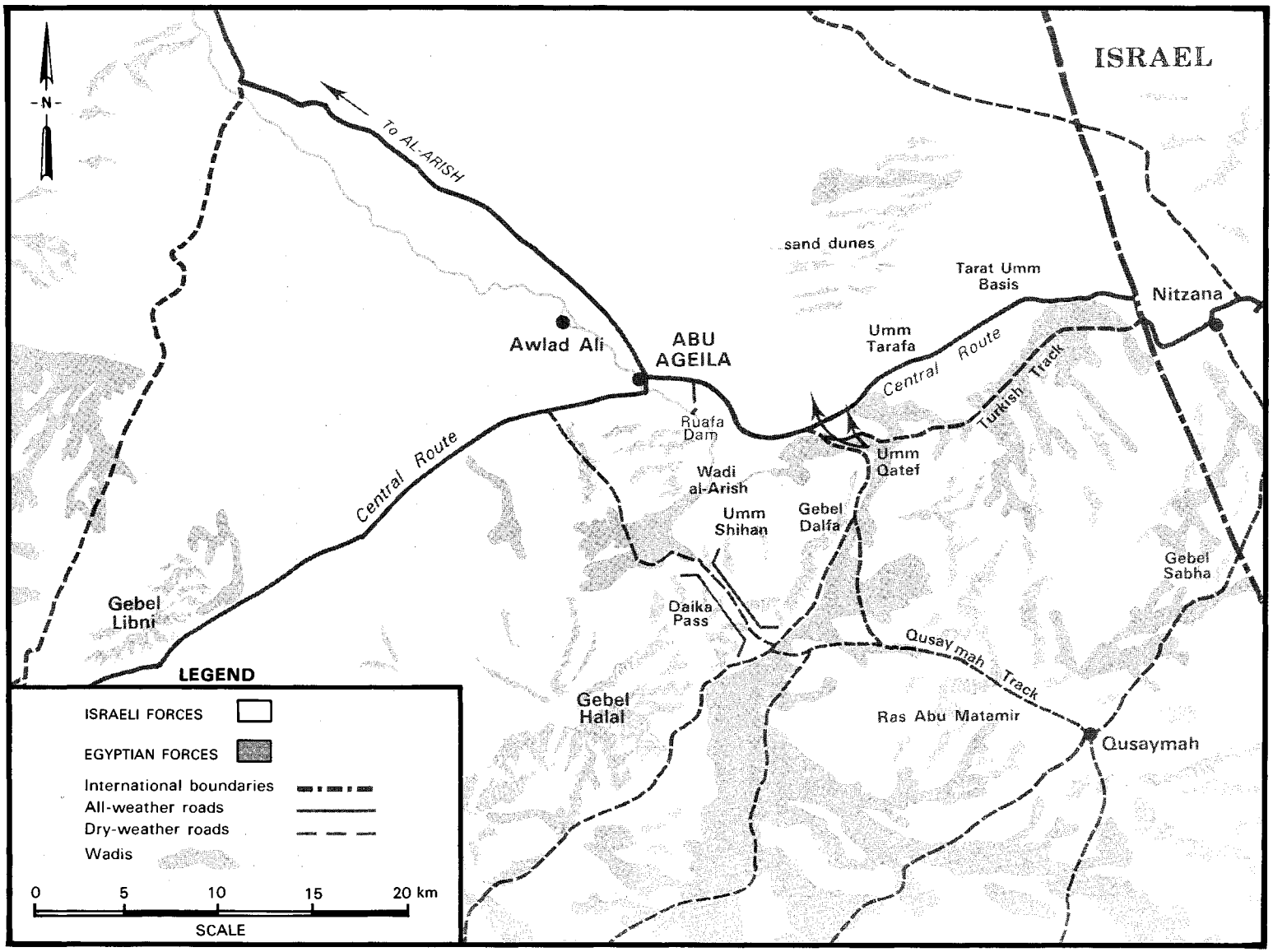
Umm Qatef, a ridge twenty-five to thirty meters in height, formed the most natural position for defenses close to the Israeli border. Located some twenty kilometers from Israel, this ridge spanned several kilometers in length, with the central route cutting through it. Egyptian defenders atop Umm Qatef overlooked the main road in the peninsula and viewed almost five kilometers in an easterly direction toward a flat valley. A frontal attack from the east by the Israelis was thus virtually impossible without incurring heavy losses.

Just south of Umm Qatef lay a low mountain range known as Gebel Wugayr that impeded any Israeli attempt to bypass the area. A small dirt

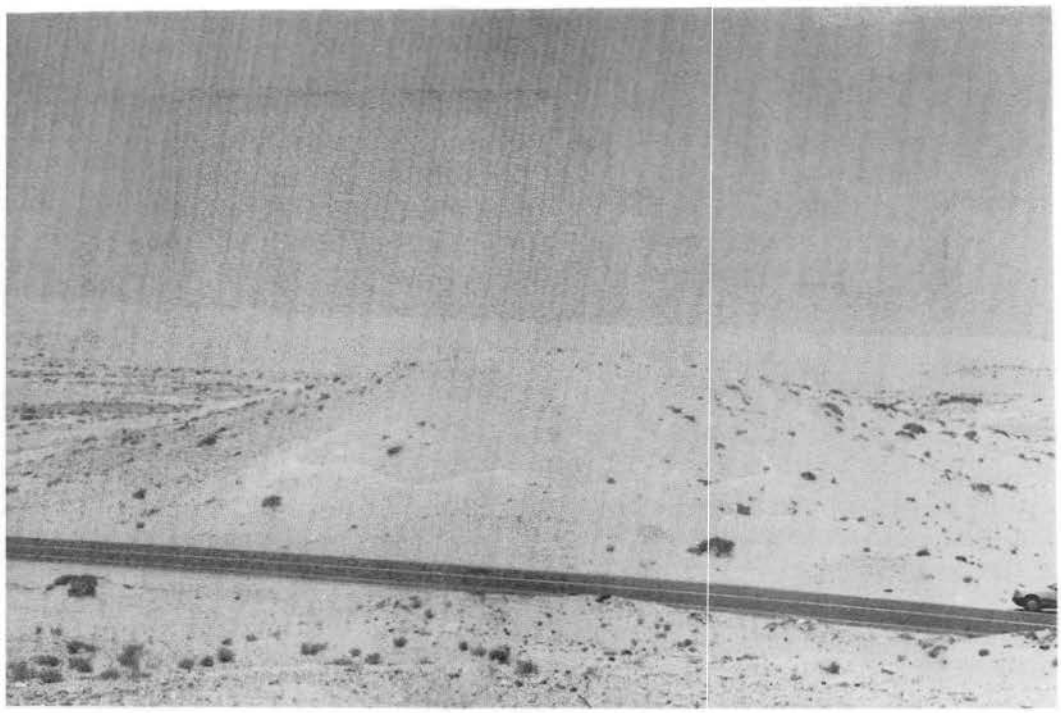


Courtesy of Maj. Thomas P. Odom

The view from Umm Qatef, looking northwest at the point intersected by the central route

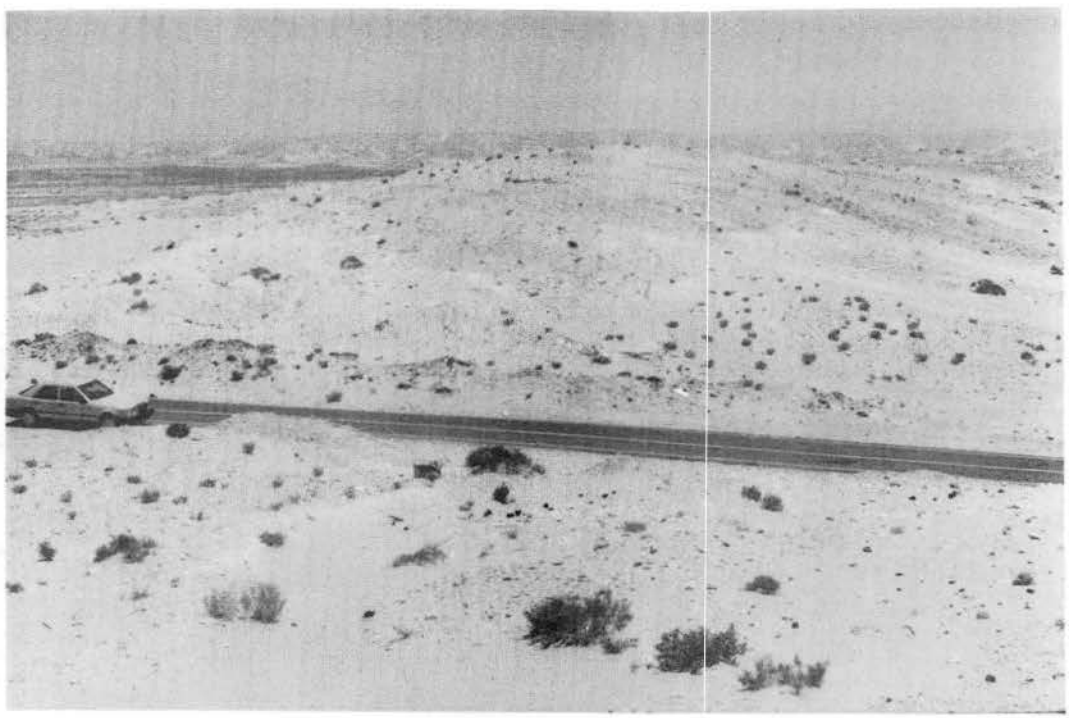


Map 3. The Abu Ageila area



Courtesy of Maj. Thomas P. Odom

The central route as seen from the southern half of Umm Qatef looking north



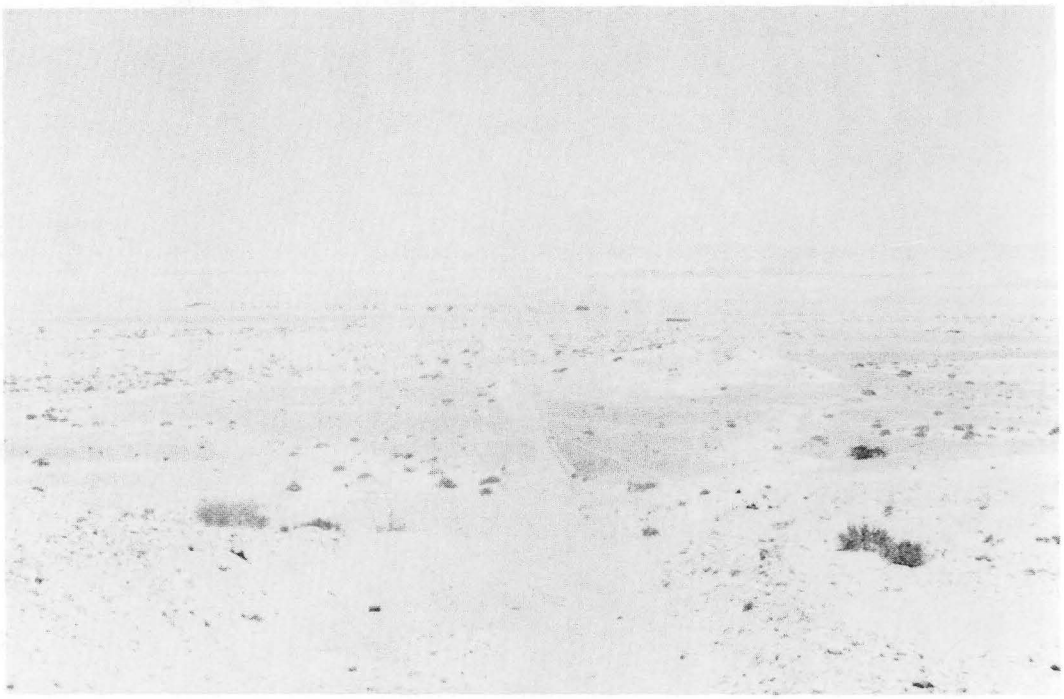
Courtesy of Maj. Thomas P. Odom

A view of the central route from the northern side of Umm Qatef looking south



Courtesy of Maj. Thomas P. Odom

The prospect from the southern half of Umm Qatef looking directly east



Courtesy of Maj. Thomas P. Odom

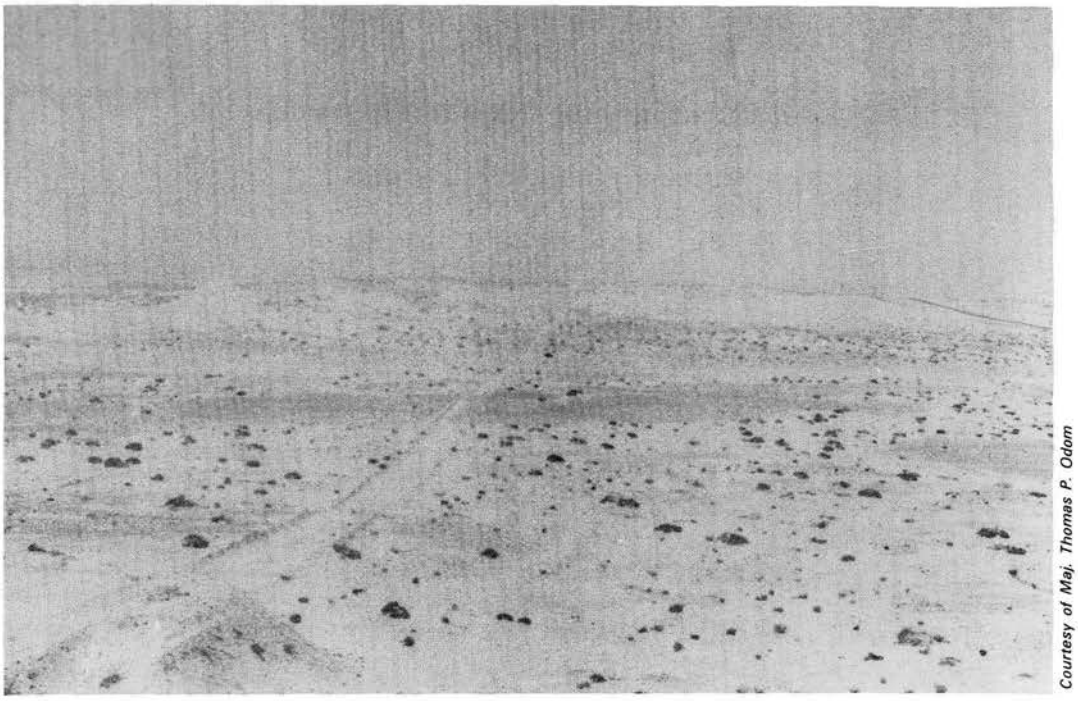
The view from the southern part of Umm Qatef looking due east down the Turkish Track

track, called the Turkish Track, ran east to west just south of the central route. Defenders on Umm Qatef could make it costly for the Israelis to use this avenue of attack against the Abu Ageila complex.

Just west of Umm Qatef stood a second ridge where the Egyptians could place forces in support of those at Umm Qatef. And still farther west, some eleven kilometers from the first ridge, stood a low ridge at the southern tip of which the Egyptians had constructed the Ruafa Dam. Connected to the central route by a road, this stone and earthen dam created a reservoir during the spring and early summer when the Wadi al-Arish became a small stream, perhaps two meters deep. Egyptians used the low, hilly area around the dam for positioning a second echelon. From here, the Egyptians could easily observe any military movements to the west of them for several kilometers.

A major drawback of the main defensive area, which stretched from Umm Qatef to Ruafa Dam, was that the valleys and low, rolling ridges in the area made mutual fire support from the various positions impossible. Another problem was that Abu Ageila—the intersection of the central route and the road to al-Arish—stood outside of the main defensive complex owing to its lack of suitable defensive cover. Thus, some literature refers to the entire area as either Umm Qatef or Umm Qatef-Abu Ageila, rather than just Abu Ageila.

Egyptian defenders at Abu Ageila also had to pay special attention to the route that ran through the small village of Qusaymah. Situated on a dirt track some ten kilometers from the Israeli border at Gebel Sabha and twenty kilometers southeast of Umm Qatef, Qusaymah sat in a valley blessed with trees that provided soldiers with much needed shade and the relief of greenery.



Courtesy of Maj. Thomas P. Odom

The view from the southern end of Umm Qatef looking due west along the Turkish Track

A 22-kilometer track connected Qusaymah and the central route at a point several kilometers behind Umm Qatef. To reach the central route, the Qusaymah Track cut through the defile of Ras Abu Matamir, after which a fork turned southwest in the direction of the Daika Pass and Bir al-Hasana. Taking Qusaymah thus afforded the Israelis an opportunity of bypassing Abu Ageila or attacking Umm Qatef from the rear. To meet this threat, the Egyptians constructed defensive positions at Umm Qatef to ward off an Israeli flanking movement from the south.

Static Defenses at Abu Ageila

On the eve of the 1956 war, Brigadier General Sami Yassa Boulos, a Coptic Christian, commanded the 6th Infantry Brigade, with responsibility for the defense of Abu Ageila.[10] A number of factors would help Boulos carry out his mission during the war. First, Boulos had been in his position for a while, knew his troops, and had adequate time to develop his defenses. Second, the division commander had given him enough latitude in command so that he could demonstrate initiative in battle.[11] In addition, the Egyptian brigade at Abu Ageila still had British equipment and commanders and soldiers who were appropriately well versed in their weapons and the tactics for employing them. The unit had only just begun its transition into the unfamiliar Soviet system after Egypt's arms deal with the Soviets in September 1955.

The Egyptian 6th Infantry Brigade was missing its 16th Infantry Battalion, which general headquarters had withdrawn for service in the canal area.[12] This move left the 6th Brigade with only two of its organic infantry battalions and the following organization:

17th and 18th Infantry Battalions
289th Reserve Battalion (minus)
2d Cavalry Troop
Two reconnaissance troops of light vehicles
78th Antitank Battery (self-propelled)
94th Antitank Battery (self-propelled)
A light antiaircraft battery
3d Artillery Regiment (25-pounders) (see figure 1)[13]

This force numbered approximately 3,000 men.[14]

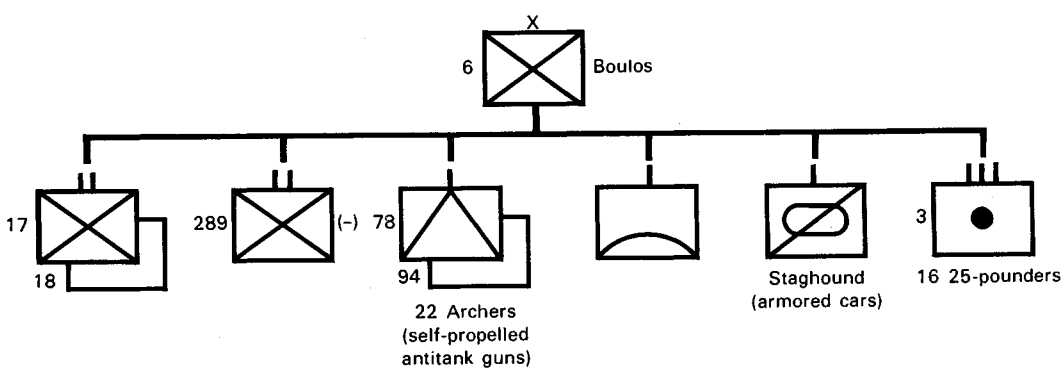
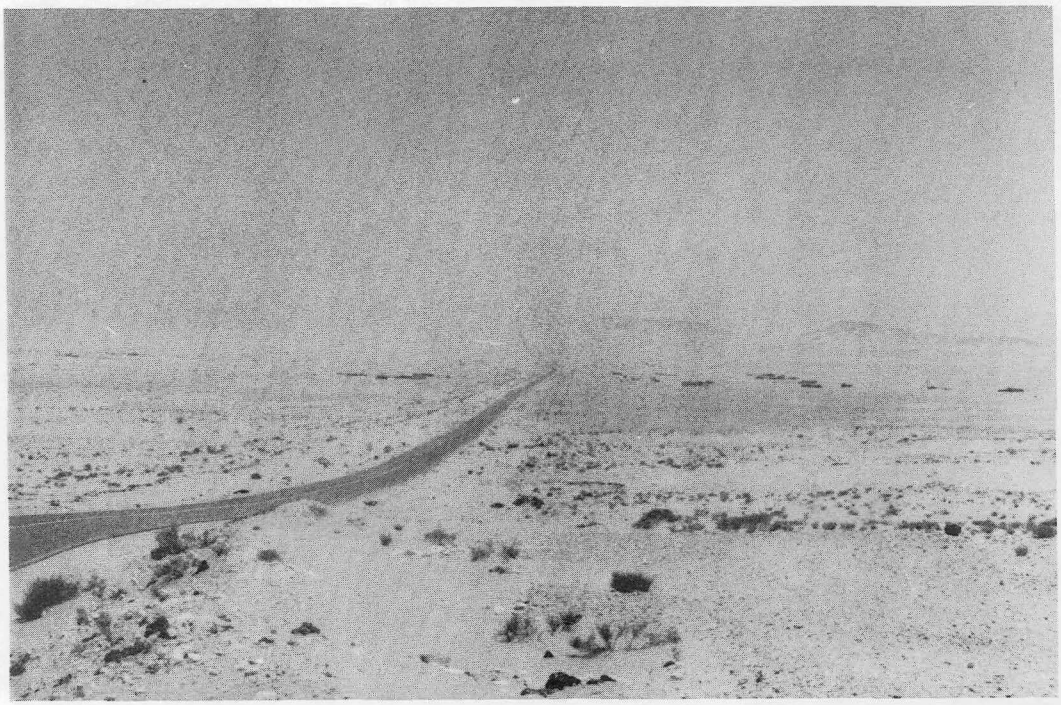


Figure 1. Egyptian forces at Abu Ageila

Boulos deployed the bulk of his force at Umm Qatef, a ridge that gave the Egyptians a commanding view of movements from the east (see map 4). There, he placed the 18th Infantry Battalion, one infantry company of the 17th Battalion, and the 78th Antitank Battery. One infantry company of the 289th Reserve Battalion, augmented by a section of antitank guns, was entrenched on Qusaymah Track just west of Gebel Dalfa. The light antiaircraft battery took up positions throughout the Umm Qatef and Ruafa Dam areas.

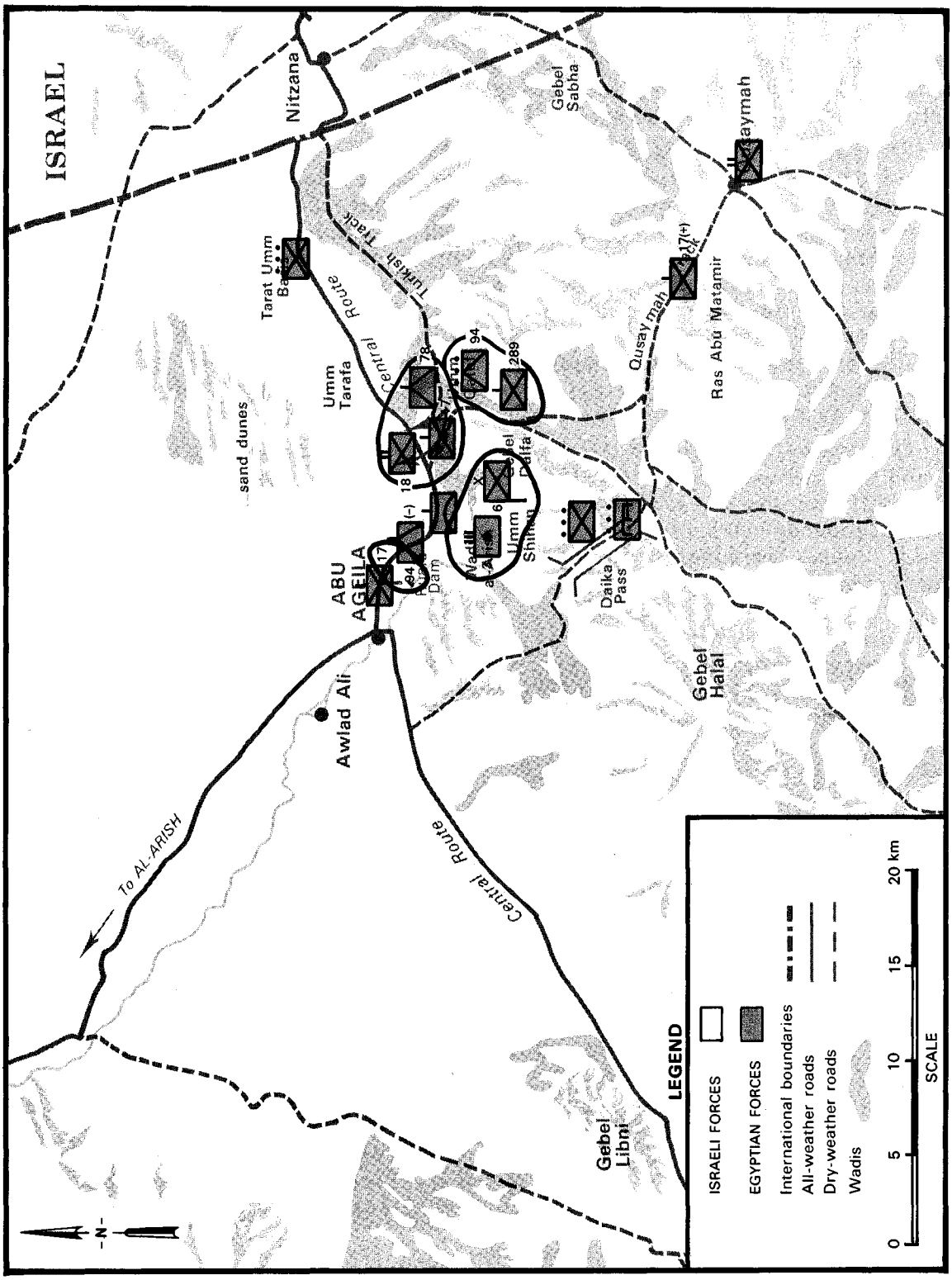
The 3d Artillery Regiment occupied a position at the base of Gebel Dalfa, behind the second ridge to the west, with Boulos' command post just east of the artillery perimeter. For his general reserve, Boulos relied on one company of infantry, the headquarters of the 17th Infantry Battalion, and part of the 94th Antitank Battery—all located in the Ruafa Dam area. His main logistical base was situated at Awlad Ali (with its water wells), some twenty-two kilometers from Umm Qatef. Locating their supplies at Awlad Ali gave the Egyptians access to water, which was lacking at Abu Ageila. Any Israeli penetration into the brigade's rear area through the Daika Pass to the crossroads at Abu Ageila, however, would cut off the Egyptian defenders from their main logistical base at Awlad Ali.[15]

Observation posts ringed the main defensive perimeter. A troop of Staghound armored cars guarded the Daika Pass, whereas one company from the 17th Battalion and two reconnaissance sections containing land rovers, jeeps, and Staghounds overlooked the defile at Abu Ras Matamir on the Qusaymah Track. Boulos positioned a security detachment from the 18th Battalion at Tarat Umm Basis, a hill area some nine kilometers east of Umm Qatef. This



Courtesy of Maj. Thomas P. Odom

Tarat Umm Basis, looking eastward to the Israeli border



Map 4. Egyptian deployments at Abu Ageila and surrounding area

position served as a forward observation post overlooking a valley almost six kilometers in length. Several platoon- or squad-size observation posts ringed the border-crossing area.

To delay an Israeli attack, the Egyptians placed explosives at three points south of the Abu Ageila main complex: the first on Qusaymah Track near the eastern edge of Gebel Dalfa; the second on the bridge just before the turn into the Daika Pass; and the third within the pass itself. To set off these explosions at an appropriate time, the brigade commander received elements from the 2d Engineer Regiment.[16]

Even though Egypt had concluded a major arms deal with the Soviets in September 1955, the Egyptian 6th Brigade still possessed mainly British World War II-vintage weapons and vehicles, but it had no tanks. This forced the Egyptian commander at Abu Ageila to rely on antitank weapons and artillery firepower against Israeli armored attacks. The 3d Artillery Regiment contained sixteen to eighteen British 25-pounders (howitzers with 88-mm cannons possessing a range of up to 12,000 meters). The 78th and 94th Antitank Batteries each consisted of eleven self-propelled Archers, a total of twenty-two. The Archer, first adopted by Britain in 1942, mounted a 76-mm antitank gun on a Valentine tank chassis. The antitank gun faced backwards, which reduced its effectiveness in attacks or counterattacks. Boulos had the Archers from the 78th Antitank Battery and elements from the 94th Antitank Battery entrenched in the forward positions at Umm Qatef and overlooking Qusaymah Track, leaving him with only eight Archers in the second echelon. The Egyptians also had approximately three dozen towed 57-mm antitank guns that were organic to the infantry battalions. To deal with the Israeli Air Force, the 6th Brigade had an antiaircraft battery of 30-mm guns. The main combat vehicles available to the Egyptians were Staghound armored cars, normally armed with 37-mm guns, and Bren carriers, lightly armored vehicles.[17]

To fortify their main perimeter, the Egyptians employed a system that S. L. A. Marshall has referred to as "a hedgehog." The aim was to have as many mutually supporting defensive positions as possible.[18] The Egyptians placed barbed wire and a minefield in front of Umm Qatef; mines also guarded the area between the southernmost tip of Umm Qatef and the defenses on Qusaymah Track. Behind the mines and wire stood a network of sandbagged trenches and bunkers that included infantry and antitank guns. The field artillery provided additional fire support against attacking forces. Obstacles would slow down the enemy while Egyptian antitank and artillery fire destroyed his forces. This concept resembled the one the British employed in the Western Desert during World War II: units held key terrain with self-sufficient, fortified, and box-based infantry and artillery, while a maneuver force hit the flanks of the advancing enemy. In the case of the Egyptians, the maneuver force would come from the divisional reserve at al-Arish.

The Egyptians deployed their combat forces at Abu Ageila to perform three basic missions. First, forward elements served as observers to provide early warning and to determine the size of attacking forces. Behind this ring of observation posts stood the main combat force at Umm Qatef; its orders were to stop the enemy's advance. Finally, a general reserve of one infantry company and the headquarters from the 17th Infantry Battalion—some 150

to 200 men supported by the 94th Antitank Battery (minus)—was prepared to stop any breakthroughs and handle any Israeli maneuvers in the rear.[19]

The Egyptians' general reserve for use in a counterattack was relatively small and without armor support, and Moshe Dayan, writing after the war, saw this limited capacity as a major flaw in the Egyptian defenses: "The Abu Ageila defense complex could play a decisive role in the defense of Sinai only if it served as a solid base for mobile forces who could go out and engage an enemy seeking to break through to the Canal."[20] To a point, Dayan was correct in his evaluation, but as events proved, even this Egyptian defense system, with limited maneuver capability, became a major thorn for the IDF.

Qusaymah figured prominently in Egyptian defensive plans. The commander of the 3d Infantry Division at al-Arish exercised direct control over the National Guard battalion of 500 to 600 men located there. The battalion's mission was to conduct a delaying action to discover the size of the enemy's force and its possible intent. The bulk of the battalion was concentrated at Qusaymah, with several platoon-size observation posts located on Gebel Sabha near the border. The battalion was large enough, unlike the observation posts around Abu Ageila, to deal with a small Israeli raiding party. To prevent an easy bypassing of Qusaymah, the brigade commander at Abu Ageila also placed regular units at the pass at Ras Abu Matamir. Together, these two forces might have put up a stiff resistance, but since the National Guard battalion had only jeeps, its fighting capabilities were severely limited against

An Archer at Umm Qatef



Mid-East War: Israel's Armor in Action

armor. Consequently, the battalion commander at Qusaymah had instructions not to become decisively engaged and to withdraw into the main defensive perimeter at Abu Ageila if faced with a far superior force.[21]

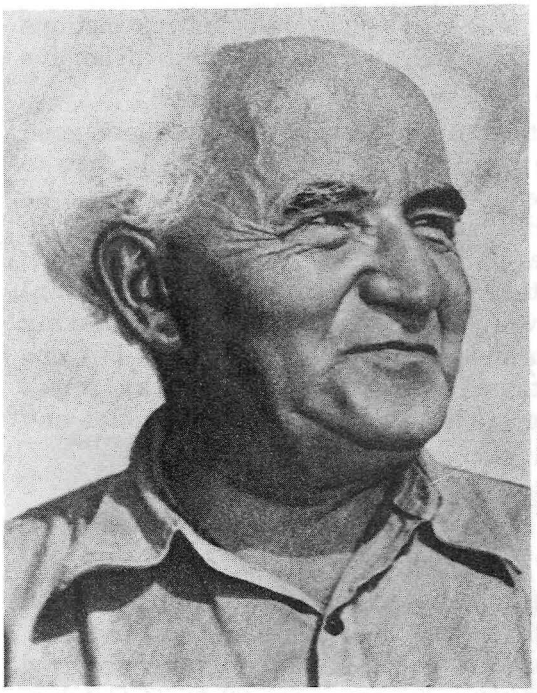
In summary, Egyptian defenses at Abu Ageila were in relatively good shape on the eve of the 1956 war. The Egyptians had had sufficient time to develop their main and outer perimeters, and the brigade commander was familiar with the terrain and his men. His troops were disciplined and trained, and they were under the command of regular officers and NCOs. Furthermore, the brigade commander clearly understood his superior's intent in the event of a major assault on Abu Ageila and even possessed some latitude for making decisions. The Israelis thus faced a formidable foe at Abu Ageila—but one dependent on an operational reserve stationed over 200 kilometers away, across the Suez Canal. This strategic situation gave the IDF both operational and tactical advantages.

The Sèvres Agreement

Israel went to war in large measure because France and Britain promised to invade the Suez Canal in cooperation with Israeli operations in the Sinai. The final agreement for military cooperation among the three states occurred during highly secret meetings held at Sèvres, France, from 22 to 24 October, less than a week before the outbreak of hostilities.[22] Prime Minister and Defense Minister David Ben-Gurion, Chief of the General Staff Moshe Dayan, and Director General of the Defense Ministry Shimon Peres represented Israel. On the French side sat Prime Minister Guy Mollet, Minister of Foreign Affairs Christian Pineau, and Defense Minister Maurice Bourges-Maunoury. Selwyn Lloyd, the British foreign secretary, and his aide, Donald Logan, arrived late during the first meeting.

By 24 October, after much discussion, all three parties overcame a major obstacle: no one wanted to appear as a flagrant aggressor in attacking Egypt. The British and French needed a pretext for invading Egypt—both for domestic and international consumption. Three full months had elapsed since the nationalization of the canal, and the Egyptians were clearly succeeding in maintaining a normal level of traffic on that vital waterway. So the two European governments—grasping for any face-saving rationale—wanted the Israelis to "threaten" the canal to justify a British and French expedition to "protect" it.

Ben-Gurion, for his part, wanted to avoid involving Israel in a major campaign without a concurrent British and French military involvement; otherwise, Israel would appear a blatant aggressor. Dayan worked out an ingenious compromise to break the deadlock. A battalion of Israeli paratroopers would land on 29 October at the Mitla Pass, some thirty kilometers from the canal. This action would appear to pose a military threat to the Suez Canal serious enough to warrant France and Britain sending an ultimatum to the Egyptian and Israeli governments demanding the withdrawal of both of their armies ten miles from the canal. In effect, Egypt, if it complied with this demand, would have to abandon its control of the canal, while Israel would gain a free hand to conquer the Sinai. No one expected Egypt to accept this outrageous demand, and the French and British could then cynically follow



Israel Defense Army 1948—1958

David Ben-Gurion, Israel's prime minister and minister of defense

through with their threat of an invasion by bombing Egyptian airfields within thirty-six hours of the Israeli paratroop operation. The two European states would then land an expeditionary force in the canal zone, while Israel pressed on with its military operations in the Sinai.

In exchange for an Israeli partnership in the invasion of Egypt, France agreed to continue transferring arms to Israel. Military relations between the two countries had begun in 1952 with secret negotiations for the sale of arms to Israel. The first major consignment followed in 1954, approximately one year before Egypt's arms deal with the Soviets. The steadily growing military relationship between France and Israel served as the basis for further discussions between the two governments concerning military cooperation against Nasser once Egypt nationalized the Suez Canal. Eventually, the French brought the British and Israelis together for a joint military operation. From August to October 1956, more French military hardware arrived in Israel, including AMX tanks, fighter aircraft, artillery pieces, and badly needed ammunition (especially for the Israeli Air Force).[23] Then, on 27 October—at the last minute—Israel received an important shipment of 200 6 by 6 trucks that, according to Dayan, retrieved the situation: "After the poor crop of Israeli vehicles mobilized from civilian owners, I do not know what we would have done if these French trucks had not arrived."[24]

But even this military aid was insufficient for Ben-Gurion to contemplate going to war with Egypt. At Sèvres, Ben-Gurion was also troubled by the thirty-six hours that would elapse between the opening of hostilities by Israel and the actual attack by European bombers on Egyptian airfields. During this long interval, Egypt would almost certainly send a large strike force against the Israeli paratroopers at Mitla and might even launch its own



Major General Moshe Dayan

Israel Defense Army 1948—1958

bombers against populated areas in Israel. Both possibilities greatly disturbed Ben-Gurion and made the Israeli leader balk in his negotiations with French and British officials. To assuage his fears and cement the alliance, the French promised to send a reinforced squadron of Mystère IV-A fighters and a squadron of F-84 fighter-bombers to defend Israeli airspace. These arrived quickly. Now, with a French air umbrella protecting Israel, the Israeli Air Force was free to provide ground support to its troops. In further support of the Israelis, French pilots reportedly flew missions on the first day of the campaign—although many Israelis deny this.[25]

With the Sèvres Agreement in hand, Israel could begin the war confident that a second front would open up against Egypt in a relatively short time. In the meantime, French air squadrons would assure the safety of Israeli cities. This French military involvement at the onset of the war was precisely the guarantee Ben-Gurion needed to ensure that France and Britain would keep their part of the bargain.

Operation Kadesh

Dayan, now armed with the promise of eventual European involvement, had to alter his war plans to accommodate British and French wishes. According to Dayan, the operational directive of 5 October 1956—that is, the one formulated by the General Staff before Sèvres—had assigned an entire paratroop brigade to help seize al-Arish in an operation involving naval and other ground forces. During the first two days, the Israeli Army would concentrate its efforts on taking the northern Sinai, including al-Arish, Abu Ageila,

Gebel Libni, and Bir al-Hasana. Then, the bulk of Israeli forces would advance toward the canal, while a brigade headed southwest to capture the Strait of Tiran.[26] From the general outline of this plan, Dayan clearly wanted to attack the Egyptian 3d Infantry Division head-on at the onset of the campaign.

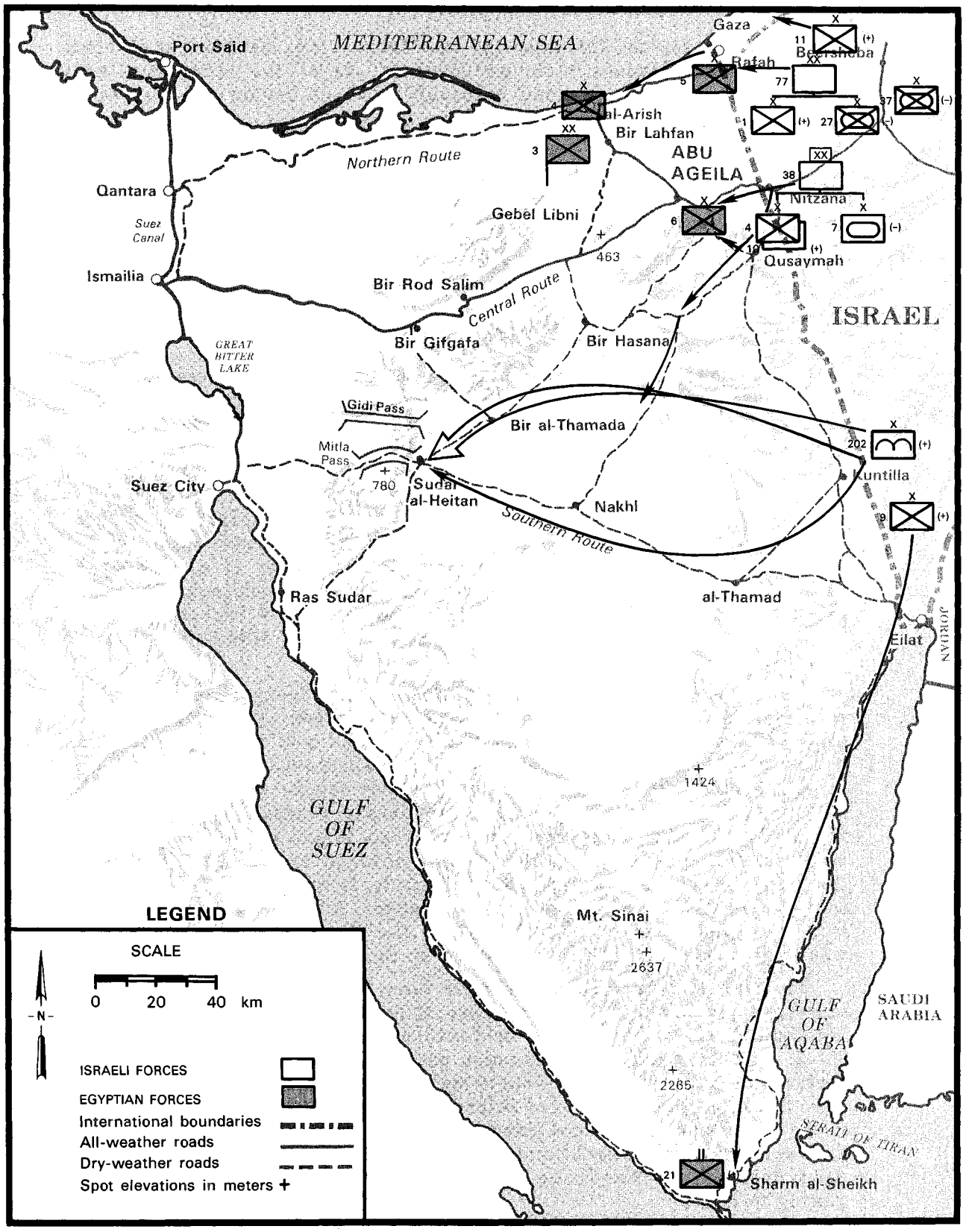
On 25 October, upon his return from France, Dayan immediately issued new directives for Operation Kadesh (the Biblical name for the place from which the Jews began their odyssey in the Sinai under Moses' leadership). His plan committed the 38th and 77th *Ugdahs* (division-size task groups) and three independent brigades—a total of some 45,000 men—against the Egyptian Army in the Sinai (see map 5).

The first phase of the operation involved the drop of a paratroop battalion at Mitla Pass, scheduled for late afternoon on 29 October. Simultaneously, the remainder of the paratroop brigade, reinforced by a tank company and commanded by Lieutenant Colonel Ariel Sharon, would advance along the Kuntilla—al-Thamada—Nakhl route for a linkup with the force at the Mitla Pass. Dayan would thus begin his campaign advantageously because of the earlier withdrawal of the Egyptian 2d Infantry Division from the southern region of the Sinai. The Egyptian high command, ordered in August to conduct a major pullout of forces, had decided to thin troop deployments in the south while keeping the 3d Division on guard over the Rafah—al-Arish—Abu Ageila triangle. The southern route, now unguarded except for a few infantry companies, offered Dayan an opportunity to link up with his small force at Mitla.

During the first night, while the paratroopers executed their orders, the Israeli 38th *Ugdah* would prepare to attack the Egyptian positions at Qusaymah, to be initiated on the morning of the 30th. In the meantime, the 9th Brigade would prepare for its long and arduous journey toward Sharm al-Shiekh. Then, on the night of 30—31 October, the 38th *Ugdah* was to seize forward positions east of Umm Qatef and advance to capture Abu Ageila on the next day. During the latter operation, the 77th *Ugdah* would assault Rafah and then al-Arish on the northern route, while the 11th Infantry Brigade moved against Gaza. Finally, the bulk of the 38th and 77th *Ugdahs* would head for the canal in conjunction with the 9th Brigade's long trek to Sharm al-Shiekh.[27] Dayan had identified clearly the main objectives of the campaign: to create a military threat to the Suez Canal by seizing territory in proximity to it; to break the Egyptian blockade of the Strait of Tiran by capturing Sharm al-Shiekh; and to "confound the organization of the Egyptian forces in the Sinai and bring about their collapse."[28]

Operation Kadesh did, however, possess a major weakness. Naturally, an Israeli military thrust deep into Egyptian territory best suited the paratroopers, and Dayan decided to commit the IDF's only paratroop brigade, the 202d, to this phase of the campaign—one battalion to drop at Mitla Pass, while the remainder moved overland along the southern route. This decision, however, would adversely affect operations against Egyptian fortified positions such as those at Abu Ageila.

By 1956, Sharon's paratroopers had developed into the elite force of the IDF, and Dayan, to enhance Israeli fighting capabilities, modeled his entire army after the unit. But this process was not yet complete, especially in infantry formations.[29] By assigning the Mitla operation to the entire 202d Para-



Map 5. Operation Kadesh

troop Brigade, Dayan eliminated his best fighters from battles that involved assaults on fortifications in the eastern Sinai. He left the paratroopers with only a political mission designed to bring France and Britain into the war.

Therefore, for the conquest of Abu Ageila, Dayan had to depend on infantry brigades composed of reservists, who, because of secrecy, could be called up no sooner than forty-eight hours before the war began—instead of the required seventy-two.[30] Some reserve units, as events would show later, lacked sufficient training to assault a well-fortified position such as Abu Ageila. Although the trade-off ultimately worked to Israel's benefit—Britain and France did enter the war—operations at Abu Ageila would suffer as a consequence.

Abu Ageila in Operation Kadesh

Colonel Yehuda Wallach commanded the 38th *Ugdah*, whose mission it was to seize Qusaymah, Umm Qatef, and Abu Ageila. Wallach, an infantry battalion commander in the 1948 war, had served in the interwar years as an infantry brigade commander, commandant of the battalion commanders' school, and inspector of the infantry corps. To accomplish his task in Operation Kadesh, Wallach was assigned two reserve infantry brigades, the 4th and the 10th, and the 7th Armored Brigade, the only regular tank brigade in the IDF. The 38th *Ugdah* commander also had three batteries of heavy field artillery, a battery of medium-size artillery pieces, and a company of engineers.[31] In case of a major operational or tactical problem, Wallach could appeal to Brigadier General Assaf Simhoni, the front commander, who in turn could request assistance from the 37th Mechanized-Armored Brigade, which, in the meantime, served as a general reserve.[32]

Dayan provided Simhoni and Wallach with clear instructions for the first phase of fighting. The 4th Infantry Brigade—comprised of three infantry battalions, a reconnaissance company, a mixed company of antitank-antiaircraft guns, and a battalion of mortars and field artillery—was to proceed on foot on the night of 29—30 October to take Qusaymah by the morning of the 30th. Its commander was Colonel Joseph Harpaz, a company commander in the 1948 war, who afterwards commanded an infantry battalion and then served as the commandant of the Officers' School.[33] Another consideration in this early move by the 4th Brigade was that the Israeli high command wanted to open another route to help the paratroopers. Afterwards, at least part of this force would dash in the direction of the Mitla Pass, while other units would attempt to outflank Umm Qatef from the south.

The 10th Infantry Brigade, with its three infantry battalions, one reconnaissance company, a mixed company of antitank-antiaircraft guns, and a battalion of heavy mortars and field artillery, would embark on the night of 30—31 October to take the observation posts along the central route and then capture the main defenses at Umm Qatef by 1 November. To give the brigade more firepower, the 7th Armored Brigade transferred one of its tank companies to the 10th Brigade.[34] Colonel Shmuel Goder, commander of the 10th Brigade, had been a highly successful and much decorated artillery officer in the Soviet Army during World War II. He commanded an artillery regiment before immigrating to Israel.[35]

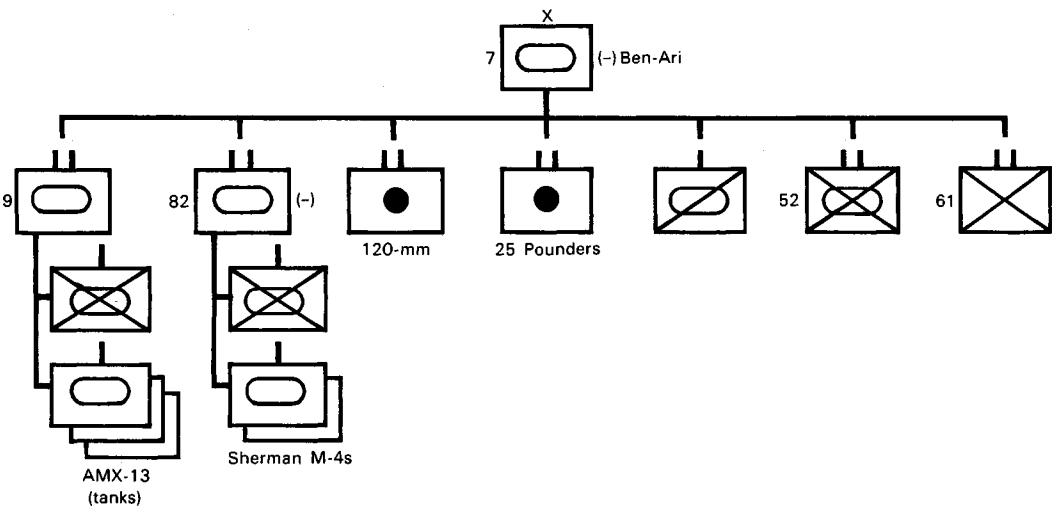


Figure 2. Organization of the 7th Armored Brigade

Colonel Uri Ben-Ari, perhaps Israel's premier tanker in 1956, commanded the 7th Armored Brigade, which had two tank battalions, the 9th and the 82d; two battalions of infantry, one mechanized (52d), the other motorized (61st); a reconnaissance company; and a battalion each of 120-mm mortars and 25-pounders (see figure 2). The 9th Armored Battalion consisted of AMX-13s—light French tanks weighing 14.5 tons, mounting a 75-mm gun, and having a speed of thirty-five mph. The 82d Armored Battalion, on the other hand, had the Israeli Sherman M-4s, with either 75-mm guns from the AMX-13 tanks or 76.2-mm guns. The Sherman tank weighed thirty tons and could travel up to twenty-five mph. The brigade's reconnaissance company consisted of three platoons riding on jeeps.[36] Dayan planned to have the 7th Armored Brigade remain as Wallach's reserve, ready to assist either the 4th or the 10th Brigade—but under no circumstances was it to enter combat before the 31st. Then, Israeli tanks would exploit any success achieved by the infantry by heading for the canal.[37]

A comparison of the opposing forces at Abu Ageila shows the Israelis possessed a marked advantage in both manpower and weaponry. Against the Egyptian infantry brigade at Abu Ageila and a National Guard battalion at Qusaymah, Wallach initially had at his disposal one armored and two infantry brigades. In 1956, an Israeli infantry brigade numbered between 3,500 and 4,500 men—even as high as 5,000 in some instances—whereas the 7th Armored Brigade contained from 3,000 to 3,500 men.[38] When one takes into account the *ugdah's* artillery and other units, the Israelis had at least 12,000 men pitted against a combined Egyptian force of 3,500 at Abu Ageila and Qusaymah.

In addition to a favorable manpower ratio, the Israelis also held an overwhelming advantage in tanks; Wallach had an armored brigade of around 100 tanks, whereas the Egyptians had no tanks and relied on antitank guns and artillery to stop Israeli armor.[39] If either tactical commander needed rein-



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AMX-13 light tank

forcements, Wallach was again in a more favorable position than his Egyptian counterpart, for he could look to Simhoni and the 37th Armored-Mechanized Brigade. The Egyptian commander could rely on only the 4th Infantry Brigade and its two to three tank companies.

The 38th Ugdah's Vulnerabilities

Yet despite all his apparent advantages, Wallach had to exercise command within a set of restrictions that prevented him from achieving surprise and mass. The 38th *Ugdah* had to begin the attack with the capture of Qusaymah, postponing its assault on Umm Qatef for approximately forty-eight hours. Furthermore, Wallach needed to send at least part of the 4th Infantry Brigade to Mitla to reinforce the paratroopers there. In addition, Dayan had ordered Simhoni not to commit the 7th Brigade before the 31st, which reduced, somewhat, the Israelis' overwhelming armor advantage. In short, the plan to seize Abu Ageila was piecemeal and tentative in nature—like the campaign itself. Dayan adopted this approach to the campaign to comply with Ben-Gurion's wish that no extensive combat should occur until the commencement of French and British bomber attacks on Egyptian airfields.

In addition to the political constraints placed on Operation Kadesh, the IDF labored under internal problems. Before the war, the IDF had become embroiled in a major debate over the use of armor and infantry.[40] Moshe Dayan, chief of the General Staff, headed what might be loosely called the "infantry school." Born in Palestine in 1915, he was an infantry man, schooled in the experiences of small-unit tactics that characterized much of Israel's War for Independence (1947—49). Ben-Gurion had taken Dayan under his wing and helped him rise rapidly in the army. After Dayan had commanded a



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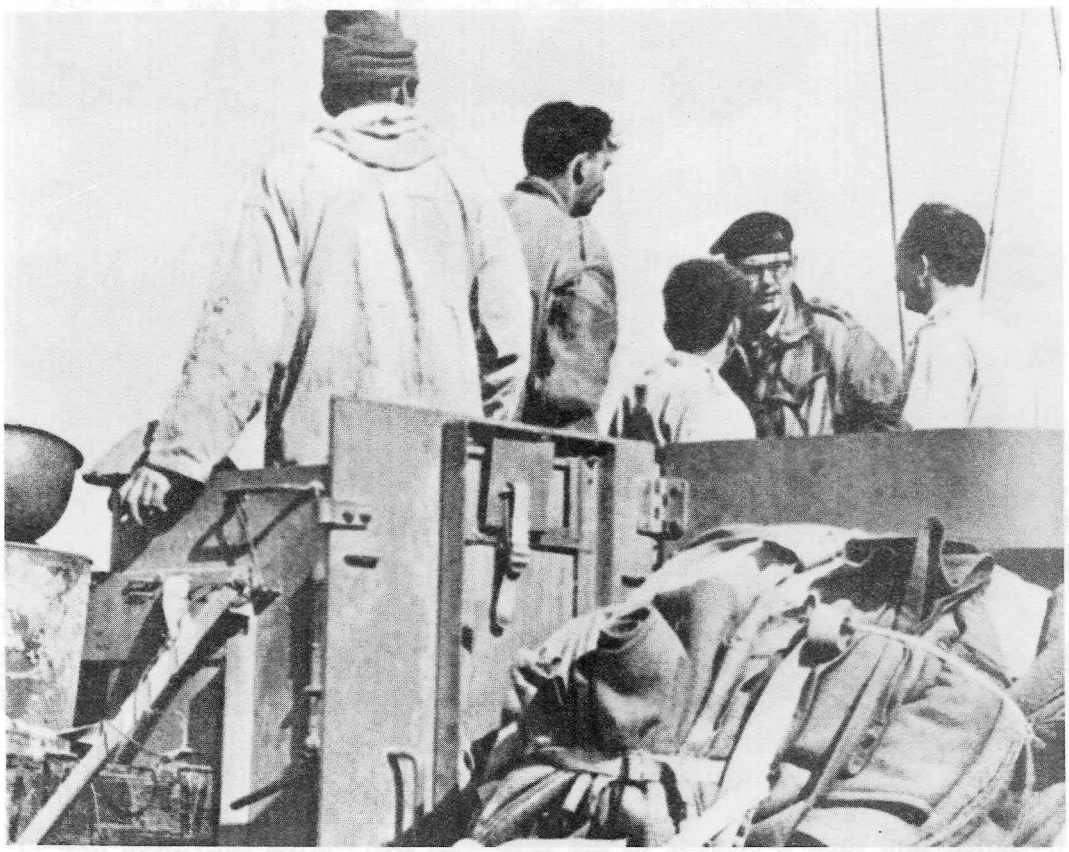
A Sherman M4 A3 E8 (Israeli version), mounting a 76.2-mm gun

battalion and then a brigade in the 1948 war, Ben-Gurion convinced him to remain in the army and take charge of the Southern Command. After attending

a three-month course in England for senior officers (1952), Dayan served as head of the Northern Command and then as chief of operations. In December 1953, Dayan, at the time only thirty-seven years old, became chief of the General Staff.

Dayan had studied little military history and thus had some difficulty transcending his own experiences. For Dayan, infantry shone as the queen of battle; tanks were too expensive and mechanically unreliable to constitute the spearhead of an attacking force. He ignored many of the lessons of World War II as having little relevance to the new Israeli Army. To Dayan, an ideal combat formation consisted of an infantry battalion, with a tank company and artillery in support as part of a combined arms team. As part of this scenario, infantry—riding in jeeps, half-tracks, or armored cars—would make deep and rapid penetrations, with tanks following on transports. Against fortified positions, infantry would, if necessary, dismount and assault, with tanks providing fire cover. Thus, the motive force of Dayan's army was mobile infantry.

Brigadier General Haim Laskov opposed Dayan's infantry-oriented doctrine. Laskov, unlike Dayan, had fought outside of Palestine as a major with the Jewish Brigade in the British Army and thus had experienced combat firsthand on a modern battlefield. After Israel's War of Independence, Laskov played a



Israel Defense Army 1948—1958

Armor corps commander, Brigadier General Laskov, in his command vehicle, 1956



Chief of Staff Haim Laskov, chief of the General Staff, 1958—69

Israel Defense Army 1948—1958

major role in building the IDF's military education system. In tribute, the Officers' School today bears his name. Before the 1956 campaign, he served as director of military training (1948—51), commanding officer of the Israeli Air Corps (1951—53), chief of operations (1955), and commander of the Armor Corps (1956—57). After his military career, Laskov went to England to study history and economics at St. Anthony College, Oxford.

In sharp contrast to Dayan, Laskov complemented his military experiences by reading military literature extensively. He was greatly influenced by Liddell Hart's theories of armor warfare and introduced Israeli officers to the importance of tanks in achieving decisive victories in maneuver warfare.[41] Laskov believed in concentrating tanks to act as the spearhead of a land campaign, with infantry and artillery assaulting fortified positions, while tank battalions moved toward the enemy's rear, cutting supplies and communications and blocking the arrival of reinforcements.

Just prior to the 1956 war, Dayan worked out a compromise that still favored infantry but assigned a greater role to armor. Originally, Dayan consigned the 7th Armored Brigade to make a feint attack against Jordan as part of a general deception, but later decided it should lead a spearhead in the Sinai, if events favored it. Unlike other Israeli armored brigades, the 7th Brigade carried a full complement of two tank battalions. Two other Israeli brigades, while they were called "armored," were units blending mechanized and armored characteristics. The 27th Brigade, assigned to assault the Rafah area, and the 37th, the general reserve, each had only four tank companies in comparison to the 7th Brigade's six. The 202d Paratroop and the 10th and 11th Infantry Brigades received attachments of tanks, the latter from the 37th Brigade. The remaining four infantry brigades—the 1st, 4th, 9th, and 12th—

received no tanks or a platoon at best.[42] Doctrinal ambiguity over the roles of armor and infantry, as events would make evident, resulted in confusion regarding how the IDF would defeat the Egyptian Army. This problem was further compounded by the fact that senior Israeli commanders lacked knowledge of the Sèvres Agreement and thus did not understand the reasoning behind some of Dayan's planning.

Another internal problem in the IDF on the eve of war concerned Dayan's view of the character of the Egyptian Army. Ten years after the war, Dayan described how he had evaluated the Egyptian Army going into the 1956 campaign: "There is no need to fear that Egyptian units who will be bypassed will launch a counterattack or cut our supply lines. We should avoid analogies whereby Egyptian units would be expected to behave as European armies would in similar circumstances."[43] Such an attitude is referred to by Dayan's contemporary critics as the "Collapse Theory." In essence, Dayan did not have a high regard for the Egyptian Army, and this helps explain why Dayan assigned the 10th Infantry Brigade, supported by a tank company from the 7th, the conquest of Umm Qatef—instead of the entire task force under Wallach's command. Dayan expected that once the campaign unfolded that a mere brigade would prove sufficient to remove any threat by the Egyptian defenders.[44]

Another circumstance also complicated matters for Dayan: the vulnerable position of the paratroop battalion at Mitla during the first twenty-four hours of the campaign. Dayan feared his paratroopers might become stranded, so he ordered an assault against Qusaymah to secure a route to reach them. Only afterwards could Wallach move against Abu Ageila. Fear for the fate of the paratroopers also complicated matters for the 7th Armored Brigade in the overall campaign. The brigade's tanks, in addition to their designated mission, had to be prepared to make a dash toward central Sinai should the need arise. For example, Lieutenant Colonel Avraham Adan, the commander of the 82d Armored Battalion of the 7th Brigade, received as one of his possible missions a quick thrust toward Mitla to help Sharon's men.[45]

The above problems adversely affected Israeli operations at Abu Ageila. Despite the eventual participation of France and Britain in the war, the tentative and piecemeal approach of Operation Kadesh, coupled with doctrinal ambiguity, created an unexpected albatross for Wallach when the Egyptian defenders at Abu Ageila refused to surrender when surrounded. The Egyptians' tenacity in the defense also demonstrated the hollowness of Dayan's Collapse Theory.

Chapter 2

The Battle of Abu Ageila, 1956

> Defending this position [Abu Ageila] proved a major success in the operations of 1956; indeed, it was a source of great pride for the Egyptian forces who fought in the Sinai.
>
> —Lieutenant General Salah al-Din al-Hadidi[1]

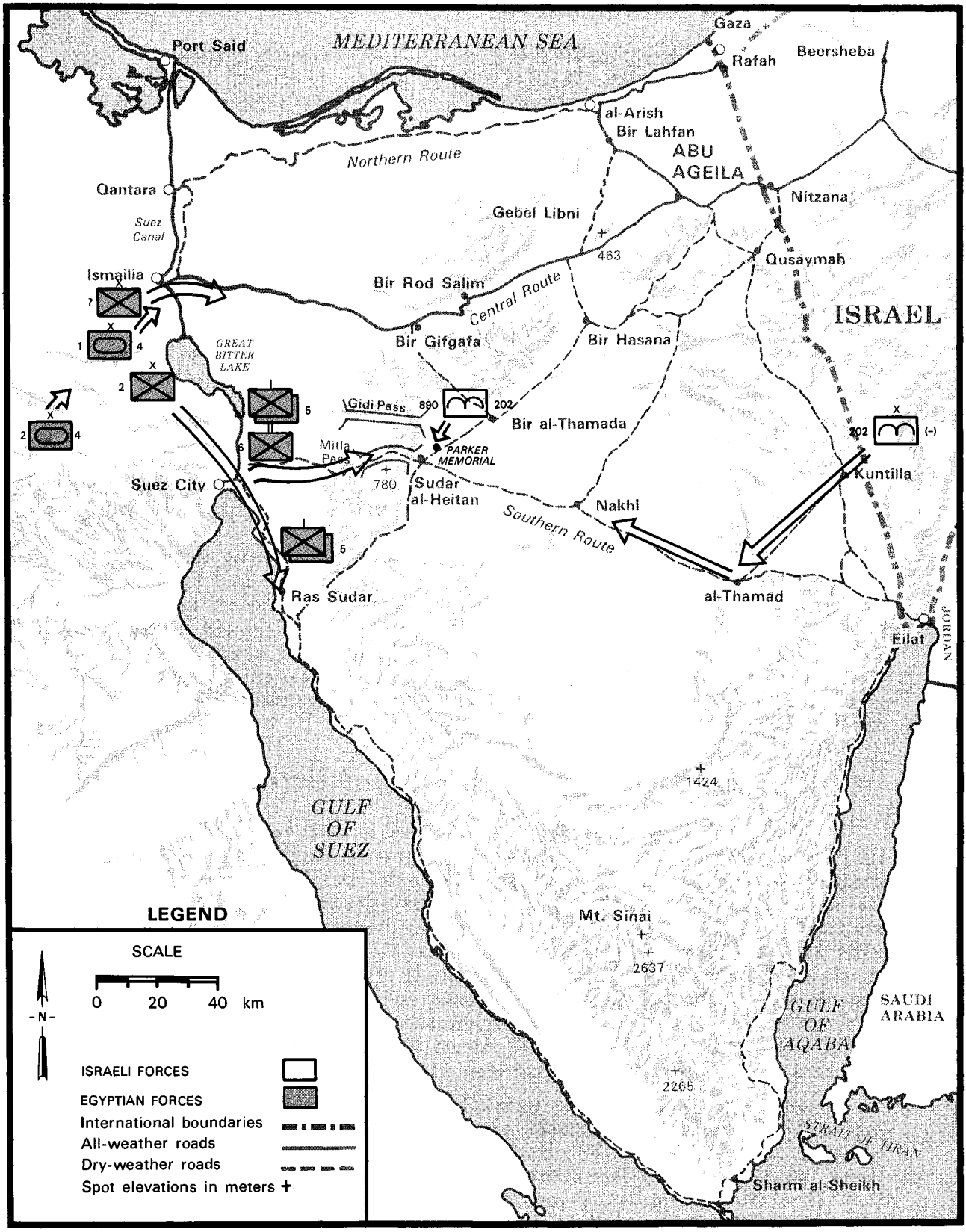
> The positions of Um Katef [Umm Qatef] and Um Shihan [Umm Shihan]—or, as the Egyptians call them, the defended localities of Abu Ageila—are the only sectors where, so far, the Egyptians fought extremely well and our [Israeli] forces extremely poorly.
>
> —Moshe Dayan[2]

Britain and France kept their part of the Sèvres Agreement and helped the Israelis defeat the Egyptian Army in the Sinai. London and Paris presented their ultimatum to the Egyptian and Israeli governments and then followed up on their threats with the actual bombing of Egyptian airfields, although the bombardment took place thirteen hours behind schedule. During this tense period of fifty hours, Dayan faced two major operational problems: to protect the isolated paratroopers at Mitla and to overcome the stalwart resistance of the Egyptian defenders at Abu Ageila.

The Mitla Operation: An Isolated Elite Force

Israel opened the land campaign as scheduled at 1659 on 29 October with the drop of the 890th Battalion of the 202d Paratroop Brigade, a force of 395 paratroopers commanded by Lieutenant Colonel Raful Eitan (later chief of the General Staff in the 1982 war in Lebanon). Orginally, the Israelis had wanted the paratroopers to take up positions at the western entrance into the Mitla Pass, some thirty kilometers from the Suez Canal, but air reconnaissance photos on the 28th had revealed the presence of tents and vehicles in the area. Israeli intelligence believed the photographs depicted a military camp rather than a construction site, and Dayan, accepting this erroneous interpretation, altered his plan slightly and ordered Eitan to land east of the Mitla Pass at a place known as the Parker Memorial (see map 6).

Although the 890th Battalion missed its target and landed five kilometers east of the desired site, Eitan quickly organized his force and moved westward, reaching his objective by 1930. He then had his men dig in to await reinforcements, since Dayan's orders expressly forbade him to attempt to enter the Mitla Pass. Meanwhile, Israeli and French aircraft dropped Eitan vital arms and supplies that included eight jeeps, four 105-mm recoilless antitank guns,



Map 6. Opening moves by Israel and Egypt, 29—30 October



Paratroopers assembling at the Parker Memorial

Mid-East Wars: The Israeli Commando's

and two 120-mm mortars. The air transports completed their mission on the 30th, several hours after midnight.

Concurrent with the airborne operation, the remainder of the 202d Paratroop Brigade crossed the border at Kuntilla reinforced by additional combat and support units, among them a company of AMX-13 tanks. Lieutenant Colonel Ariel Sharon, the commander of this column of approximately 3,000 men, took the Kuntilla—al-Thamad—Nakhl route to link up with Eitan's force. After several clashes with Egyptian units along the southern route and numerous delays resulting from vehicle breakdowns in the sand, Sharon finally arrived at his destination at 2230 on 30 October after having traveled 290 kilometers in approximately 30 hours. Then, like Eitan before him, Sharon received strict orders from Dayan not to mount an assault on the Egyptian positions in the Mitla Pass.[3] This restriction prevented the paratroopers from occupying more defensible ground within the Mitla Pass, which they could have done easily on the night of 29—30 October—before the arrival of Egyptian troops. Dayan, however, only wanted to provide a pretext for France and Britain to launch a joint military invasion of the Suez Canal.

The Egyptians reacted quickly to these two opening moves. During the early evening hours of the 29th, word reached Cairo of the Mitla landing and the Kuntilla crossing. Both operations caught the Egyptians completely by surprise: not only had the Egyptian leadership braced itself for a possible invasion in the Nile Delta, but the presence of an Israeli force in the middle of the Sinai made little military sense to the Egyptian senior command. While the Egyptians understood the strategic importance of the southern half of the Sinai with regard to Sharm al-Sheikh and the oil fields at Ras Sudar, posi-



Courtesy of Infantry and Brig. Gen. S. L. A. Marshall

Israeli paratroopers organizing their position at Mitla Pass

tioning Israeli forces at the Mitla Pass would not sever the important land route along the western shore of the peninsula that ran south from Suez City to both locations.

Muhammad Haykal, a close friend of Nasser throughout the period, described the bewilderment and confusion that prevailed among Egypt's political and military leadership that first evening. Nasser's first words to Haykal on the phone were allegedly: "The Israelis are in the Sinai and they seem to be fighting the sands, because they are occupying one empty position after another. . . . We can't make out what's happening." On arriving at general headquarters after his phone conversation with Nasser, Haykal found several theories circulating to explain the Israeli military action. Some officers suggested an Israeli feint intended to draw attention to Egypt while Israel invaded Jordan; others speculated a major Israeli operation would follow in the northern Sinai while Egyptian forces moved to deal with the diversionary actions in the south.[4]

Despite the confusion regarding the Israelis' intent, Nasser reached an important decision on how to deal with the Israeli forces at Mitla and along the southern route. The commander of the Eastern Military District had already ordered the 2d Infantry Brigade, stationed at Fayid on the west bank, to dispatch its 6th Infantry Battalion, plus two infantry companies from the 5th Infantry Battalion to blocking positions at the eastern entrance to the Mitla Pass. In addition, two other companies from the 5th set out for Ras Sudar to protect the oil wells there. The force sent to Mitla, although harassed by the Israeli Air Force, managed to reach its destination by late morning of the 30th and took shelter in the caves on the hillsides of the defile.

After listening to various viewpoints expressed at general headquarters (GHQ), Nasser decided to move the 1st and 2d Armored Brigades from the 4th Armored Division (still in formation) to a staging area between Bir Gifgafa

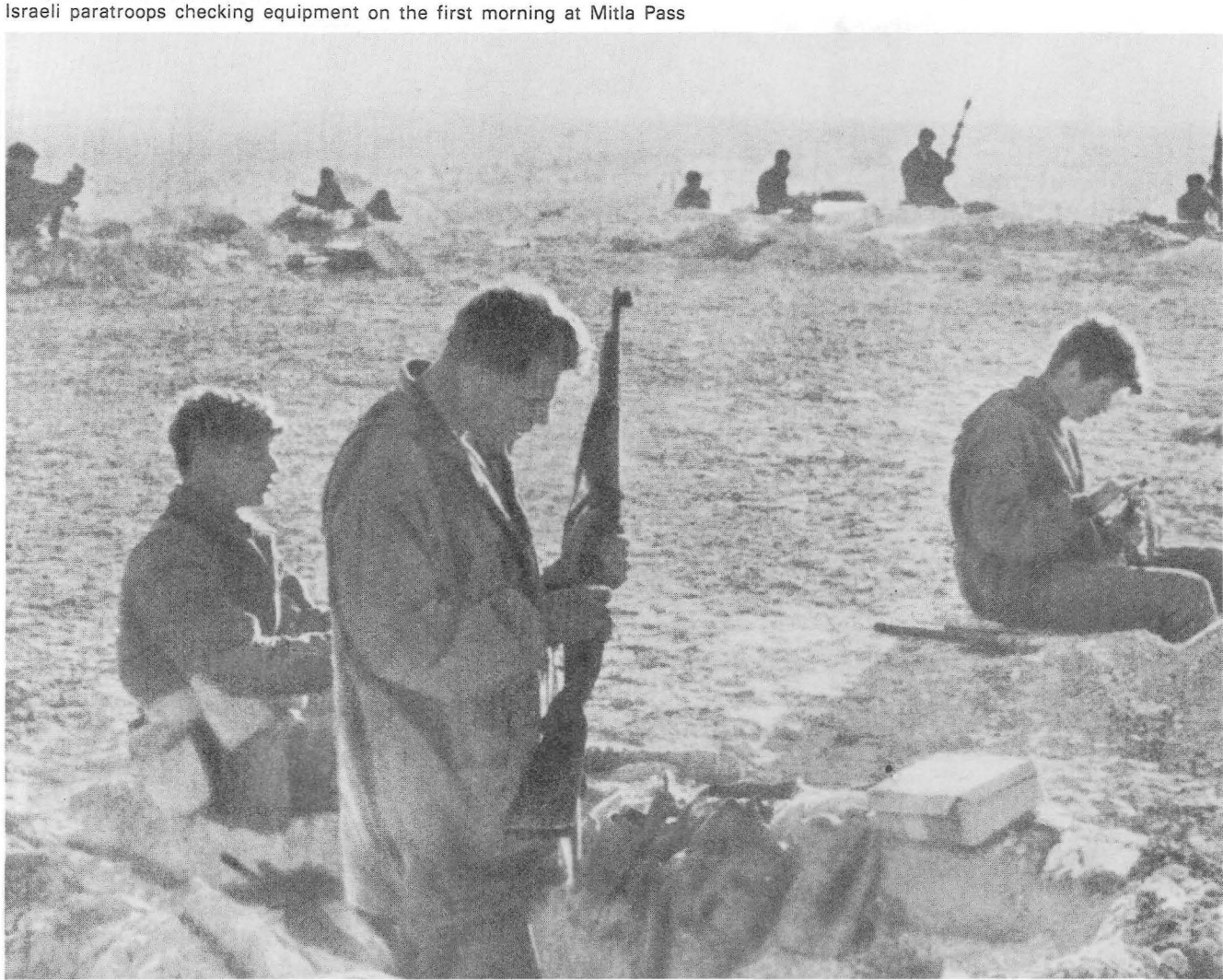
and Bir Rod Salim on the central route. From here, the two Egyptian armor brigades, comprising 200 T-34 tanks and SU-100 antitank self-propelled guns, could move south and southeast to meet Eitan's force at Mitla and Sharon's column moving toward Nakhl. Or they could head east to reinforce the northern Sinai should an Israeli main effort develop there. To support the two armored brigades, GHQ dispatched an infantry brigade to Bir Rod Salim. The Egyptians also shifted other military units around in case the Israeli moves were the beginning of a major invasion (see map 6).[5]

In transporting their tank force to the Sinai, the Egyptians faced a number of problems. In 1956, only one bridge—a combined railway and auto trestle at Firdan near Ismailia—spanned the Suez Canal. Moreover, one of the 4th Division's two tank brigades was near Cairo guarding an avenue of approach to the capital from Alexandria, and the brigade had to use rail cars to reach its crossing point at Firdan. The other tank brigade, which was located close to the canal, began moving across the Suez waterway shortly after midnight on the 30th. The dispersal of armor over a wide area meant the Egyptian Army also needed the night of 30—31 October to get the entire tank division safely across the canal and assemble it in its staging area for a possible counterthrust against the Israelis.[6]

During this 24-hour period, the Egyptian high command expected to discern Israel's true intentions and take more appropriate measures. Nonetheless, Egyptian commanders had made some sound decisions: an infantry force

Israeli paratroops checking equipment on the first morning at Mitla Pass

Israel Defense Army 1948—1958



would meet the Israelis' closest intrusion to the canal, and the armor reserve would cautiously deploy to meet any major Israeli offensive elsewhere in the Sinai. However, the Egyptians' delay meant that Britain and France would be able to give their ultimatum before the Egyptian armor reserves challenged the paratroopers at Mitla and other Israeli forces in the Sinai.

The Capture of Qusaymah, 30 October

In the Abu Ageila sector, Operation Kadesh called for the Israeli 4th Infantry Brigade to leave its staging area near the Egyptian border on the evening of 29 October and take Qusaymah by the morning of the 30th. After accomplishing this mission, part of the 4th Brigade was to stand ready to clear the Qusaymah Track for an assault on Umm Qatef from the south. The 4th Brigade would perform this mission in conjunction with the 10th Brigade, which would attack from the east.[7] According to this plan, the 7th Armored Brigade could enter the war no earlier than 31 October, its mission depending on events on the battlefield.

As it turned out, however, Brigadier General Assaf Simhoni, the Israeli commander on the Sinai front, disobeyed Dayan's orders and committed his tank brigade prematurely out of concern that he might prove unable to seize Qusaymah on schedule. Colonel Joseph Harpaz, the commander of the 4th Brigade, experienced some initial delay and confusion in organizing his force

Israeli tanks on the move



Israel Defense Army 1948—1958

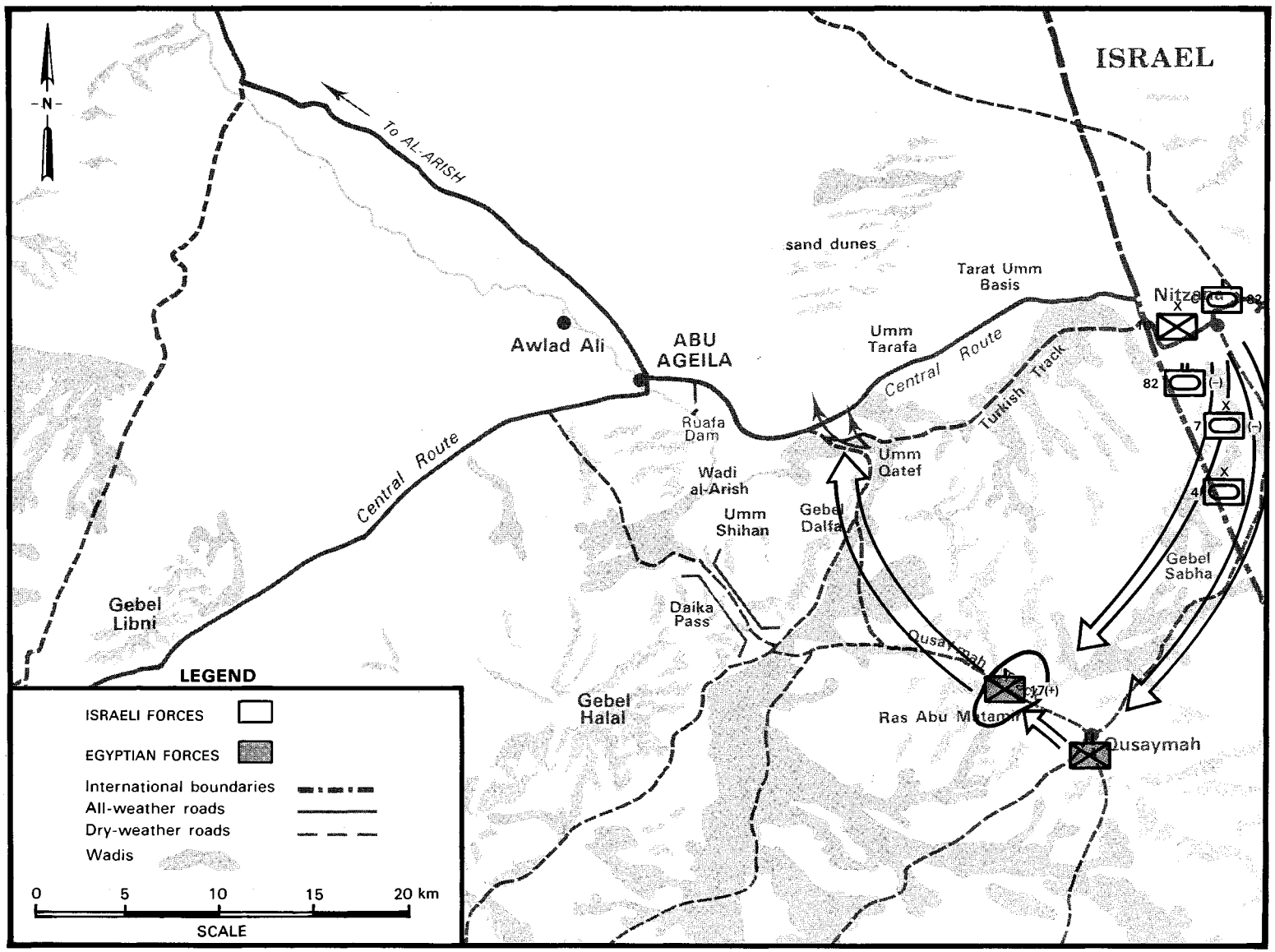
of reservists in its designated area at Nitzana in Israel, some eighteen kilometers from Qusaymah. Consequently, GHQ delayed the operation for several hours, but Harpaz' problems did not end there. Transportation difficulties also forced him to depart for Qusaymah with only one-third of the brigade's alloted ammunition supply. He had, after all, been given only forty-eight hours, instead of the normal seventy-two hours, to mobilize his brigade. Once en route, the brigade, moving on foot south of the road connecting Qusaymah with the Israeli area of Nitzana, encountered sand obstacles that slowed down its progress. This was why Simhoni, who feared that the 4th Brigade might fail to adhere to its timetable, ordered the 7th Armored Brigade into action against Dayan's specific orders.[8]

After receiving his new instructions from Simhoni, Colonel Uri Ben-Ari, the commanding officer of the 7th Armored Brigade, divided his force for the assault on Qusaymah. He ordered the 82d Armored Battalion, under Lieutenant Colonel Avraham Adan, along a dirt track north of the Qusaymah-Nitzana road. This battalion had only two of its three tank companies (C Company had been attached to the 10th Infantry Brigade). Ben-Ari then took the remainder of the brigade with him along the Nitzana-Qusaymah road in order to arrive at Qusaymah as rapidly as possible (see map 7).[9]

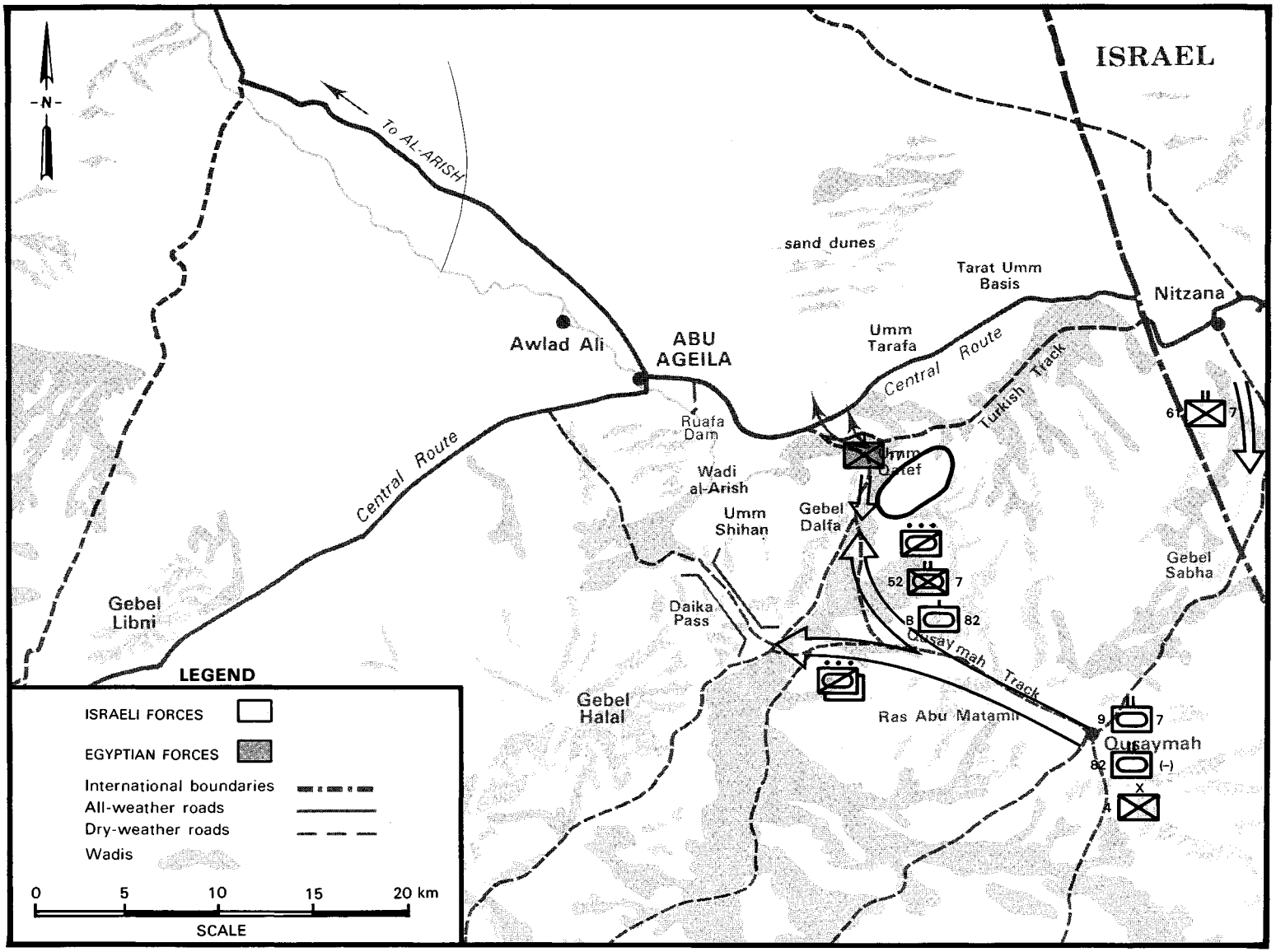
The Israeli 4th Brigade was already engaged in battle with the Egyptian defenders at Qusaymah when advance elements of Ben-Ari's 7th Armored Brigade arrived. Israeli tank fire quickly convinced the Egyptians of their desperate plight, and at around 0700—0730, the Egyptian National Guard battalion hastily retreated toward Umm Qatef, with elements of the 17th Infantry Battalion withdrawing from their position at Ras Abu Matamir without a fight.[10] The local Egyptian commanders had thus followed orders that required them to withdraw in the face of a far superior force.

The Israeli commanders at Qusaymah, encouraged by their initial success, decided to continue to press the Egyptians. Ben-Ari sent his reconnaissance company of three platoons in two directions—toward the Daika Pass and Umm Qatef. He also ordered the 52d Mechanized Infantry Battalion from the 7th Brigade, commanded by Lieutenant Colonel Uri Rom, to move within three kilometers of Umm Qatef and await further orders. To strenghten this mechanized force, Ben-Ari ordered Adan to give Rom a tank company (B Company) from the 82d Armored Battalion.[11] This decision reduced Adan's battalion to one tank company and a company of mechanized infantry (see map 8).

When elements of the 52d Mechanized Infantry Battalion appeared south of Umm Qatef at around 1230, Boulos, the Egyptian commander of the 6th Infantry Brigade at Abu Ageila, was already engrossed in preparing to meet the Israelis. His engineering detachment blew up positions on Qusaymah Track in an attempt to stop the Israeli advance. Rom, the Israeli battalion commander, decided to press ahead and probe the Egyptian position. His force steered around small crevices and managed to approach within 600 meters of the main perimeter of Abu Ageila. In the meantime, Boulos reorganized his defenses, strengthened by the arrival of the National Guard battalion from Qusaymah and the reinforced infantry company from the Ras Abu Matamir Pass. Once the Israelis circumvented the obstacles and threatened to break into the underbelly of the main defensive perimeter of Abu Ageila, Boulos decided to launch a counterattack with one company from the 17th Battalion



Map 7. The Israeli capture of Qusaymah



Map 8. Israeli moves from Qusaymah, 30 October

supported by artillery (see map 8). Unfortunately for the Egyptians, Boulos suffered either a wound or a heart attack at around 1300 as he prepared his force for a hand-to-hand engagement. He was evacuated to al-Arish and eventually to a hospital in Cairo.[12]

This aggressive initial Egyptian response brought success despite the loss of the brigade commander. After accurate fire destroyed two to four Israeli Sherman tanks and a number of armored vehicles, the Israeli brigade commander, Ben-Ari, who arrived on the scene during the heat of the battle, ordered his force to withdraw to positions several kilometers away. Dayan described the engagement thus:

> The [Israeli] attack met with strong resistance and accurate anti-tank fire from well entrenched "Archers" . . . the brigade commander [Ben-Ari] reached the spot, and it was his judgement that the battalion team had no chance of capturing the Egyptian position on its own. The battalion accordingly retired and the brigade commander started assembling additional forces for the attack.[13]

But Israeli tanks would not have a second chance to assault Abu Ageila from the south.

Moshe Dayan, quite surprised by the unexpected turn of events with the 38th *Ugdah* at Qusaymah, decided to confront his senior tactical commanders in the field. He met with Simhoni, Wallach, and Ben-Ari near Qusaymah around noontime on the 30th. There, Dayan expressed his anger at the premature commitment of Israeli armor against his explicit orders, later writing in his diary: "Yesterday I had stiff contretemps with the GOC Southern Command who, contrary to GHQ orders, sent 7th Armored Brigade into action before their appointed time."[14]

Simhoni, the front commander, was concerned about the fate of the paratroopers at Mitla and understood the importance of Qusaymah for opening a second route to the isolated force. However, he was unaware of Israel's secret agreement with the British and the French that had placed restrictions on the tempo of the campaign. So Simhoni accused Dayan of ruining the Israeli Army with his timid plan.[15] Simhoni's views and decision of that day underscored the dilemma facing the Israeli Army in Operation Kadesh. Its senior commanders had been taught to exercise initiative and press the enemy, yet they began the war without any clear notion of the political forces restraining bold military actions. Simhoni took the natural course of action expected of an Israeli commander: he followed the spirit, rather than the letter, of his orders.

Dayan understood this dilemma and therefore avoided punishing Simhoni. During this first phase of operations in the Qusaymah area, Israeli commanders had clearly shown aggressiveness and flexibility in command, and Dayan admired his subordinates in this regard, even though their actions threatened to commit Israel prematurely to a major campaign in the Sinai: "I could not avoid a sympathetic feeling over the hastening of the [7th] Brigade into combat even before they were required. Better to be engaged in restraining the noble stallion than in prodding the reluctant mule!"[16]

This famous statement giving primacy to the principle of initiative would remain one of the main legacies of Dayan's tenure as chief of the General Staff (1953—58) and to this day constitutes a key element in the Israeli military ethos that charges Israeli officers to view plans as merely a basis for

change. In this regard, the battle of Abu Ageila holds an honored place in modern Israeli military history: it constituted the first major application of this Israeli principle in a post-1948 war where the initiative was demonstrated contrary to specific orders.

In response to the train of events at Qusaymah and Umm Qatef, Dayan decided not to inform Ben-Gurion of the major changes in Operation Kadesh, his excuse being that the venerable leader lay in bed with influenza.[17] Yet Israel was slowly becoming enmeshed in a major campaign without the clear commitment of French and British military forces—something Ben-Gurion dearly wanted to avoid as evident from the secret talks at Sèvres. The joint ultimatum promised by London and Paris would arrive in Cairo at 1800 on 30 October—hours after the conclusion of the Qusaymah meeting.

Before leaving the 38th *Ugdah*, Dayan issued new orders that demonstrated his continuing anxiety for the fate of the 890th Paratroop Battalion at Mitla. The Israeli Air Force was to continue to concentrate its sorties against any movements in the direction of Mitla. Moreover, Dayan ordered Harpaz to move his entire 4th Brigade toward Nakhl in support of Sharon, while he directed Ben-Ari's 7th Armored Brigade to bypass Umm Qatef and head in two directions—toward Gebel Libni on the central route and Bir al-Hasana on the way to Mitla. At Bir al-Hasana, Israeli tanks would be in a position to protect Sharon's flank and come to the aid of Eitan if necessary.[18] With these new directives, Wallach found himself without the use of the 7th Armored Brigade for the assault on Abu Ageila.

But Dayan could have taken another course of action. He could have left the entire 7th Armored Brigade on the Qusaymah Track to mount a coordinated attack with the reinforced 10th Infantry Brigade for the morning of the 31st. Instead, only one tank company—C Company attached to the 10th Brigade—remained to assault the entire position of Abu Ageila. Eventually, GHQ would have to release two tank companies from its strategic reserve to beef up the armor for the assault on Umm Qatef.

A Turning Point in the Battle for Abu Ageila

In the early afternoon of the 30th, an important event occurred that proved a turning point in the Israeli attempt to take Abu Ageila. Elements of the Israeli 7th Armored Brigade's reconnaissance company discovered that the Daika Pass was unguarded: the Egyptians had blown up a bridge just before the entrance and then had withdrawn deep into the defile. On learning this, one Israeli reconnaissance platoon occupied overwatching positions, while a second platoon moved into the defile. By 1615, the second platoon reached the northern tip of the Daika Pass, within view of Ruafa Dam some ten kilometers to the northeast. There, the platoon commander observed Egyptian trucks rushing supplies into the main defensive perimeter.[19]

The discovery of an open route through Daika Pass presented the Israelis with a golden opportunity for dislodging the Egyptian defenders at Abu Ageila with an attack from the west. The earlier Israeli probe along Qusaymah Track had confronted formidable Egyptian defenses. Ben-Ari now hoped that Egyptian positions at Ruafa Dam would not be as unyielding. On receiving word sometime in the late afternoon of developments at the Daika Pass, Ben-Ari

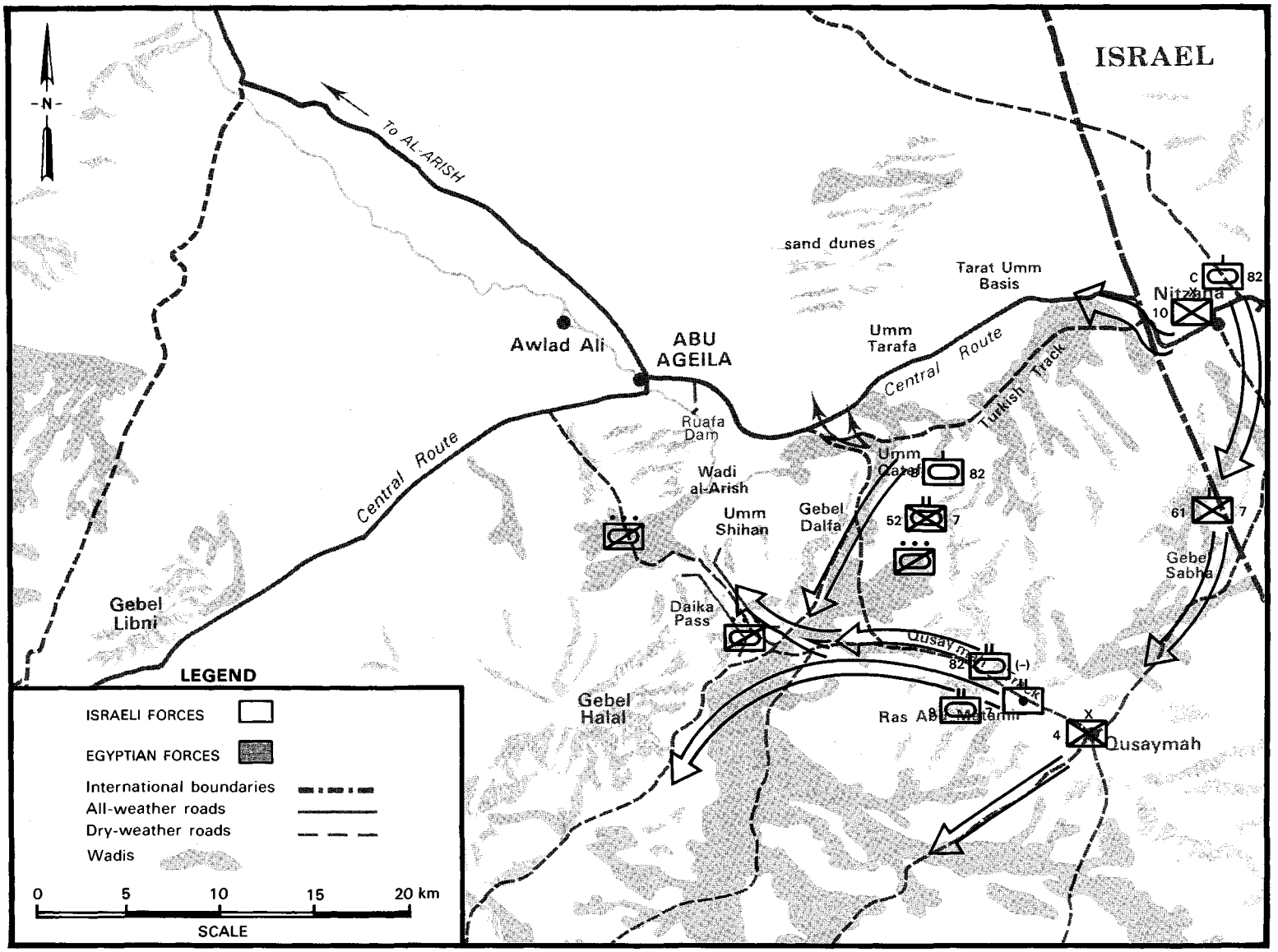
sought to exploit this fortunate turn of events and gained Wallach's support for the venture.[20]

Ben-Ari redeployed the 7th Brigade for this new mission. A reconnaissance platoon and the 9th Armored Battalion, composed of AMX-13 tanks, headed for Bir al-Hasana, while the 61st Motorized Battalion took up positions south of Umm Qatef. To move through the Daika Pass, Ben-Ari decided to employ the 82d Armored Battalion, the 52d Mechanized Battalion, and the 7th Brigade's mortar and artillery battalions.[21] At this juncture, only the A Company of Sherman tanks actually belonged to Adan's 82d Battalion. The 10th Brigade had gained C Company at the outset of the campaign; B Company had been attached to the 52d Mechanized Battalion at Qusaymah for the probe of Egyptian defenses along that track. Ben-Ari planned to return B Company to Adan once the tanks passed through the Daika Pass (see map 9).

To augment Ben-Ari's force, Wallach, the *ugdah* commander, decided at 1900 to return Adan's C Company of tanks that had been attached to the 10th Brigade (see map 9). With this decision, Adan could look forward to having his entire battalion back. After the war, however, Dayan criticized Wallach for taking this step because it left the 10th Infantry Brigade without any armor support for its scheduled assault on Umm Qatef. Wallach defended his action as appropriate given the developing tactical situation in the rear of Umm Qatef and the imperative need to exploit this excellent opportunity with all available assets.[22] No doubt Wallach was also concerned that the 7th Armored Brigade would be in the rear of Abu Ageila without its 9th Armored Battalion—which was en route to Bir al-Hasana—while the Egyptian 4th Armored Division was preparing for a counterattack in the vicinity of Bir Rod Salim.

With this reconfiguration of forces and the assignment of new missions, Wallach was left with the 10th Infantry Brigade to attack Umm Qatef and three battalions—one each of armor, mechanized infantry, and mortars—from the 7th Armored Brigade for taking Abu Ageila and Ruafa Dam. Although Israeli initiative, courage, and offensive spirit were leading to the encirclement of the main defensive perimeter of Abu Ageila, Wallach had lost the element of surprise and much of his initial advantage in men and materiel. In a way, however, he was lucky, for the discovery of the unguarded pass resulted in a major part of the 7th Armored Brigade remaining for the attack on Abu Ageila instead of heading toward central Sinai as ordered by Dayan at Qusaymah. The task now became one of taking full advantage of those forces.

By evening, word reached Dayan of the new situation at Daika Pass. Dayan soon approved Wallach's plan to exploit the pass with elements from the 7th Brigade and issued new directives for the next day. Ben-Ari, in addition to taking Bir al-Hasana as planned, would now also seize the Ruafa Dam and then help assault Umm Qatef. The 10th Brigade, already committed by Simhoni, was to capture Tarat Umm Basis that evening and prepare to take Umm Qatef the next morning (31 October) in coordination with Ben-Ari's attack from the west. The 77th *Ugdah*, to the north, would attack Rafah on the evening of 31 October—1 November and then proceed to al-Arish. The 9th Infantry Brigade, scheduled to take Sharm al-Sheikh, was not to embark on the coastal road until the establishment of air supremacy (see map 5).[23]



Map 9. Israeli movements, evening 30 October

At this point in the campaign—that is, twenty-four hours after the paratroop operation—Israeli forces were becoming dangerously spread out in central and southern Sinai. Moreover, they were maneuvering without seizing important terrain or destroying enemy forces. This same dynamic would continue for the next twenty-four hours, but by then, Dayan desperately wanted to seize Umm Qatef.

Egyptian Reactions to Events at Abu Ageila

The Egyptians adjusted rather well to the developments at Qusaymah, Umm Qatef, and the Daika Pass. To alleviate the loss of Boulos, Qadi—the commander of the 3d Infantry Division—ordered Colonel Sa'ad Mutawalli, the commander of the Egyptian 4th Infantry Brigade (which constituted the main part of the division's reserve), to assume command of the defenses at Abu Ageila. Mutawalli reached his new assignment as commander of the 6th Infantry Brigade by 1700 on 30 October.[24] His role in commanding the 6th Brigade at Abu Ageila would prove critical to the Egyptians in their tenacious defense during the next thirty-six hours.

By early evening of 30 October, the Egyptians were becoming acutely aware that a major Israeli force might be surrounding Abu Ageila. By 1700, the Israeli 10th Infantry Brigade had crossed the frontier on the 30th and seized the observation posts before Tarat Umm Basis. By 1900, the Israelis captured Tarat Umm Basis, some nine kilometers east of Umm Qatef.[25] At this juncture, both Qadi and Mutawalli had riveted their attentions on an Israeli force moving through the Daika Pass, which threatened to cut off Abu Ageila from Ismailia and al-Arish.

Based on reports received throughout the day of the 30th, Qadi realized the seriousness of the threat to his 6th Brigade and dispatched an infantry battalion—augmented by a field artillery battery and four self-propelled Archers—from al-Arish to Abu Ageila. These units, which arrived in the Abu Ageila area sometime after midnight on the 31st, provided Mutawalli with additional combat power and reduced the Israelis' force ratio advantage before the most intense fighting for Abu Ageila took place.[26] The Egyptian relief column, under Mutawalli's direction, would obstruct the Israelis in their attempts to break into the rear of Abu Ageila and repel the Israeli attacks of 31 October—1 November.

The First Engagements in the Egyptian Rear

Ben-Ari selected Lieutenant Colonel Avraham Adan's 82d Armored Battalion to take the crossroads at Abu Ageila. At the time of this decision, Adan, who awaited further orders at Qusaymah, was positioned to reach the Daika Pass more quickly than the 52d Mechanized Battalion, which had just fought south of Umm Qatef. Adan's unit was a tank battalion in name only. At Qusaymah, the 82d Battalion consisted of only one tank company of Shermans and a company of mechanized infantry. Adan hoped to have at least one of his two absent companies, if not both, back in time to assault Umm Qatef from the west the next morning (the 31st).

Ben-Ari's plan for the task force moving through Daika Pass under his command directed the brigade's battalion of artillery to provide fire support while Adan captured the Abu Ageila crossroads in the morning. Ben-Ari would then leap-frog past Adan with the 52d Mechanized Battalion and assault the defenses at Ruafa Dam. Then, in conjunction with the attack on Umm Qatef by the Israeli 10th Brigade from the east and the 61st Motorized Battalion from the south, Ben-Ari and Adan would together assault Umm Qatef with the 52d and 82d Battalions from the west (see map 10).[27]

Getting through the narrow Daika Pass, however, presented Adan with some transportation problems. Although the brigade's reconnaissance platoon had negotiated the pass rather easily, the larger force of tanks and armored personnel carriers experienced unexpected difficulties. Nonetheless, at dawn on 31 October, Adan finally joined the reconnaissance platoon just south of the central route—tired but determined to press on toward his objective.

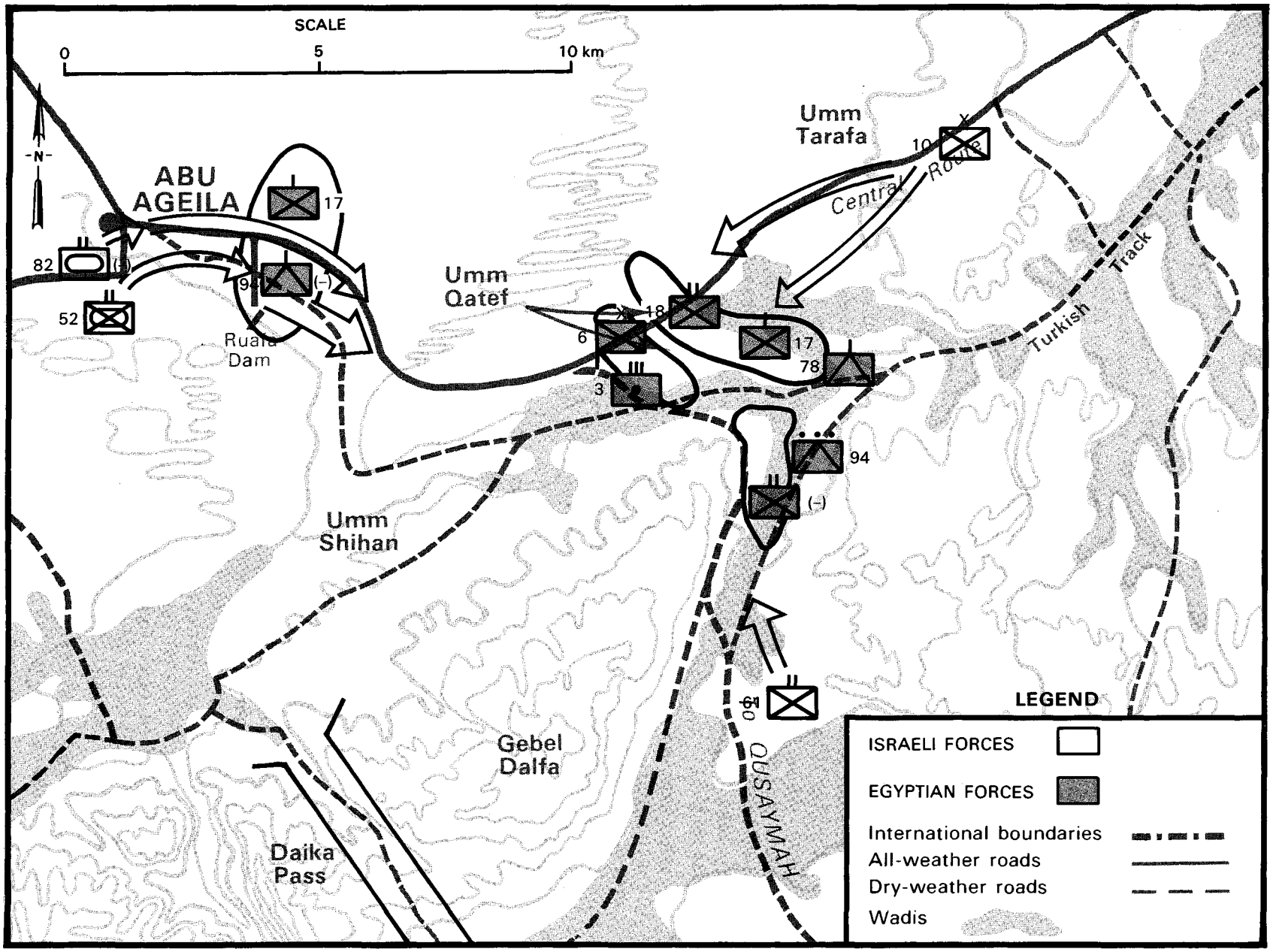
At this point in the campaign, problems in communications began to hamper command and control and impede coordination of the three forces surrounding Abu Ageila. Ben-Ari and Adan sometimes lost contact with Wallach, whose command post was located south of Tarat Umm Basis. To alleviate this problem during a critical phase of the operation, Wallach once resorted to sending his chief of staff to Adan to ensure the proper transmission of an order, for the SCR 608 and Mk 19 radios proved unreliable at long distances.[28]

After arriving south of the central route, Adan quickly organized his forces for an assault on Abu Ageila, where the Egyptians had a small military camp with a few buildings containing caches of supplies. Adan had one company of fourteen Sherman tanks and another company of armored infantry on half-tracks. These would be useful, since taking Abu Ageila in the early morning required a dash across open country.

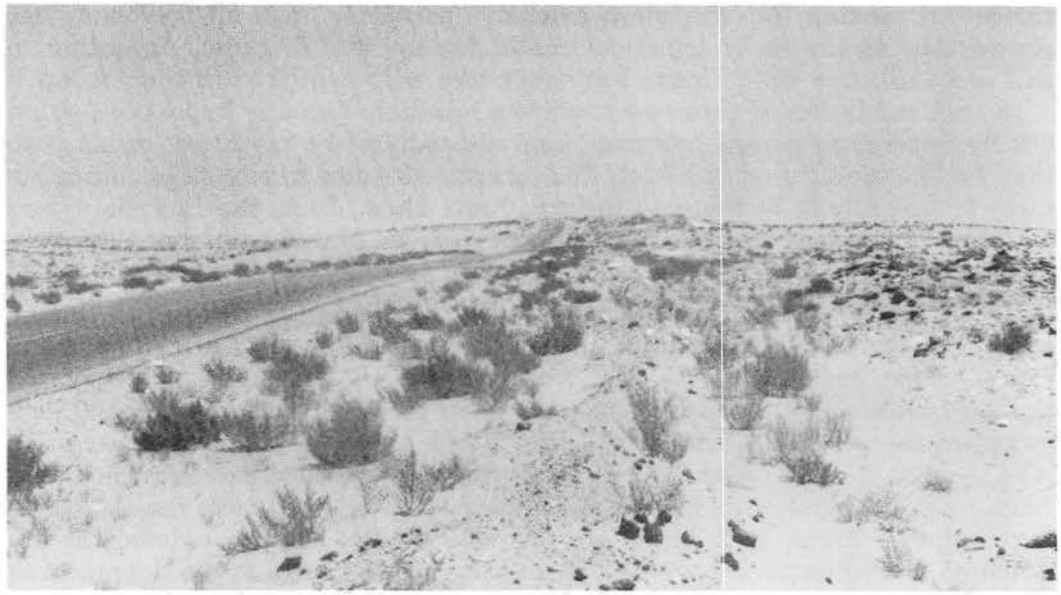
Unfortunately for the Israelis, the dazzling sun was in their face. Without hesitating, Adan's tanks charged the crossroads, firing on the move. Artillery fire from Egyptian positions at the Ruafa Dam, although inflicting some damage, proved unable to stop his advance. On reaching the crossroads, Adan defeated a small Egyptian force consisting of two dismounted platoons of infantry armed with bazookas. Between 0645—0700, the Israelis had seized the important crossroads of Abu Ageila and effectively cut off the Egyptian 6th Brigade from al-Arish. The Egyptians were surrounded.[29]

Accounts differ as to what transpired next. Some sources, mainly Israeli, maintain that the Egyptian 12th Infantry Battalion (or part of it), sent on the 30th from al-Arish, had actually entered the main defensive perimeter to bolster defenses there and that on the 31st Qadi followed up with the dispatch of the 10th Infantry Battalion supported by a tank company of T-34s or Shermans. This relief column, however, suffered extensive damage from the Israeli Air Force while en route to Abu Ageila during the morning. Nevertheless, it still had some fighting power as it regrouped at the Awlad Ali area. Qadi then directed Mutawalli to attack from the dam with one force, while the 10th Battalion attacked Adan from the north.[30]

Official Egyptian military sources offer another picture. According to them, Qadi had sent only the 12th Infantry Battalion from al-Arish. This force,

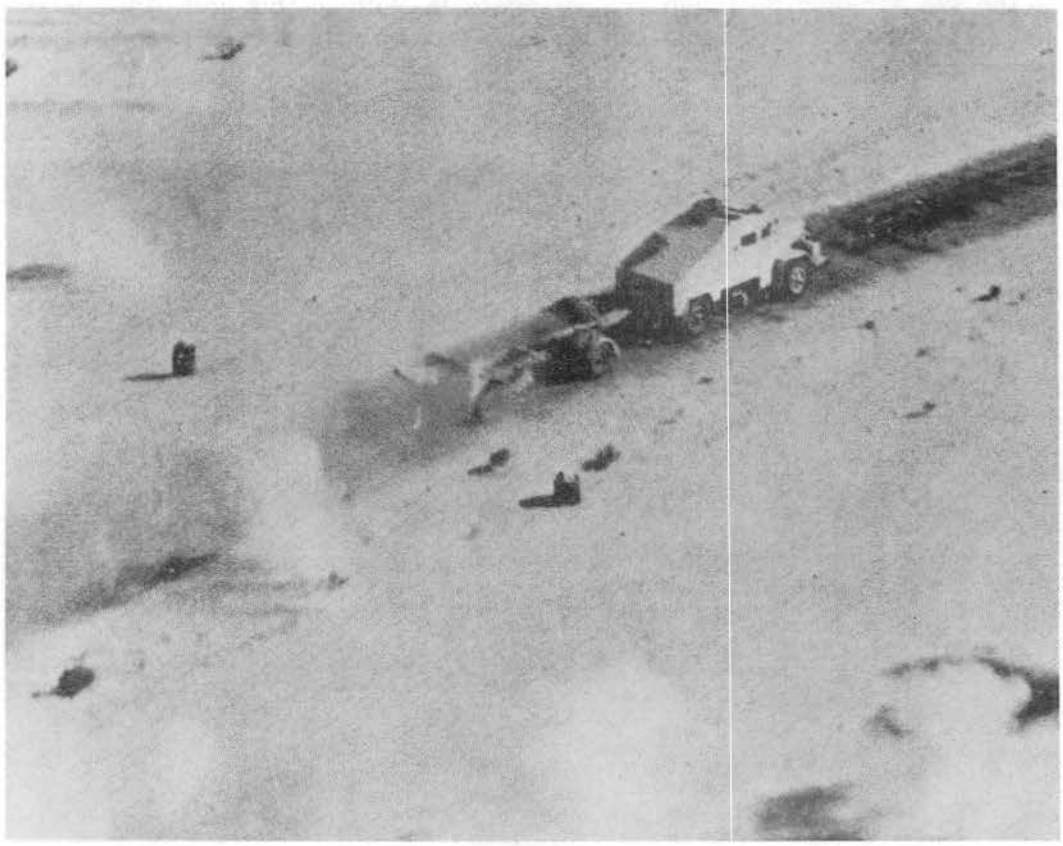


Map 10. Israeli plan of assault, 31 October



Courtesy of Major Thomas P. Odom

The central route, looking due east from the crossroads at Abu Ageila toward the Egyptian rear in the Ruafa Dam area



Israel Defense Army 1948–1958

Egyptian artillery column undergoing a strafing

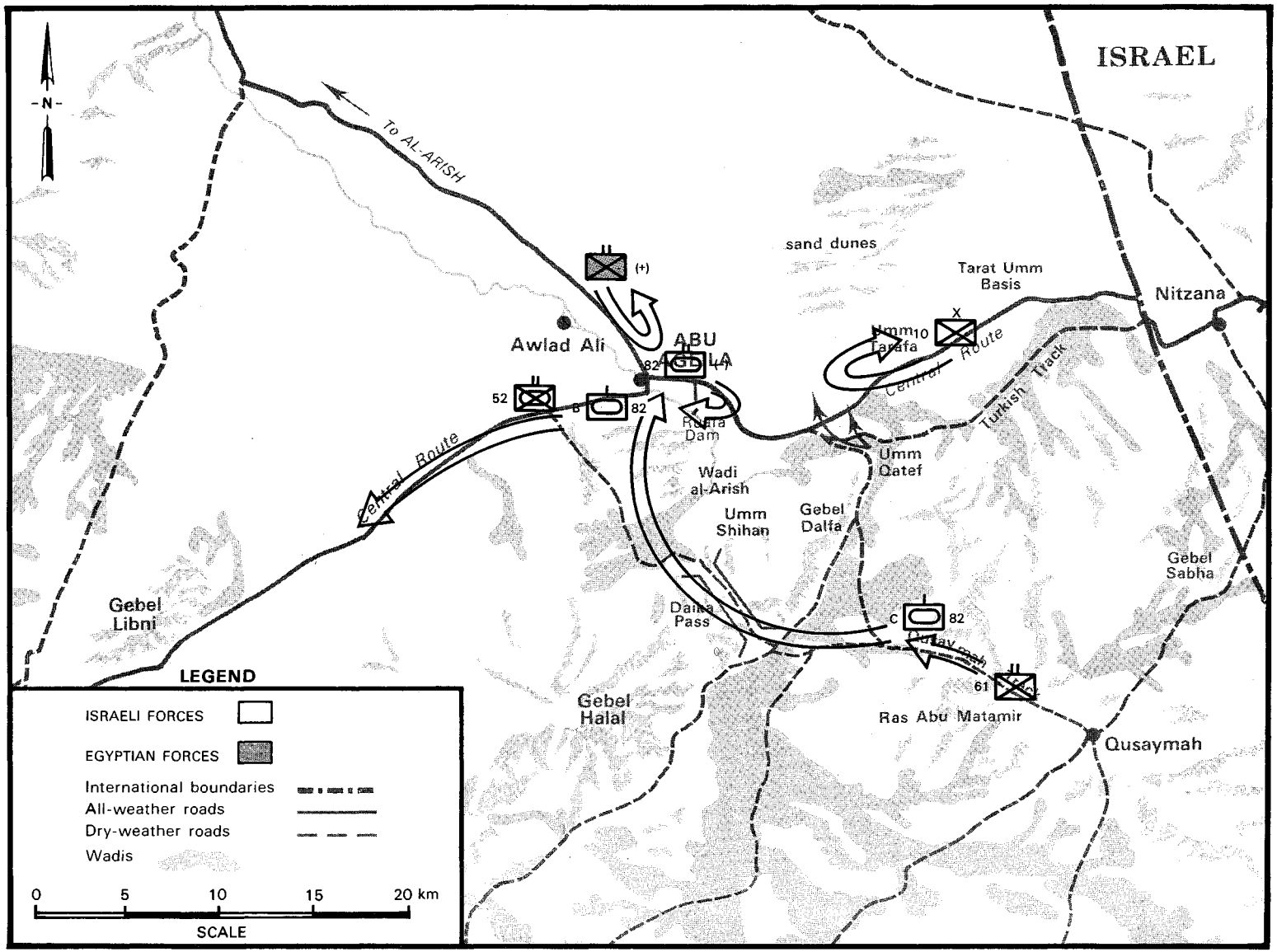
instead of moving into the main defensive perimeter, took up positions near Awlad Ali (at the main logistical center for the 6th Brigade). According to this account, the relief force had no tanks with which to attack Adan.[31] Although resolution of these contradictory accounts remains impossible, Adan clearly faced a reinforced battalion from al-Arish, to the northwest of his position, on the morning of the 31st. This prevented Adan from concentrating his force for an attack to the east toward Ruafa Dam. Thus, the Egyptians had managed to send reinforcements of some sort to Abu Ageila that adversely affected the course of the battle for the Israelis.

Now, an unexpected development occurred that forced Ben-Ari to change his plans for taking Ruafa Dam and, in turn, put Adan in a precarious situation. On the morning of the 31st, the Israeli Air Force incorrectly reported the approach of an Egyptian armored force of T-34 tanks and SU-100 self-propelled guns in the vicinity of Gebel Libni, some forty kilometers west of Abu Ageila. Ben-Ari, who had now negotiated a passage through the Daika Pass, opted to move with his 52d Mechanized Battalion to meet the approaching Egyptian armor in a battle west of Abu Ageila. He also ordered the 9th Armored Battalion at Bir al-Hasana to turn north to attack the approaching Egyptian armor on its right flank. In order to defeat what he believed was a large armor force, Ben-Ari decided to keep Adan's B Company of Shermans that he had attached to the 52d Mechanized Infantry Battalion at Qusaymah.[32] Now, Wallach's decision to have the 10th Brigade return Adan's C Company to the 82d Armored Battalion proved sagacious. Without this unit, Adan would have had approximately fourteen tanks to face an attack from two directions (see map 11).



Colonel Uri Ben-Ari, 7th Armored Brigade, controlling operations

Mid-East Wars: Israel's Armor in Action



Map 11. Developments on 31 October

Keeping Adan at the Abu Ageila crossroads, while a major risk, made tactical sense: The Egyptian defenders at Umm Qatef and Ruafa Dam were now completely surrounded. Years later, Adan described his important role in the battle for Abu Ageila this way: ". . . we were as a bone in the enemy's throat, disrupting its continuity between Nitzana and El Arish."[33]

Concluding that he could not take the dam without more tanks, Adan decided to dig in and await the arrival of his second tank company. Dividing his meager force in two, he placed most of an infantry company and a platoon of tanks on dunes overlooking the al-Arish road to deal with the Egyptian force in his rear. Meanwhile, he assigned a rifle platoon and two tank platoons to face Ruafa Dam.[34]

During the relative lull in fighting on the afternoon of the 31st, Mutawalli did not launch any major attacks against Adan's small force. Egyptian military sources later admit that this passivity on the Egyptians' part represented a serious tactical mistake.[35] Aggressive, synchronized attacks by Egyptian units from al-Arish and Ruafa Dam—in conjunction with the Egyptian Air Force—would have most likely destroyed the small Israeli force. At this point, Adan was extremely low on fuel and ammunition and would have found it extremely difficult to sustain a defense against a coordinated attack from two directions.[36]

Adan took advantage of the calm to give his men a much needed respite. At approximately 1600, the second company of Shermans finally arrived from the 10th Brigade, raising the Israeli force to approximately 500 men and 30 tanks.[37] But much time had been wasted waiting for the tanks, and the Egyptians still stood fast. Nonetheless, now Adan could plan a serious assault on the Abu Ageila complex in conjunction with the two other Israeli forces moving from the south and east.

Initial Problems with the Israeli 10th Brigade

Adan's inability to mount an attack on the Ruafa Dam on the morning of the 31st was not too costly to the Israelis, because the Israeli 10th Infantry Brigade became immobilized by its own set of problems east of Umm Qatef. After seizing Tarat Umm Basis with relative ease by the early evening of the 30th, Goder's 10th Brigade became ineffectual. Goder failed to organize his force for a major assault against Umm Qatef early the next morning. After a probe with his reconnaissance force, he concluded that he needed the support of tanks to attack Umm Qatef in broad daylight across open terrain, and he appealed to his superiors for help. Simhoni passed on the request to GHQ. The Operations Branch in Tel Aviv, unable to locate Dayan, released part of its strategic reserve from the 37th Armored-Mechanized Brigade, and Goder settled down to await its arrival.[38]

Dayan, although unaware of the above decision, learned of the 10th Brigade's inability to assault Umm Qatef in conjunction with Adan's attack in the rear. Dayan personally visited Goder at Umm Tarafa around noontime on the 31st, impressing on the commander the urgency of opening up the central route for the sake of the 7th Brigade and the paratroopers at Mitla. The 10th Brigade, much to his surprise and chagrin, showed little sign of being ready for this mission. Dayan found "the battalion commanders had

not [yet] made the necessary preparations for the attack on these two [Umm Qatef and Umm Shihan] localities."[39]

Angered by what he saw among his own troops, Dayan confronted the brigade and battalion commanders in a heated discussion:

> The meeting with these officers was tough and not at all agreeable, and we all got angry. It was not only that I felt I was not getting through to them in my efforts to rouse them to action; it seemed clear that we were just not seeing things in the same light. Here I was urging the brigade command to get into combat, to advance and assault Um Katef, and they were just not prepared for it. They said they had been told by Southern Command that this assignment would be given to another unit. They had a thousand and one good and understandable reasons why they were unable that night to storm the Egyptian positions, with their minefields and well-laid defenses; but the fact is, in all its brutality, that the sole purpose in bringing them here was for them to capture these very positions, and it was vital for the campaign that this should be done as soon as possible.[40]

In this exchange, Dayan learned of the commitment of a task force from the 37th Brigade into the battle for Abu Ageila.

Ignoring all arguments, Dayan assumed operational command and ordered the brigade to attack Umm Qatef with all haste. In the early afternoon and in broad daylight, Goder attacked with the brigade's reconnaissance unit and an infantry company in ten half-tracks and other assorted vehicles. The Egyptian defenders were ready and opened fire on this exposed force, scoring numerous hits using Archers from Umm Qatef and artillery from near Gebel Dalfa. The Israelis lost heart quickly and withdrew to the safety of Umm Tarafa. Afterwards, Dayan tersely described this effort as "the first lukewarm attempt [by the 10th Brigade]."[41]

South of Umm Qatef on Qusaymah Track, the 61st Motorized Battalion failed to attack on the morning of the 31st.[42] Perhaps the infantry force, de-



Courtesy of Infantry and Brig. Gen. S. L. A. Marshall

The Israeli charge at Abu Ageila

prived of the luxury of half-tracks, had problems negotiating Qusaymah Track. The silence of published sources regarding the absence of an Israeli attack from the south for the next twenty-four hours remains a mystery (see map 11).

Israeli Command Problems

The emerging operational problems at Abu Ageila stemmed, in part, from Dayan's practice of command and control. Throughout the campaign, Dayan exhibited a penchant for being in the field with combat troops, returning to GHQ only in the evenings, when possible. In his memoirs, Dayan candidly admits to a problem here: "But of course my non-appearance [at the GHQ command post] during the day makes things difficult and upsets the ordered organization of the work."[43] In the case of the 10th Brigade, the Operations Branch of GHQ was left to make a decision without its chief of the General Staff, who later assumed operational command because he was unhappy with its actions.

Dayan's intervention at Abu Ageila caused a major dispute between him and the divisional task force commander. Wallach, commander of the 38th *Ugdah*, expressed serious reservations to Dayan concerning the latter's unrelenting determination to take Umm Qatef. Arguing that supplies could reach the 7th Armored Brigade by way of Qusaymah, Wallach saw no need to assault Abu Ageila: the defenders at Abu Ageila would eventually have to surrender since they were cut off from al-Arish. But according to Wallach, Dayan refused to listen to this argument and retained his fixation for conquering what amounted to "an imaginary road block." The events of 31 October—2 November resulted from what Wallach has since referred to as an "unnecessary, tragic misunderstanding" over the importance of Abu Ageila to the Sinai campaign.[44]

Dayan, in his version of this controversial issue, views the significance of Abu Ageila to the Sinai campaign in a different light. According to him, the IDF desperately needed a favorable axis to support the 7th Armored Brigade and the 202d Paratroop Brigade at Mitla Pass because supply convoys were already experiencing bottlenecks on the alternate routes. The dirt track through Qusaymah was in such bad condition, especially after the clashes there with the Egyptian National Guard battalion, that only transports using four-wheel drives could negotiate this route. And of these, the army possessed a limited supply. Consequently, Dayan felt he had no choice but to seize Abu Ageila in order to control the central route, which could service forces moving toward the Suez Canal.[45]

Dayan's position in this controversy contains much merit, especially given the possibility that the Egyptians might have launched a major counterattack with armor in the central Sinai. Reports on the morning of the 31st, after all, had indicated the approach of a large tank force just west of Gebel Libni, which caused Ben-Ari to veer in a westward direction instead of helping Adan seize Ruafa Dam. A large tank battle west of Abu Ageila might favor the Egyptians, who controlled much of the central route and could field upward of a division against a spread-out Israeli 7th Armored Brigade. Such an advantage certainly could be offset by the Israeli Air Force, but given the delicate operational situation, Dayan could ill afford to take too many risks. His con-

cern for logistics routes was later validated on 1 November when the 7th Armored Brigade experienced logistical problems in its advance toward the canal—even without having to deal with major Egyptian resistance. On that

A sandy desert track near Abu Ageila

Courtesy of Infantry and Brig. Gen. S. L. A. Marshall



day, Ben-Ari halted his pursuit of withdrawing Egyptian armor owing to fuel shortages, and his brigade was able to proceed westward again on the next day only because it had captured gasoline storage tanks at Bir Rod Salim.[46]

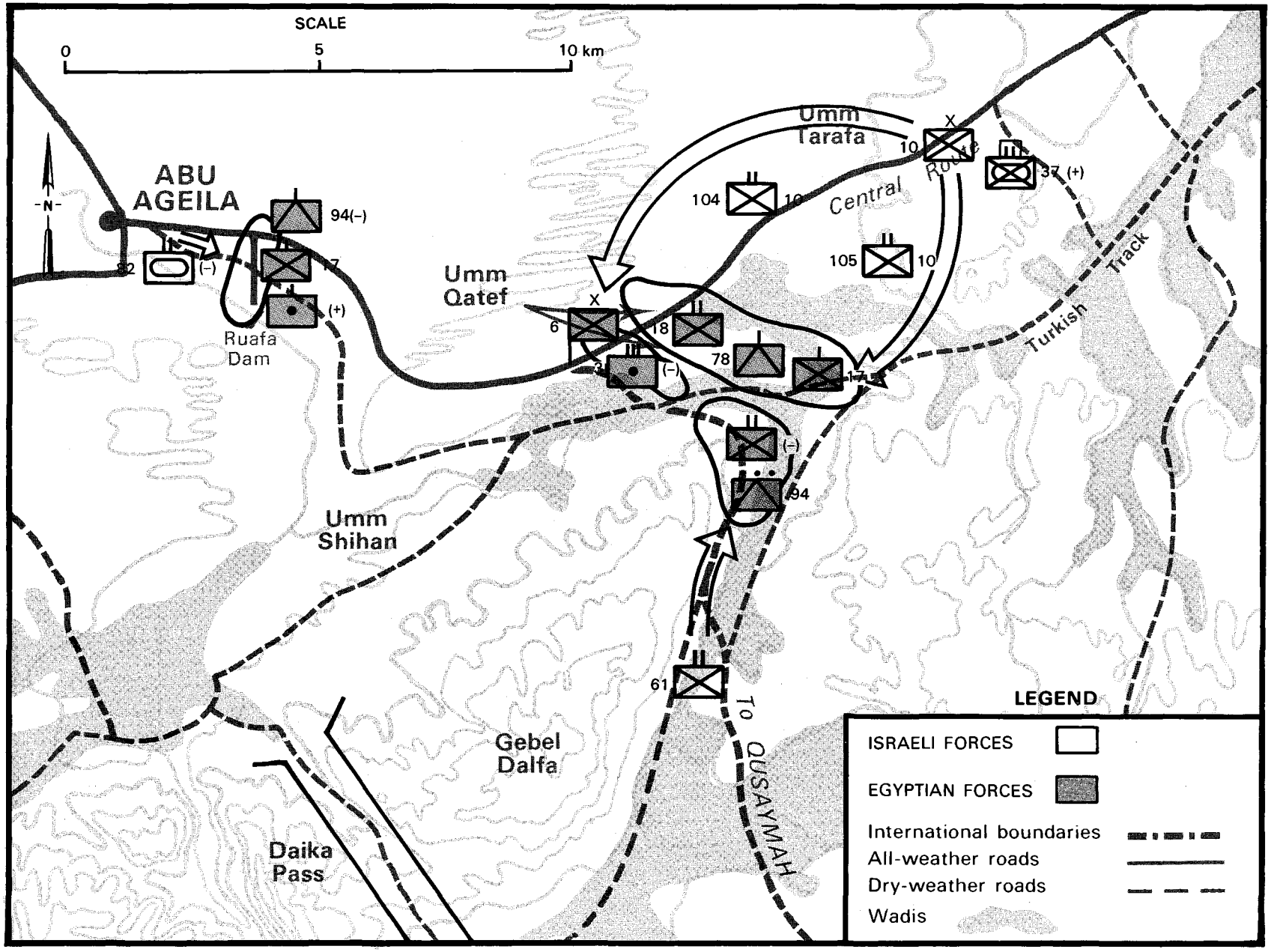
In addition to his command tensions with Wallach and Goder on the 31st, Dayan had a major problem with Ben-Gurion, the nation's leader. Dayan pushed for an attack on Abu Ageila, expecting France and Britain to follow their ultimatum of the 30th with the actual bombing of Egyptian airfields on the 31st. He probably reasoned that his troops would then advance quickly to the canal and require logistical support at a faster tempo than alternate routes could provide. Ben-Gurion, however, wanted all Israeli troops withdrawn from the Sinai, because the British and French air strikes planned for the morning of the 31st had not taken place, and the prime minister, unclear as to the reasons for this delay, feared a betrayal. Dayan resisted the execution of Ben-Gurion's order, and his action proved correct, for France and Britain began their strikes at 1900 on the 31st.[47]

Too many variables in the midst of the fog of war seemed to drive Dayan to press on for the conquest of Abu Ageila. In the wake of the Dayan-Wallach debate, the chief of the General Staff had his way, and the IDF made preparations for a night assault on Abu Ageila. Adan would attack Ruafa Dam from the west, break through, and assault Umm Qatef from the rear. Meanwhile, the 10th Brigade would attack Umm Qatef on the northern and southern flanks with an infantry battalion each. The task force from the 37th Brigade would penetrate through the center, while in the south, the 61st Motorized Battalion would hit the underbelly of the Abu Ageila complex (see map 12).

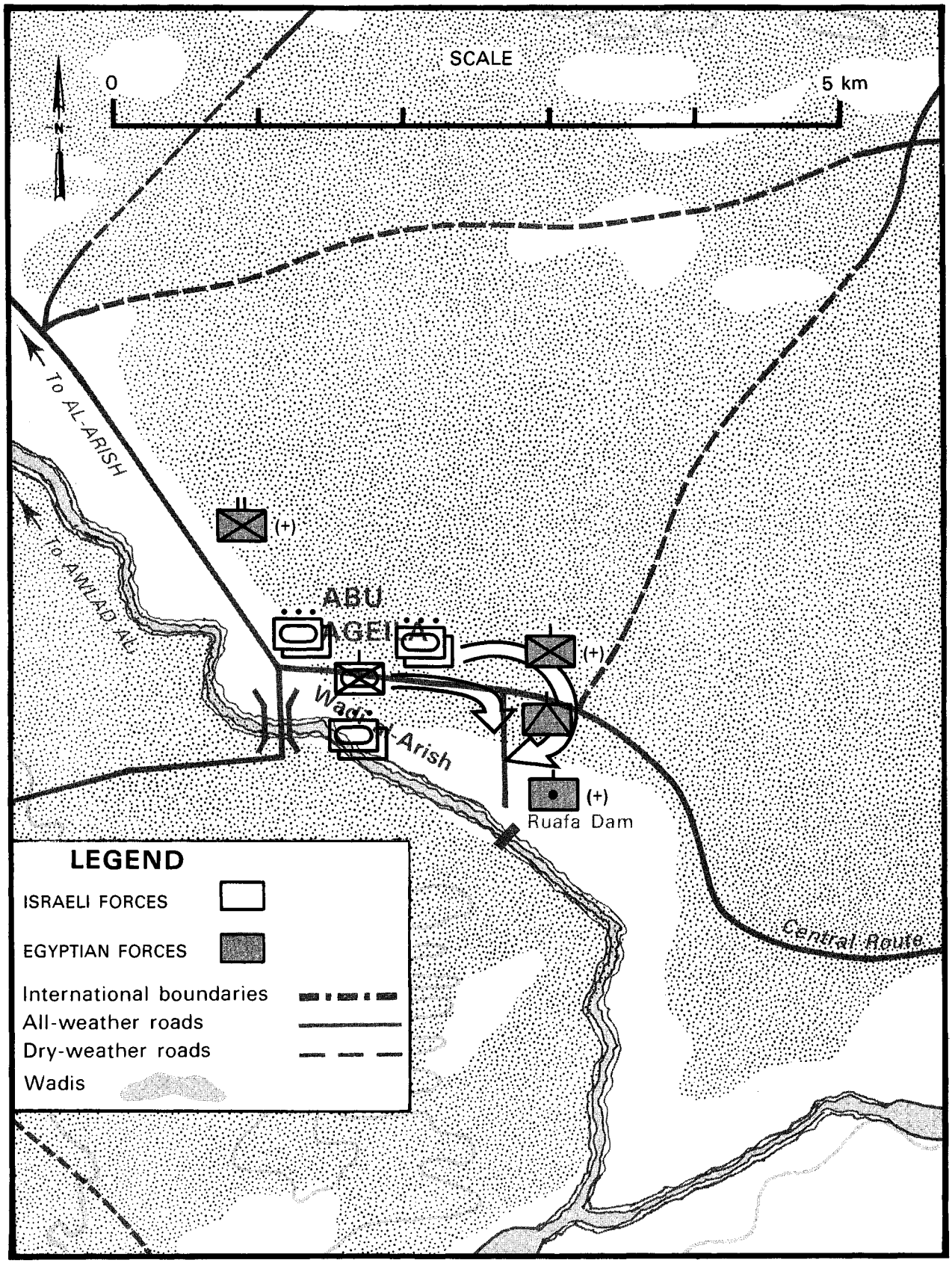
Adan's Failed Attacks

In the west, Adan, strengthened by the arrival of his second tank company, prepared to attack Ruafa Dam at 1800. Two tank platoons would remain in the vicinity of the crossroads of Abu Ageila to watch for a possible attack by the Egyptian force at Awlad Ali. To take the dam area, Adan planned to send two tank platoons to positions on a small hill south of the crossroads, where they would provide covering fire for an assault force that consisted of two tank platoons and a company of armored infantry. The infantry was to break through the defensive line and turn south against the fortified hill, while the tanks proceeded farther east and then veered south to assault the Egyptian position from the rear (see map 13). Israeli artillery provided additional fire support during the early phase of the assault.[48]

Unfortunately for the Israelis, events did not proceed according to plan. After encountering some initial resistance, the Israeli infantry managed to break through the defensive line and head south as planned. However, the tank force, while it moved parallel with the infantry, failed to move farther east and south to envelop the Egyptian position. This failure resulted from the darkness that descended on the area and hampered Israeli movement. The critical time Adan lost awaiting the arrival of the second tank company now came to haunt the Israelis. Though the dam did fall to the Israeli attackers, the ensuing dusk caused confusion among the Israelis and forced



Map 12. Israeli plan of attack, 31 October—1 November



Map 13. Adan's plan of attack on Ruafa Dam, 31 October

Adan to withdraw in the face of an Egyptian counterattack that won back the Ruafa position by 2300. Refusing to give up, Adan regrouped and made a second attempt at 0330 on 1 November—but again without success.[49]

The Egyptians had held their ground at Ruafa Dam with a single infantry company supported by six to eight 25-pounders, eight to ten Archers, and seven to twelve 57-mm antitank guns.[50] Mutawalli, the Egyptian brigade commander, later underscored for a Western journalist the exemplary performance of this combined arms force: "They fought like a brigade. They fired till their guns melted."[51] Although the Egyptians had not fortified Ruafa Dam as they had Umm Qatef, Israeli armor and infantry had still failed to attain its objective.

The Second Israeli Assault on Umm Qatef

East of Umm Qatef, Israeli infantry also failed to reach its goal, but with more disastrous results. At nightfall, Goder dispatched the 104th and 105th Infantry Battalions of the 10th Brigade with orders to flank the main defensive position from both the north and south respectively in conjunction with operations in the west and south. Both battalions, however, got lost in the dark. Nonetheless, by midnight on 1 November, at least one Israeli platoon had managed to break into the main perimeter just south of Umm Qatef, but the Israelis proved unable to exploit this success. Hand-to-hand combat ensued between Israeli and Egyptian soldiers, with cries of pain from bayonet wounds chilling the desert air. In the confusion, both sides lost soldiers to friendly fire. Resolute Egyptians—helped in part by a timely counterattack by an infantry company—forced the Israelis to retreat.[52]

The Egyptians held out, in part, because of aggressive and clever tactics. Throughout the battle for Abu Ageila, Mutawalli willingly displaced his artillery and machine-gun sections to new positions, bringing some of the artillery forward to Umm Qatef.[53] The Egyptians also managed to surprise the Israeli 105th Infantry Battalion moving against the Egyptian right flank by successfully concealing an infantry company armed with four medium machine guns on a hill south of the Turkish Track. During the Israeli probe on the morning of the 31st, the Egyptian company apparently held its fire. Later, in the evening, the Egyptians surprised the attacking Israelis and pinned down part of the battalion.[54] Wallach later admitted the Egyptians had made excellent use of terrain in building their defenses.[55] The Israelis, for their part, failed to launch any surprise attacks on Umm Qatef to unnerve the Egyptian defenders.

Dayan was now thoroughly disgusted with the performance of the 10th Brigade. On learning that its two assault battalions had lost their way, he met with Simhoni, the front commander, and the two men decided to dismiss the brigade commander.[56] Wallach, located with his artillery south of Tarat Umm Basis, received an order to personally inform Goder.[57] Despite losing his command, Goder was "rehabilitated" after the war and eventually promoted to brigadier general—ironically at one point serving as the chief of the Military Tribunal of Appeals.[58]

According to Wallach, Goder, a highly competent artilleryman from the Soviet Union, proved incapable of leading an infantry brigade in combat. In

Goder's defense, however, it should be noted that his brigade had to fight without armor support and had only a battalion-size force initially—albeit supported with Israeli artillery fire—with which to assault Umm Qatef in daylight across five kilometers of open terrain without the benefit of surprise. Furthermore, not all the 10th Brigade's problems had been of Goder's making. Even Wallach admitted that the brigade had an inordinate number of reservists over the age of 40, and the IDF was to learn from the war that such individuals should have been placed in combat support positions.[59] Nonetheless, there was still hope that the strategic reserve might accomplish its mission.

The GHQ could not commit the entire 37th Brigade to Abu Ageila to ensure success because it had already assigned one of its tank companies and a company of armored infantry to help the 11th Infantry Brigade conquer the Gaza Strip.[60] For the battle at Abu Ageila, Colonel Shmuel Golinka, the brigade commander of the 37th, ordered two tank companies and two companies of infantry on half-tracks to leave their concentration area near Beersheba—with the tanks traveling on lorries as the infantry moved on ahead. As mentioned earlier, the new plan called for seizing Umm Qatef during the night of 31 October—1 November with two infantry battalions of the 10th Brigade—one flanking from the north and the other from the south. Then, in the early hours of the morning of 1 November, the task force from the 37th Brigade would launch a frontal attack on Umm Qatef and punch through to the dam, while other Israeli forces would attack from the south and the west (see map 12). This plan gave more armor punch to the infantry attacks in the east than envisaged in the revised Operation Kadesh.

While the 10th Brigade conducted its futile attacks against Umm Qatef during the evening of 31 October—1 November, Golinka waited impatiently for his task force in order to attack in the early morning. His two infantry companies arrived on schedule, but the tanks still trailed far behind on transports. After waiting until around 0400 on 1 November, Golinka finally decided to attack without his armor, initiating a frontal assault even though the 10th Brigade, in an earlier such attack, had failed. Golinka personally led the charge of infantry in half-tracks, with headlights on, perhaps thinking he might intimidate the Egyptian defenders into submission. The Egyptians, however, used Archers and artillery to inflict numerous casualities on the attacking Israelis, and where Egyptian fire missed, minefields took their toll. The Israelis lost twenty killed and sixty-five wounded in the 37th Brigade alone; among the dead was Golinka himself.[61]

In his book on the 1956 war, Dayan assessed the fiasco thus: "the failure of 37th Brigade was due to the over-eagerness of its officers to rush the enemy defenses."[62] During the battle, however, Dayan had castigated the officers of the 10th Brigade for their lack of zeal. This stance had no doubt heightened Golinka's desire to press his attack. Israeli intelligence, perhaps aware of the beginnings of an Egyptian general withdrawal from the Sinai, also contributed to the debacle by reporting that the Egyptian defenses were on the point of collapse.[63] Despite Israeli optimism, at noontime on the 1st, after forty-eight hours of battle—some of it fierce—the Egyptians still retained control of their defensive perimeter, despite numerous assaults by elements from three Israeli brigades. Military events taking place outside the Sinai, however, would force the Egyptians to withdraw from the peninsula.

The Abandonment of Abu Ageila

At 1800 on Tuesday, 30 October, the British and French ambassadors in Cairo and Jerusalem had delivered their ultimatum to both the Egyptian and Israeli governments. Their notes demanded an immediate cease-fire and the withdrawal of all Egyptian forces to the west bank. British and French troops would occupy the three cities of Port Said, Ismailia, and Suez City. Since Israeli troops were to be permitted to advance to within ten miles east of the Suez, Israel stood to gain territory from this arrangement. Thus far, Israeli forces had not advanced that close to the canal. The notes required a response from Israel and Egypt within twelve hours. Ben-Gurion understandably accepted the ultimatum, while Nasser rejected it outright.

The joint British-French ultimatum created a strategic dilemma for Egypt. Haykal describes the first reactions among the country's political and military leaders: "News of the ultimatum was received with astonishment bordering on disbelief."[64] Nasser and Amer, anxiously awaiting the next step from the two European states, suspended any plans for major operations in the Sinai.[65]

By this time, however, the Egyptian high command had a clear picture of the battle situation in the Sinai. To the Egyptians, the Israelis appeared to be involved in two major efforts, one along the Kuntilla to Mitla route and the other along the central route through Abu Ageila to the Suez Canal. In light of this assessment, the battle for Abu Ageila emerged as the "key" (*miftah*) to the entire campaign in the Sinai. GHQ wanted forward positions to hold, with the mission of delaying and impeding Israeli forces while Egyptian armor prepared for a counterattack that would drive the Israelis out of the Sinai. The Egyptians planned to unleash two major task forces—each consisting of an armored brigade of T-34 tanks and SU-100 self-propelled guns—supported by an infantry brigade. One force would move on the central route to deal with the Israelis at Abu Ageila, while the second moved against the paratroopers at Mitla. A third force would remain in the Bir Gifgafa and Bir Rod Salim area as a reserve.[66] But the ultimatum put this plan into abeyance.

Then on the 31st at 1900, French and British bombers began their attacks on Egyptian airfields, destroying much of the Egyptian Air Force on the tarmac. Now Egypt had to deal with a second front in the war, but one much more threatening to the state than the theater of operations in the Sinai. Following the bombing of Egyptian airfields, Nasser immediately concluded that his entire army in the Sinai might be cut off by a European expeditionary force occupying the canal area. He therefore called an emergency meeting of top political and military leaders to discuss strategic options. Against the opposition of several individuals, including his war minister Amer, Nasser ordered a general withdrawal from the Sinai.[67]

GHQ in Cairo quickly drew up plans for a phased pullout to be extended over two days. The armored group at Bir Gifgafa and part of the force at Mitla Pass would withdraw to the west bank of the canal under the cover of darkness during the night of 31 October—1 November, while the 5th Brigade at Rafah pulled back to al-Arish. The second armored group and the defenders at al-Arish and Abu Ageila would act as covering forces. Then, during the night of 1—2 November, Egyptian troops at al-Arish and Abu Ageila and the

remainder of the soldiers at Mitla were to fight their way back to the west bank.[68] Nasser felt he must do this to save his army and prepare for the defense of the Egyptian heartland against two European powers about to launch a major invasion of his country.

Qadi, the division commander at al-Arish, apparently waited until 1700 on 1 November to inform Mutawalli of the withdrawal.[69] He may have reasoned that this would avoid causing a collapse in morale among Egyptian troops at Abu Ageila. In fact, during the night of 31 October—1 November, the defenders at Abu Ageila faced the most serious attacks launched against them during the war—and from at least two directions. In intense fighting, the Israelis lost one brigade commander killed in action, and Dayan relieved another brigade commander. From the Israeli viewpoint, this period saw perhaps the worst fighting performance of the IDF in the entire war.

Mutawalli informed his immediate subordinates of the withdrawal shortly after receiving Qadi's directive. The brigade commander planned a pullout in three phases, at thirty-minute intervals, beginning at 1830. A skeleton artillery crew and an infantry company were to remain and fire throughout the night to create the impression that conditions were unchanged at Abu Ageila.[70] The Egyptians were so successful in this ruse that for the next sixteen hours the Israelis made no attempt to enter Abu Ageila.

By late morning of 1 November—even before the Egyptian 6th Brigade began its withdrawal—Dayan suspended operations, leaving the fortifications surrounded but unpressed by attacks. New missions went out to the various Israelis units. The bulk of the 7th Armored Brigade, already west of Gebel Libni, was instructed to continue its advance toward the Suez Canal. The 61st Infantry Battalion (motorized) was to remain south of Umm Qatef under the control of the 10th Brigade and its new commander, Colonel Israel Tal. To support the 61st Battalion in its encirclement of Abu Ageila from the south, Tal transferred an infantry battalion to it from the 10th Brigade. Adan kept one tank company to hold the Abu Ageila crossroads, while a second company headed west. The 37th Brigade, for its part, lost one tank company to the 10th Brigade, while the remainder of the task force was to join Adan at Abu Ageila, by way of Qusaymah, to defeat the Egyptian force at Awlad Ali.[71] As the Israelis reshuffled their forces, they now hoped to starve the defenders into submission.

By 0400 on 2 November, Wallach—suspecting something amiss because of the relative inactivity within the Abu Ageila complex—sent a tank company from the 37th Brigade and two infantry companies from the 10th Brigade to investigate. Wallach's headquarters, however, failed to inform Adan, situated to the west, of the troop's entry into the defensive complex. Wallach's infantry, finding no Egyptians, occupied Umm Qatef, and his tanks continued west in the direction of Ruafa Dam. Adan's force, unaware of developments at Umm Qatef, thought the Israeli tanks approaching them were Egyptian and opened fire, destroying eight tanks and forcing four others to retreat.[72] This event was the last of the Israeli missteps at Abu Ageila, and the most tragic—one they could blame only on themselves.

A Final Assessment of Operations

Several writers have pointed out that no major Egyptian position at Abu Ageila had fallen to the Israelis when the French and British commenced their bombing operation.[73] Maintaining those defenses after the bombing, however, would have proven suicidal, so Nasser abandoned the Sinai to defend the heartland of Egypt. Any final assessment of the Battle of Abu Ageila must deal with the operational and tactical developments during those critical days of 31 October and 1 November.

Even before the arrival of the withdrawal order, the Egyptian defenders at Abu Ageila were hemmed in by Israelis from the west, east, and south—with little hope of receiving reinforcements. By the late evening of the 31st, the Israelis began to assault Rafah with the 77th *Ugdah*. Qadi, the commander of the Egyptian 3d Infantry Division, faced an Israeli division-size force that threatened to take Rafah on the way to al-Arish. Thus, Mutawalli, the commander of Egyptian forces at Abu Ageila, could expect no more help from his superior.

The only other Egyptian hope for reinforcements and supplies lay with the two armored brigades and the infantry brigade assembling at Bir Rod Salim. But this force had its own problems, even before the British and French bombed Egypt's airfields on the 31st. During daylight hours on the 30th and 31st, the Israeli Air Force—perhaps aided by the French—attacked the Egyp-

Foundered Egyptian tanks



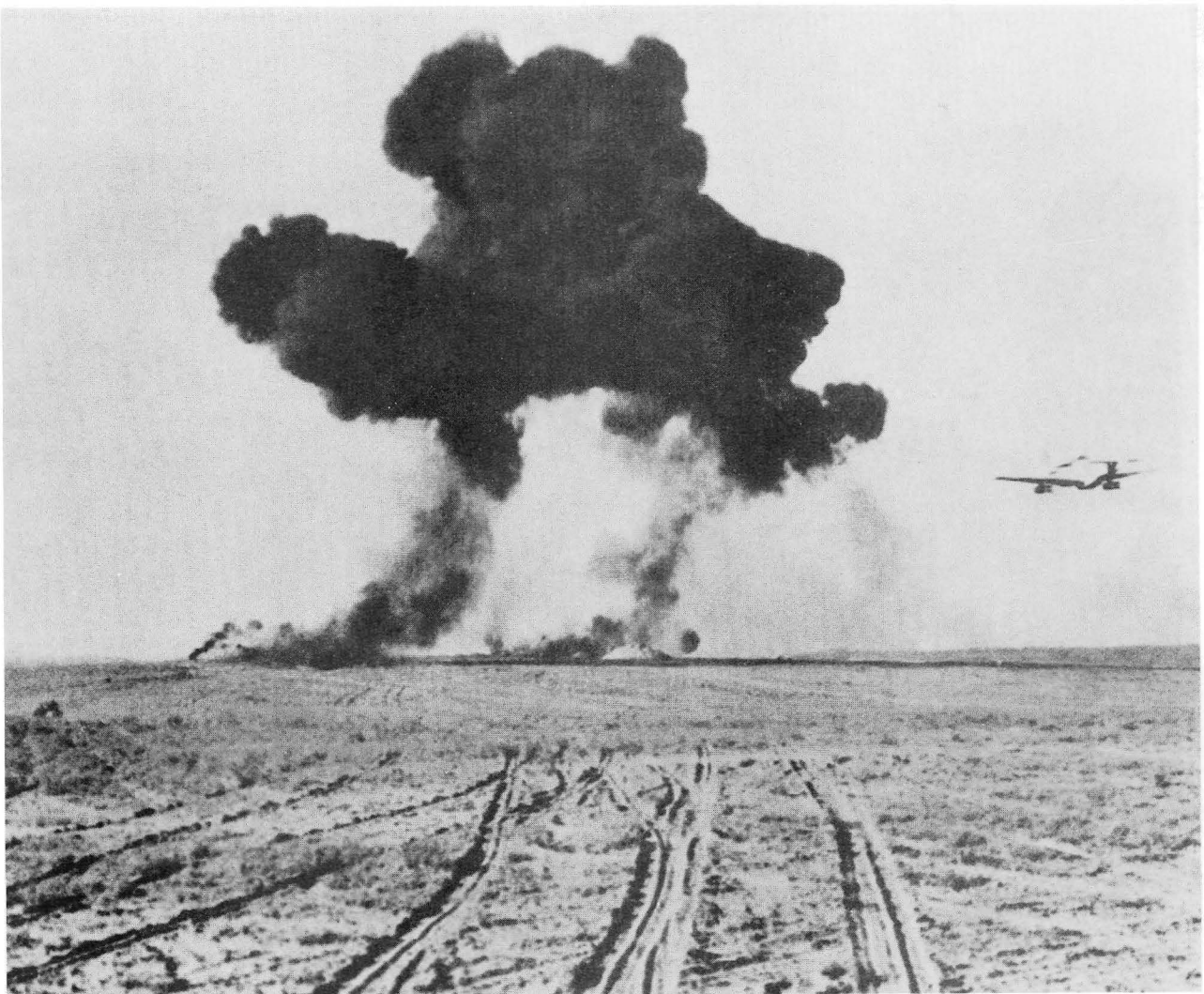
Israel Defense Army 1948–1958

tian armor, inflicting much damage. Some sources claim the losses were so severe that they forced Egyptian commanders to halt their advance.[74] Thus, the Egyptian armor force, weakened in firepower, had lost much of its ability to break through to Abu Ageila and rescue the defenders there.

By the evening of 1 November, the tactical situation had become desperate for Mutawalli. His provisions had run extremely low, especially after the heavy Israeli air attacks during 1 November.[75] One source has claimed that only 5 or 6 rounds remained for each Egyptian artillery piece and that the Egyptian 6th Brigade had only 200 gallons of water for approximately 3,500 men.[76] Certainly, Mutawalli could not have held out much longer when ordered to pull out. From their harsh combat experience, the Egyptians have learned that troops in forward positions need more than the fifteen-days' supplies that they had alloted them in 1956.[77]

Uncertainty as to how many Egyptian defenders at Abu Ageila actually managed to return to the west bank of the canal clouds a final assessment of the battle. Unit cohesion broke down among a number of infantry battalions of the 3d Division in the general withdrawal from the Sinai so that many soldiers had to rely on their own survival abilities during the long trek through the desert to the Suez Canal. GHQ ordered the men of the 3d to don Bedouin garb, if necessary, in their hasty retreat.[78] As Haykal noted, "Every man [became] his [own] responsibility."[79] Most of the men of the 6th Brigade also

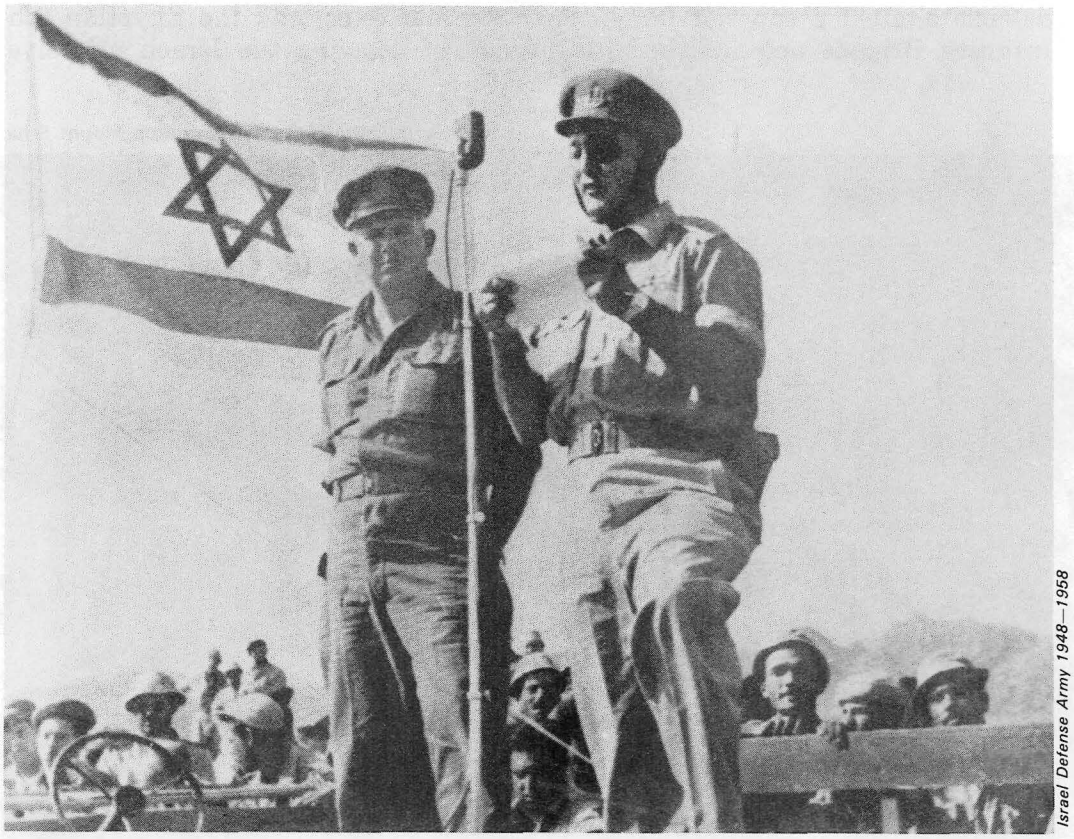
Israeli napalm attack of enemy fortifications in the Sinai



Israel Defense Army 1948—1958



Some Egyptian prisoners of war



Israel Defense Army 1948—1958

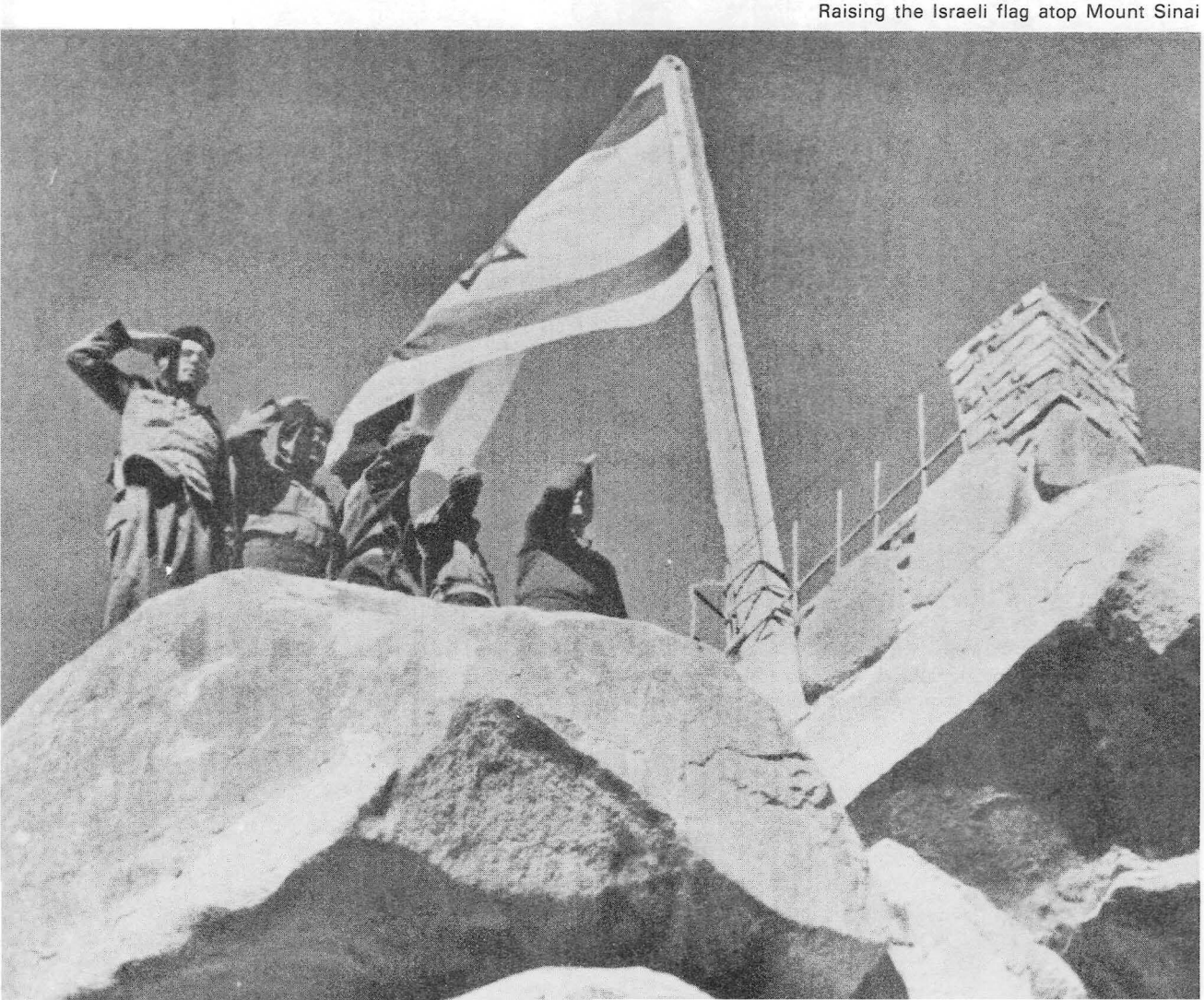
Major General Dayan, announcing the successful conclusion of operations in the Sinai in 1956. Brigadier General Simhoni, commander of the Southern Command, looks on at left

reached the canal in a state of disarray, although the 18th Infantry Battalion did reach al-Arish, and then the canal, intact as a unit.[80]

Despite their abandonment of Abu Ageila, Egyptian officers had led their men in an exemplary fashion. Boulos, the original brigade commander, became a casualty while preparing his men for a counterattack. Mutawalli, who replaced him, emerged as a national hero, helped in large measure by the Egyptian regime's propaganda machine: "Mutawally's twenty-six day odyssey across the desert and Canal to Cairo became one of the folk-legends of the Sinai campaign. He escaped an Israeli patrol, was stung by a scorpion, and spent days with Bedouin who told him of the fall of al-Arish."[81] After the Sinai campaign, Mutawalli continued an illustrious career in the military, eventually reaching the rank of lieutenant general. Later, he provided crucial support to General Muhammad Fawzi, the commander in chief of the Egyptian Armed Forces, during the reconstruction of the military after its overwhelming defeat in 1967. In the early 1970s, Mutawalli ended his career in the position of adviser to President Anwar Sadat.[82]

In the end, neither side could analyze the struggle for Abu Ageila without mixed feelings. The battle concluded with Israelis killing each other in a tank battle in broad daylight while an undetermined number of Egyptians were dying from thirst in the desert. The Egyptians had maintained a stubborn defense against a superior Israeli force for four days, and the Egyptian 6th Infantry Brigade accomplished its mission of delaying the Israeli offensive

Raising the Israeli flag atop Mount Sinai



Israel Defense Army 1948—1958

until an Egyptian armored division crossed the Suez Canal and deployed at Bir Rod Salim. The Israelis, on the other hand, had surrounded Abu Ageila with a daring armor move into the Egyptian rear and forced the position to the point of surrender by the time the withdrawal order arrived from Cairo. At the same time, Israeli armor had demonstrated to Dayan its maneuver capabilities.

Ultimately, Egypt suffered a major defeat—but only at the hands of the combined power of Israel, France, and Britain. In the next conflict, Israel might not be so fortunate. She could not count on coalition warfare and might even face war on more than one front. Such proved to be the case, but fortunately for the Israelis, the IDF prepared well for this eventuality, drawing in part on its 1956 experience.

Chapter 3

Toward the 1967 War

> . . . [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.
>
> —André Beaufre[1]

For the Israel Defense Forces, the interwar years proved a revolutionary period that saw significant changes in Israeli doctrine, command and control, force structure, operational thinking, and training. The cumulative effect of this activity was to transform the Israeli Army into a modern fighting machine capable of conducting rapid maneuver warfare into an enemy's rear with large armor formations supported by an air force. This development largely explains the rapid and decisive defeat the Israelis inflicted on three Arab states in 1967 and provides a perspective for analyzing the reasons behind the exemplary Israeli capture of Abu Ageila in a combined arms operation conducted on the night of 5—6 June.

The Israeli Air Force and Armor Corps, 1956—67

Between the 1956 and 1967 wars, the IDF, acutely aware that Israel might have to fight alone on several fronts without any strategic depth, substantially changed its thinking on warfighting. The senior command, although still maintaining an overall strategy calling for rapid penetration of an enemy's territory, came to emphasize the concept of a far shorter war, won with greater firepower and enhanced mobility. But Israel had to determine how to wage such a war.[2]

The 1956 campaign in the Sinai had demonstrated to the senior leadership of the army the critical importance of air power in modern warfare: control of the air had tremendously enhanced Israeli ground operations in the desert. In line with this conclusion, between 1956 and 1967, the IDF developed the Israeli Air Force (IAF) into its premier service so that by 1967 the IAF was receiving half the allocations of the entire defense budget. Such a priority in the budget allowed the Israelis to purchase the most modern French aircraft, including the Mirage IIIC, the Mystère IVA, and the Super Mystère. These planes greatly enhanced the IAF's capability to destroy the Egyptian Air Force on the ground in a surprise attack—just as the French and British had done in 1956. To ensure the execution of such a complicated operation, Brigadier General Ezer Weizman, commander of the IAF from 1958 to 1966, implemented high standards for selecting and training pilots: the best now went to the air force instead of to the paratroopers.

As a result of these far-reaching changes, the IDF ultimately developed the concept of a preemptive air strike as the centerpiece of Israeli military strategy. Once Israel attained air superiority, the General Staff also planned to use the air force to support ground operations. This would require much greater coordination between the two services. Consequently, after the 1956 war, command of the air force moved from Ramla to GHQ in Tel Aviv. The air force commander now worked under one roof with the chief of the General Staff.

The idea of a short war fought with a modern air force required major changes in the ground forces. Instead of an infantry-dominated army, military planners now envisioned a rapidly advancing army led by large tank formations that employed great mobility and firepower. This force's objective would be to strike into the enemy's rear, causing its army to collapse through the disruption of its command and control system and lines of communication. Such thinking spelled the end of the doctrinal dispute generated by the earlier armor-versus-infantry debate. Dayan, now a true believer in armor, wholeheartedly embraced the tank "school" led by Haim Laskov and others. In this new view, armor, rather than providing fire support for infantry, became the decisive arm in a major land campaign, supported in battle by the air force, paratroopers, and infantry.

Brigadier General David Elazar, who had commanded an infantry brigade in the Gaza Strip in the 1956 war, helped develop this tank doctrine as head

Mystère jet fighters



Israel Defense Army 1948—1958

of the Armor Corps between 1961 and 1964. After the Six Day War, Elazar described armor's new role:

> The emphasis put on armor for land warfare is, in my opinion, a characteristic of all modern armies. After the air force, armor is the factor that decides the fate of battles on land. No other factor—except enemy armor—can wrest the decision from it. The development of the Armored Corps is therefore the factor that has turned Zahal [the IDF] into a modern army and has prepared it for this last war. The task of armor, like that of the air force, is to carry the battle into the enemy's territory and thus obtain a quick decision.[3]

In developing their theory and practice of tank warfare, the Israelis were in some measure influenced by the writings of British theorists B. H. Liddell Hart and J. F. C. Fuller and the practices of the German Army in World War II.[4] Yet the Israeli General Staff avoided merely imitating the practices of others and instead adopted its own doctrine for the tank, one that the Israelis believed was better adapted to Israel's environment and its army's requirements.

Brigadier General Israel Tal, as head of the Armor Corps from 1964 to 1967, was the main architect of Israel's new armor doctrine. (In 1956, he had taken command of Goder's brigade at Abu Ageila.) According to Tal's thinking, Israel did not need fast, light tanks but vehicles emphasizing firepower and survivability. Israel's small population relative to its Arab neighbors dictated that it place a high premium on saving its soldiers' lives. Armor-heavy British Centurion and American Patton tanks—although slower than the German Leopard, the Russian T-54/55, or the French AMX-30—had better protection and thus met this requirement.

Tal believed the rugged American and British tanks would allow Israeli armor units, supported by infantry and artillery, to punch through tough defensive positions. Then, the tanks could move rapidly across open desert terrain, sometimes without the mechanized infantry, whose main task would be to mop up. Eventually, the tanks would fight a deep battle against other tanks in maneuver warfare. To ensure rapid movement of the tanks without the support of mechanized infantry required excellent gunnery by tankers, which Tal achieved for the Armor Corps through his institution of high standards and rigorous training.[5] (Weizman effected equal reforms in the IAF.)

Tal's approach to warfare, however, neglected combined arms, which includes infantry and artillery in the attack. But this deficiency failed to hamper the Israelis in 1967. Once the Egyptian Air Force was destroyed on the tarmac, Israeli pilots assumed the role of flying artillery for ground forces, and the results were devastating for the Egyptians.

Command, Tactics, and Training

One important lesson drawn from the 1956 war concerned the need for better control of larger formations. In the Sinai campaign, the *ugdah*, still in the experimental stage, functioned as a command framework for task forces of two or more brigades. It possessed a small staff but no organic combat units. Dayan regarded brigades as more or less self-contained units that fought independently, and consequently *ugdah* headquarters had exercised loose control over combat forces. In a future war, however, the IDF would need better

coordination among brigades if the Israeli Army was to defeat the Egyptian Army decisively before moving to another front.

The increased size of Israeli forces and the need for a shorter war also influenced the IDF to refine its command and control system. In 1967, as in 1956, the IDF would fight with the brigade as its primary formation. But the size of the Israeli Army fighting in the Sinai would rise from 45,000 in 1956 to over 70,000 men in 1967. Moreover, the total mobilized strength potential for IDF ground forces during this period grew from 190,000 to 250,000. Such a growth in manpower required a better functioning headquarters between the theater or front command and the brigades, and the key link in this command chain would have to be the *ugdah* (a division-size task force of two or more brigades).

Time remained a critical factor in Israeli operations. The Israeli economy could ill afford a long war; nor could the IDF sustain the offensive on two fronts for an extended time without having to go on the defensive on one. Israel's lack of strategic depth made the defense anathema to the IDF. Thus, Israeli military planners were driven by a military strategy calling for a rapid thrust into the enemy's territory and its army's depth. Such lightning war required intricate planning for the breakthroughs, followed by closely coordinated movements among larger units during the exploitation. These exigencies dictated that the Israelis develop a delicate balance between centralized operational direction and decentralized tactical execution.

A group of Israeli senior officers directing a maneuver (in training)



Israel Defense Army 1948—1958

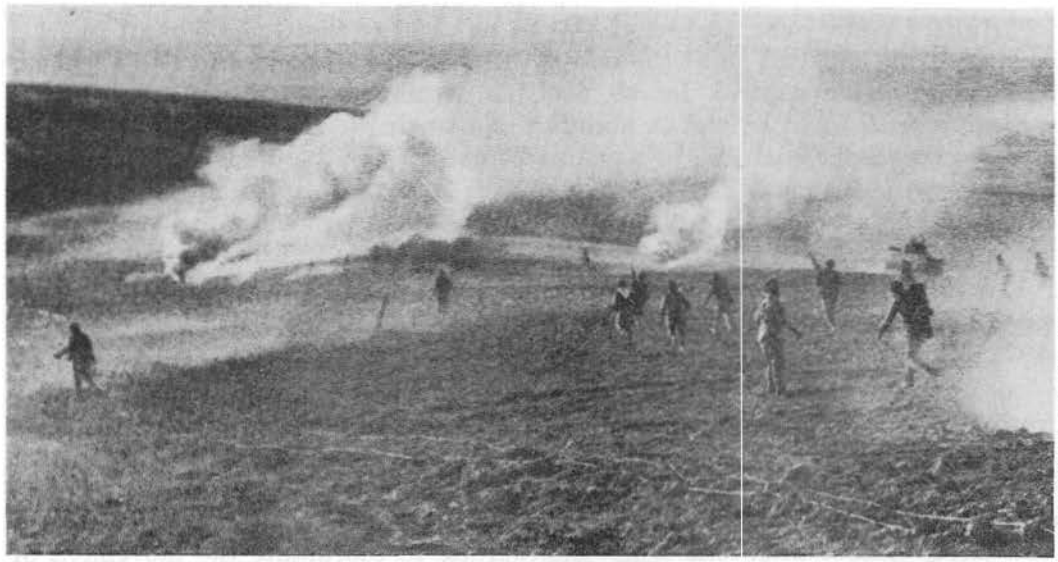
Haim Laskov, who succeeded Dayan as chief of the General Staff in 1958 and held that position until the end of 1960, helped improve the IDF's system of command and control. Israeli doctrine continued to stress flexibility and initiative on the battlefield. A standard slogan in the IDF is that "a plan is merely a basis for changes." From this perspective, battle plans will invariably break down because of the friction of war and the unpredictable nature of enemy behavior. Nonetheless, Laskov realized that various maneuvers had to be coordinated if the Israeli Army was to achieve sufficient force at critical points in a campaign.

To take advantage of the uncertainty and flux of the battlefield, while at the same time adhering to strategic and operational objectives, Laskov developed a concept that became known as "optional headquarters control." Acting from this conceptual framework, *ugdah*, brigade, and battalion commanders in direct contact with the enemy had to possess command flexibility if they were to deal effectively with enemy forces. To ensure the rapid defeat of the enemy in a theater of operations, higher echelons—i.e., the area command and GHQ—would intervene when appropriate to coordinate the movement of large formations for the attainment of strategic goals.[6]

To put this theory of command and control into practice in the early 1960s, the IDF began to execute *ugdah*-level exercises to institutionalize the proper relationships between the various headquarters. The *ugdah* thus developed into the largest tactical headquarters—an overriding unit of organization designed to achieve strategic aims while maintaining flexibility in tactical operations. By functioning through the *ugdah* headquarters, the theater commander could concentrate his forces at critical moments in a campaign. Although still basically a large task force organization in 1967, the *ugdah* would fight all the main and decisive engagements of the war. Two of the three *ugdahs* employed in the Sinai contained two full-size armor brigades that fought as brigades in spearhead operations. By 1973, the *ugdah* would become the Israelis' standard fighting unit, in the process taking away most of the logistical assets of brigades.[7]

Though concerned with command and control for larger formations, the Israeli military leadership still had to come to grips with battle in the forward area, specifically the tactical problem posed by Egyptian fortifications close to the Israeli border. In this regard, the IDF drew from its 1956 experience a healthier respect for the fighting capabilities of the Egyptian Army on the defense. As a result, Laskov and other military critics attacked Dayan's Collapse Theory, arguing that the 1956 war had demonstrated Egyptian defenses had not fallen simply because they had been isolated. No better case for this point could be made than that of Abu Ageila. Capturing Egyptian fortified positions required the organized application of sufficient combat power—including tanks—since the Egyptians proved very capable of putting up a stalwart defense against uncoordinated attacks.

Such reasoning led the IDF to devote more attention and effort to developing techniques for assaulting fortified positions. Israeli planners expected the Egyptians to follow the advice of their Soviet advisers or the instruction they received in the Soviet Union. Consequently, the Israeli General Staff studied Soviet defensive doctrine and devised solutions for fighting in the daytime or at night.[8] Combat units—especially from the reserves—underwent



Israel Defense Army 1948—1958

Israelis advancing on an objective under cover of a smoke screen (in training)

rigorous training. And to further strengthen reserve units, the IDF reassigned older individuals to supporting roles so that more physically fit soldiers—those younger than forty—remained in combat formations. The IDF sought to avoid a repetition of the poor performance of the 10th Infantry Brigade in the last war, which was a unit that contained an inordinate number of soldiers over the age of forty.[9] In 1967, as a result of the above changes, the IDF was better prepared to wage war with large formations that employed both regular army and reserve units.

The IDF and the 1956 Battle of Abu Ageila

The Israelis expected the Egyptian Army to rely on the defenses of Abu Ageila as an obstacle to unhinge any deep Israeli penetrations into the Sinai. Consequently, the IDF watched closely any changes in the defenses there and updated its plans accordingly. The exact relationship between the 1956 battle and the Israeli war plan in 1967, however, is still puzzling.

According to the popular American historian Trevor Dupuy, each year the Israeli Command and Staff College conducted a major map exercise involving an attack against Abu Ageila. In the process, students used the experience of the 1956 battle to explore ways to avoid similar mistakes in the future. Dupuy says:

> Following the failure to take Abu Ageila in 1956, the Israeli General Staff had made intensive studies of the battle. . . . In addition to detailed staff analyses, a major map problem in the Israeli Command and Staff College each year was an attack on the Abu Ageila position. This problem was updated each year to reflect everything that was known about any Egyptian improvements. Thus by 1967, most of the commanders and staff officers in the Israeli army were extremely familiar with the stronghold, with the causes of the 1956 setback, and with current official General Staff concepts of how to avoid a similar setback in a future struggle . . .[10]



Israel Defense Army 1948—1958

An Israeli forced march (in training)

This analysis suggests a possible direct link between the two battles, since many junior and senior officers became intimately knowledgeable concerning the 1956 battle by virtue of their attendance at the staff college. But the actual relationship was probably not as direct as that suggested by Dupuy.

Indeed, a number of Israeli military sources deny that the IDF employed any sort of historical method at the staff college to help its officers solve the tactical problems posed by a capture of Abu Ageila. The curriculum did not even provide officers with the details of the 1956 battle but presented Abu Ageila as a contemporary tactical exercise—not as a systematic historical case study. Students received only the latest data on Egyptian defenses and vital terrain information. Then, they were required to apply hallowed principles of warfare, common sense, and imagination to develop their own solutions.

Natke Nir, for example, graduated from the Israeli staff college in 1964. A platoon commander in Gaza in 1956, he unequivocally denies the instructional dynamic described by Dupuy. In 1967, Nir, whose mission drove him into the rear of Abu Ageila, possessed only vague notions of the 1956 battle. And only after the 1967 war did he learn how Adan had conducted an operation similar to his own![11] Detailed institutional knowledge in 1956—which may have existed for planning purposes—most likely remained in key departments such as the G3 or the Operations Branch. How this knowledge was actually used, if at all, is a subject for further research.

The influence of the staff college on the outcome at Abu Ageila in 1967 appears to have been inconsequential. More far-reaching effects on the future battle came as the result of a revolutionary period characterized by significant changes in Israeli doctrine, command and control, force structure, and training of reserves. These changes ensured that the Israelis would have the capability to defeat the Egyptian Army in the forward and deep battle areas. As a result of these new developments, the Israeli *ugdah* commander assigned to take Abu Ageila in 1967 would lead forces exhibiting a higher degree of professionalism than his predecessor in 1956. Also favoring the Israeli commander in 1967 would be an assault order that allowed him to concentrate all available forces for his mission, which would avoid the tentative, piecemeal approach characteristic of the 1956 campaign.

Two Armies Face-to-Face

Unlike the calm before the 1956 war, a train of events in May and June of 1967 escalated tensions between Israel and her Arab neighbors to such a degree that the outbreak of war on 5 June came as no surprise. On the Sinai border, two large armies, fully mobilized and in a high state of alert, faced each other. The immediate events leading to war, however, had in fact begun on the Golan front.[12]

On 7 April 1967, Israeli and Syrian Air Force fighters clashed in a major dogfight that resulted in the downing of six Syrian planes; Israel followed up on its success with a defiant buzzing of Damascus, the Syrian capital. This incident embarrassed the Syrian regime. President Gamal Abd al-Nasser, for his part, drew acerbic criticism from Arab capitals for not living up to his defense pact with Syria. Critics also charged the Egyptian leader with hiding behind the United Nations peacekeeping force that had been placed in the Sinai shortly after the 1956 war. In the midst of growing tension came reports, apparently originating from Soviet sources, that Israel was massing troops on the Golan front for a punitive strike into Syria. This information naturally sparked alarms throughout the Arab world.

Since Nasser had recently seen his prestige in the Arab world decline as a result of Egypt's military involvement in Yemen (where over 50,000 Egyptian soldiers had been engaged in a costly war since 1962), he felt the need to act decisively. On 14 May, he ordered a general mobilization and the immediate dispatch of Egyptian troops to the Sinai as a clear demonstration of his support for Syria. Furthermore, General Muhammad Fawzi, the chief of the General Staff of the Egyptian Armed Forces, departed for Damascus to evaluate the situation there for possible coordination of military action. Fawzi, as he later admitted in his memoirs, saw no evidence of an Israeli buildup along the Syrian border. In fact, much to his surprise, he found the Syrian regime so unconcerned about recent reports of an impending Israeli invasion that it had not even bothered to call out its reserves. Fawzi, therefore, returned to Cairo the following day with the assessment that there existed little likelihood of war.[13]

By this time, however, Nasser had gone too far to exit gracefully. Egyptian troops, already en route to the Sinai, had paraded through the streets of Cairo before large crowds. Recalling these forces would have proved an embarrassing matter indeed. Nasser's Arab critics would have exploited such an action to the fullest, and the immediate political and military consequences would have been serious. As Egypt took concrete steps in support of Syria, other Arab states now found themselves on the defensive and compelled to demonstrate their own solidarity with the Arab cause. Syria, for example, followed Cairo's lead and placed its own armed forces on a high state of alert for possible war with Israel.

Within two weeks, the Egyptian militarization of the Sinai had exceeded a mere demonstration of military support for an ally. At the beginning of May, before the commencement of mobilization, Egypt had stationed the 20th Infantry Division in the Gaza and the 2d Infantry Division in eastern Sinai.[14] By June, however, Egypt had six divisions in the Sinai, including the 4th Armored Division and another armored force of somewhat less than division strength. This army, which comprised approximately 100,000 men and 900 tanks, was poised within easy striking distance of Israel. To assemble this force, Nasser had mobilized the reserves and transferred some units from Yemen back to Egypt.

Developments in other Arab countries further raised the risk of war. On 30 May, King Hussein, whose relations with Nasser had been poor before the crisis, surprised many observers by journeying to Cairo to initial a mutual defense pact with Egypt. By this agreement, the Jordanian monarch agreed to place his army under Egyptian command. On 2 June, Egyptian Lieutenant General Abd al-Munim Riyad arrived in Amman to assume command of all Jordanian forces, and the next day, three Egyptian commando battalions followed him to Jordan. But matters did not end here. Iraqi troops also began leaving their bases in Iraq to take up positions in Jordan, while other Arab countries prepared to send their own token forces to the three confrontational states as symbols of Arab unity.

In addition to militarizing the Sinai, Nasser made two other important decisions that contributed to war. On 16 May, he had General Fawzi, the chief of the General Staff, send a letter to the UN commander requesting the withdrawal of UN troops from the Egyptian-Israeli border. Egypt followed up

this action on 18 May with a formal request for a withdrawal, this time to U Thant, the secretary-general of the United Nations. In the interim, on the 17th and 18th, Egyptian troops began occupying positions near the Israeli border that had been held by UN observation teams.[15]

Whatever Nasser's actual intention, U Thant promptly complied by ordering the withdrawal of all UN troops beginning on 19 May. Now, no international forces stood between Israel and Egypt. The atmosphere at GHQ in Israel had been relaxed until this time, although the Israeli senior command closely watched developments. When U Thant agreed to the Egyptian demand for a withdrawal, Israel had little choice but to order the mobilization of some 60,000 to 70,000 reserves, most of these earmarked for the Sinai.[16] Then, on 22 May, Nasser made another serious mistake when he ordered the closure of the Tiran Strait—a move that established a blockade of Eilat, Israel's only outlet to the Indian Ocean. Israeli leaders thought this action highly provocative, giving Israel just cause for a military response. All international efforts in the next two weeks aimed at creating a peaceful resolution to the confrontation were unproductive. When on 4 June the Israeli political leadership gave the green light for war with Egypt, the IDF was poised and ready to launch what it hoped would be a fast and decisive strike into the Sinai.

The Creation of Egyptian Operational Vulnerability

When Israel launched her air attacks against Egypt's airfields on the morning of 5 June, the Egyptian Armed Forces had orders to hold in a defensive posture, ready to absorb an Israeli first strike. Although conditions seemed to favor a long, drawn-out war in the Sinai, the Egyptian Armed Forces had in fact suffered a great deal of self-inflicted disorientation in the critical three weeks prior to the outbreak of war—a confusion that largely nullified the progress achieved by the Egyptian military in the interwar period. Changes in commanders, the unexpected creation of a major command, the discarding of the defensive plan for the Sinai and concomitant troop redeployments: all created havoc in the Egyptian military, weakening an army that otherwise possessed numerical superiority over its foe. This state of affairs made Egypt's military position vis-à-vis Israel much worse than it had been in 1956. Furthermore, it served to undermine what appeared to be formidable defenses at Abu Ageila.

During the 1967 war, the Egyptian Army's command and control system down to division and brigade level broke down. The seeds of this problem were planted in the three weeks before the outbreak of hostilities. Earlier, in 1966, the Egyptians developed a new plan for the defense of the Sinai called *Qahir* (the victor). Plan *Qahir* placed control of combat forces in the Sinai under a field army commander directly responsible to GHQ in Cairo. But on 15 May, for reasons that still remain unclear, the Egyptian high command surprised its senior officers with the sudden creation of a front command and the appointment of General Abd al-Mohsen Kamal Murtagui to head it. Now, the chain of command went from President Nasser, the supreme commander, to (1) a general headquarters in Cairo under Field Marshal Muhammad Abd al-Hakim Amer and the Chief of the General Staff, General Muhammad Fawzi; (2) the front command under Murtagui; (3) the field army command under

Lieutenant General Salah al-Din Mohsen; and, finally, (4) the division commanders in the Sinai.

Murtagui, as the new front commander, would be plagued by a number of problems. Although a competent soldier, he had been commanding the Egyptian expeditionary force in Yemen and lacked intimate knowledge of the operational plan for the Sinai. Furthermore, as a front commander in the Sinai, he would receive a high degree of responsibility without the commensurate authority to carry out his mission. Murtagui was to direct operations against Israel until Field Marshal Amer arrived in the Sinai to assume command, but in the interim, he could only make decisions that conformed closely to the directives of GHQ. This arrangement left Murtagui with little authority for taking any initiative—although in appearance he possessed a major command with such a mandate. Finally, Murtagui arrived at his command post in the Sinai (near Bir al-Thamada) on 29 May—only a week before the war and with a small staff of twenty officers.[17] The Egyptian command and control system was further undermined when the high command replaced all twelve division commanders and chiefs of staff in the week or two after the creation of the front command.[18] Then, the confusion seeped down to brigades and lower.

Further aggravating the situation in late May, the Egyptian high command made four major changes in its war plans for the Sinai, which compounded the confusion already caused by the structural and personnel changes made on the eve of war. Plan *Qahir* called for the regular army to deploy across the depth of the Sinai along the major routes of advance. According to *Qahir*, a security zone close to the border—manned by reconnaissance, paratroop, or border patrol battalions—would provide early warning of an Israeli attack. Behind this zone stood tactical and operational defense regions, each divided into two areas.

The first tactical region centered on the fortified points of al-Thamad, Qusaymah, Umm Qatef, and al-Arish and was manned by an infantry division supported by two mechanized infantry brigades and an armored regiment. Behind these forward forces stood a second echelon, consisting of an infantry division located in the region of Gebel Halal and Gebel Libni. The operational reserve occupied three positions: one north of Nakhl (an armor regiment); a second at Bir al-Hasana (two infantry brigades and a divisional command); and a third on the central route (an armored brigade). All these forces were under a field army commander whose headquarters was in the center of the Sinai at Bir al-Thamada. To the rear of these forces stood a reserve under general headquarters—comprised of an armored division and a brigade of paratroopers—located in two operational areas, one before and one behind the passes. Forces in the two forward lines were to hold their positions and receive reinforcements, if necessary, while the armored division eventually counterattacked to destroy any major breakthrough.[19]

During the month of May 1967, however, general headquarters made four major changes in Plan *Qahir* so that the final defensive concept bore little resemblance to the original plan. In fact, during the last two weeks of May, the Egyptian Army even prepared to launch an offensive into Israel to seize the port of Eilat on the Gulf of Aqaba. But in the end, Nasser ruled that Egypt should accept the first strike. By this time, the Egyptian Army in the

Sinai had deployed with a different set of priorities than those envisioned in its original plan. *Qahir* had emphasized the central route as the most likely place for the Israeli main effort, with the main defensive positions at Abu Ageila, Qusaymah, al-Arish, and al-Thamad. The new forward defensive area now centered on Rafah, Qusaymah, and Kuntilla, which required a major deployment of Egyptian forces forward from al-Arish to Rafah and from al-Thamad to Kuntilla, which turned al-Arish, Gebel Libni, Bir al-Hasana, and al-Thamad into the second line of defense.[20]

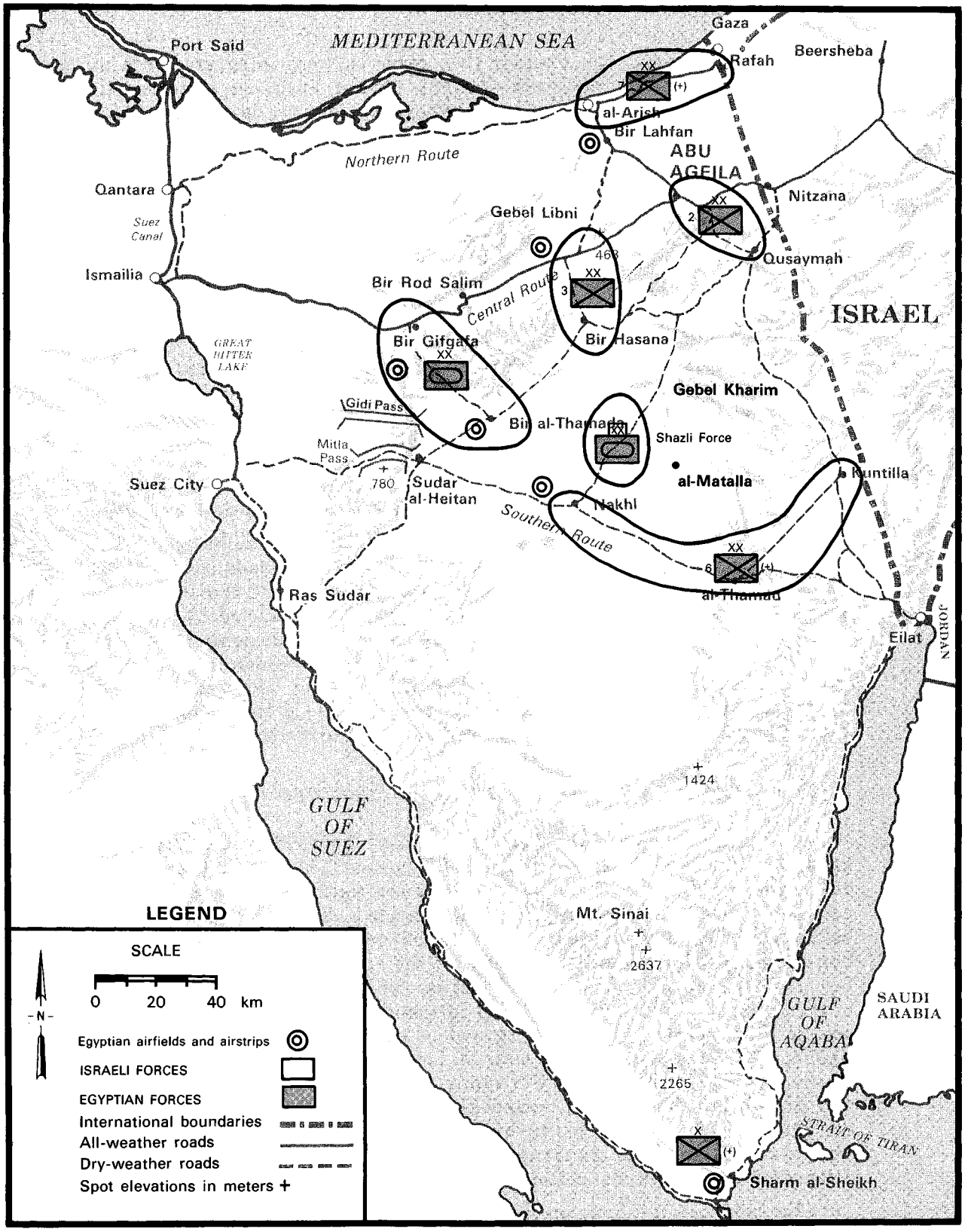
These changes in *Qahir* left little of the original plan. Now a much larger percentage of the Egyptian Army was positioned close to the Israeli border and along its length as well. This deployment left the Egyptians strategically vulnerable should the Israelis achieve a major breakthrough and advance rapidly into the Egyptian rear, and the Israeli Army set the stage for exactly this development by devising a deception plan that would further unbalance Egypt's armed forces.

To effect their plan, the Israelis placed an armored brigade with many wooden tanks and other fake vehicles in the southern sector, opposite Kuntilla, hoping to create the illusion that the Israeli main effort would occur there.[21] Egyptian military intelligence completely fell for this ruse and began reporting that Israel was massing troops in the south. Field Marshal Amer, against the advice of several senior officers at general headquarters, concluded that the Egyptian Armed Forces needed to deploy more troops to the area of Kuntilla, al-Thamad, and Nakhl. At the end of May, the Shazli Armored Task Force, created a week earlier, moved from Rafah in the north to the south in accordance with this new assessment. Then, Amer designated the area of Gebel Kharim and al-Matalla as a killing zone for the destruction of Israeli armor (see map 14). Amer's staff labored vigorously to make appropriate changes in their ever-altering war plans.[22]

Through their deception plan, the Israelis succeeded in substantially depleting forces from the Egyptian defensive positions in the northern region, where the IDF planned their main attack. The fact that Egypt had positioned one armored and four infantry divisions in the Sinai, reinforced with a division-size armored force, meant little in this instance. With many more Egyptian troops forward than envisioned in Plan *Qahir*—and these concentrated in the south—the IDF now could exploit its strategic advantage with an operational maneuver that left a good part of the Egyptian Army excluded from the main combat. This would directly affect the battle for Abu Ageila.

In addition to its changes in command and control, senior tactical commanders, war plans, and troop deployments, the Egyptian Armed Forces had to place a greater reliance on reservists than envisioned in Plan *Qahir*. To increase its army's size—especially since three of its divisions continued to fight in Yemen—the Egyptian high command mobilized its reserves and used them to form new frontline units. By the eve of the war, the Egyptian Army had grown to over 130,000 men (excluding forces in Yemen), of which some 80,000 were reservists, including over 1,000 officers.[23]

The mobilization of the reserves presented the Egyptian military with a number of problems. Many reservists were poorly trained because of Egyptian budget cuts to meet the immediate and pressing requirements of fighting in



Map 14. Egyptian deployments in the Sinai

Yemen. Furthermore, the manner that reserves were integrated into units weakened the combat readiness of many regular units. In some cases, for example, a battalion grew—with the integration of reservists—into a brigade so that the new unit consisted of one-third regular army troops and two-thirds reservists.[24]

This influx of poorly trained soldiers into regular units undermined the integrity of units and threatened group cohesion on the battlefield. Unlike its counterpart in the 1956 war, the Egyptian division responsible for Abu Ageila in 1967 experienced some of this last-minute disorientation. One important lesson learned by the Egyptians after the 1967 battle for Abu Ageila concerned the need to maintain the integrity of units through continuous training over an extended period of time.[25]

Thus, on the eve of war, the Egyptian senior command, in part responding to directives from the political leadership, had undermined its own command and control system. The result was the weakening of Egyptian forces in the vital areas of (1) leadership, by replacing all the division commanders; (2) the chain of command, by creating a weak front command; (3) unity of purpose, by frequently changing plans and strategy; and (4) integrity of force, by relying on a disproportionate number of ill-trained and recently called-up reservists.

All this self-destructive activity created an operational vulnerability in the Egyptian command and control system from general headquarters through brigades. Egyptian senior commanders were uncertain of the intent of the next higher command. Any major surprise or setback inflicted by the Israelis could rattle the Egyptian command and control to the point that general headquarters might lose control of the battlefield. Furthermore, the Egyptians would have no time to make changes in the midst of battle to rectify their errors. Unfortunately for the Egyptians, the IDF was prepared to execute its plan with an army unhampered by such serious drawbacks.

Abu Ageila and the Egyptian Defense of the Sinai

After the 1956 war, the Egyptian military leadership characterized the battle for Abu Ageila as a showpiece of Egyptian heroism for the purpose of developing national pride in the army and self-confidence among its military personnel. Not only had the Egyptian defenders, both officers and soldiers, held out for four days against several Israeli attacks, but they did so in fierce hand-to-hand night combat. Because of the resolute Egyptian defense, the Israeli force attacking Umm Qatef lost its confidence, and even the personal intervention of Dayan himself failed to instill the required combat spirit. To bolster their highly favorable portrayal of their combat performance at Abu Ageila, Egyptians cited statements of Israeli military officials praising the bravery of Egyptian soldiers. For many Egyptians, only the entry of France and Britain into the war had forced Egypt to retreat from Abu Ageila.[26] Even art played an important role in building national pride in the armed forces. Sketches and paintings transformed the battle for Abu Ageila into an heroic defense of the magnitude of Russian World War II struggles.[27]

The Egyptian military, on its part, conducted some serious studies of the Sinai campaign, with special attention given to Abu Ageila. In a book on the

1956 war published in Cairo in 1960, Muhammad Kamal Abd al-Hamid, an Egyptian brigadier general, identifies a number of specific lessons drawn from the battle of Abu Ageila. According to the author, the Egyptians were highly successful in coordinating their artillery and infantry to repulse attacks and forestall an Israeli victory. The Egyptians were also superior in countering surprise assaults and defeating superior forces with accurate fire; in employing barbed-wire obstacles, tank obstacles, and observation posts for artillery; and in their evident spirit of sacrifice among all ranks. The Egyptian author also implies that a good Egyptian defense based on sound leadership, high morale, good employment of terrain, and the proper coordination of arms could conceivably unravel an Israeli command and allow the Egyptians to seize the initiative.[28] Other lessons drawn by the Egyptians from the battle, but not discussed by Abd al-Hamid, concern the vital importance of air superiority and close air support for both defensive and offensive operations and the necessity of having tanks within the main defensive perimeter for effective local counterattacks.[29]

Knowing that any future campaign in the peninsula would involve a major struggle for Abu Ageila's key terrain, the Egyptian military, after 1956, maintained the position as a showpiece fortification in the Sinai. According to one Israeli source, every year the Egyptian Command and Staff College conducted a staff ride to Abu Ageila for the purpose of familiarizing its officers with its defenses.[30] Since the Egyptians placed such importance in Abu Ageila, should the Israelis invade again, another stalwart defense could be expected—especially since most of the Egyptian Army was deployed close to the Israeli border. During the years 1964—67, the Egyptian Army, aided by Soviet advisers, strengthened defensive positions in the eastern Sinai, laying new mines and barbed wire; digging trenches and bunkers for infantry; constructing stongpoints and observation posts; and building water storage tanks and ammunition depots.[31] From the Egyptian perspective, Abu Ageila had been transformed from an area of defense in 1956 to a well-fortified strongpoint by 1967.[32]

The Egyptian military also significantly changed its defensive system at Abu Ageila, integrating Soviet defensive practices consistent with Egyptian capabilities, objectives, and lessons learned in the 1956 war. In particular, the Egyptians blended the hedge-hog of 1956 and the Soviet system of linear defense, for the Egyptians had concluded that their defenses had worked well earlier and did not want to overhaul them completely.[33]

The Israelis expected the Egyptians at Abu Ageila to rigidly adopt the Soviet system of defense (as the Israelis understood it). Yael Dayan, Moshe Dayan's daughter, who served as a military correspondent with the Israeli *ugdah* assigned to capture Abu Ageila in 1967, recorded this expectation, as described to her by Colonel Dov Sion just before he participated in the Israeli attack on Umm Qatef:

> . . . Dov drew a few lines on the paper. "It is a typical Russian defense system," he said, "composed of three straight lines, the outer one, the main, and a rear". . . . Then Dov drew three long lines on the paper, crossing the road. "This is Um-Katef." The lines are the long ditches, three of them resting confidently on the impassable dunes on the left flank and on the high ground on the right flank.[34]

As we shall see, the Israelis formed their plans and structured their forces based on this premise, but the Egyptians had constructed only two lines of trenches forward at Umm Qatef.[35]

Egyptian Defenses at Abu Ageila

On the surface, the Egyptian defenses in the Abu Ageila area appeared much more formidable in 1967 than those of 1956. Now, instead of an infantry brigade without tanks, an entire infantry division, the 2d, occupied the Abu Ageila-Qusaymah area, with the 10th Infantry Brigade in Qusaymah and the 12th Infantry Brigade in Abu Ageila. By this arrangement, the Egyptian high command had made Qusaymah an integral part of the Abu Ageila defensive complex—much more so than in 1956. Furthermore, the Egyptians reinforced the 12th Infantry Brigade with a tank regiment and additional infantry and artillery. The composition of forces at Abu Ageila was as follows:

37th, 38th, and 39th Infantry Battalions organic to the 12th Brigade
352d Infantry Battalion
51st Artillery Brigade minus one battalion
299th Battalion of Artillery
336th Battalion of Medium Artillery
one company of antitank guided missiles (Shmel)
two companies of antiaircraft guns
6th Tank Regiment (see figure 3)[36]

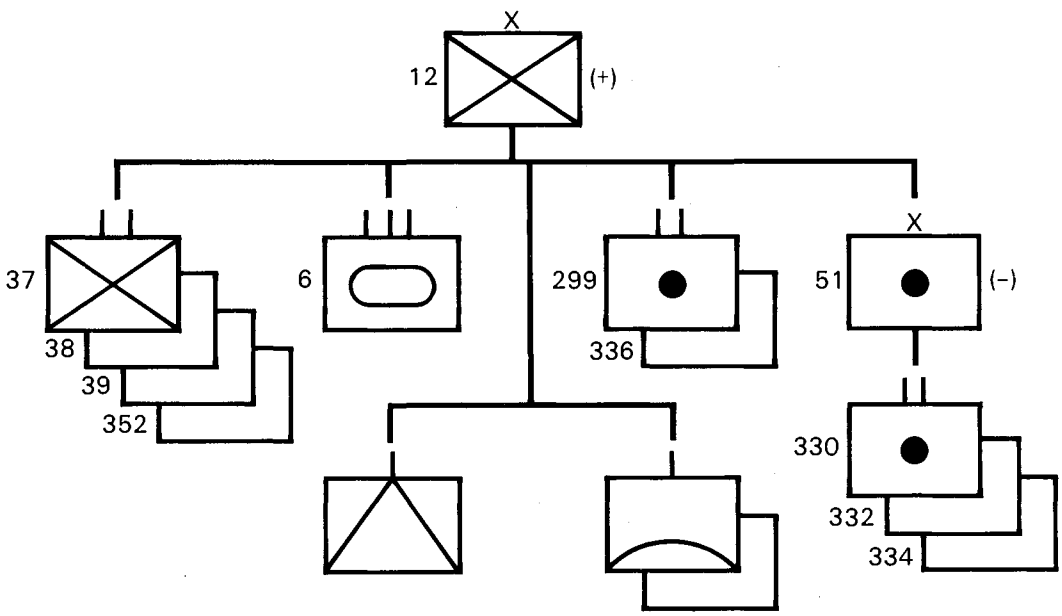


Figure 3. The Egyptian 12th Infantry Brigade (Reinforced)

With the standard size of an infantry division around 11,000 men, the 2d Infantry Division, with its attached units, numbered around 16,000 men.[37] Of these, approximately 8,000 were stationed in the Abu Ageila area. The Israelis

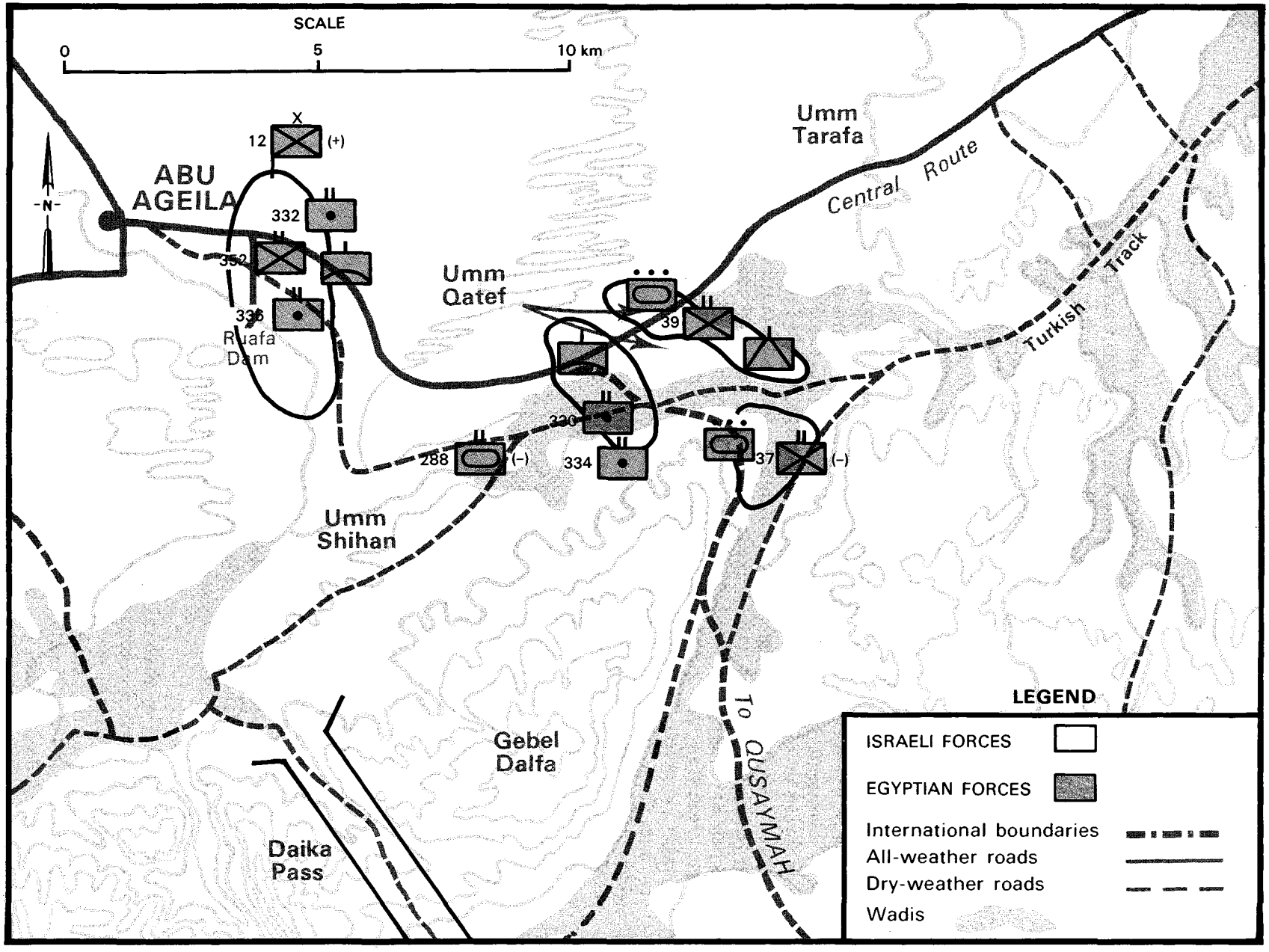
thus faced a much larger force at Abu Ageila than in 1956, one which could be reinforced quickly by elements from the 10th Brigade at Qusaymah, twenty-two kilometers away.

During the interwar period, the Egyptian senior military leadership, well aware of the growing importance of the tank in Israeli warfighting doctrine, adjusted its defenses accordingly. Thus, the 12th Infantry Brigade fielded approximately sixty-six T-34 tanks, with their 85-mm guns, and twenty-two SU-100 self-propelled tank destroyers, with their 100-mm guns.[38] With his 6th Tank Regiment, the brigade commander now was capable of launching an armored counterattack designed to prevent any Israeli breakthroughs. Dayan noted in his diary that the Egyptians had no such capability in 1956, and he considered it a major weakness. But now, the Israelis had to expect a tank battle at Abu Ageila.

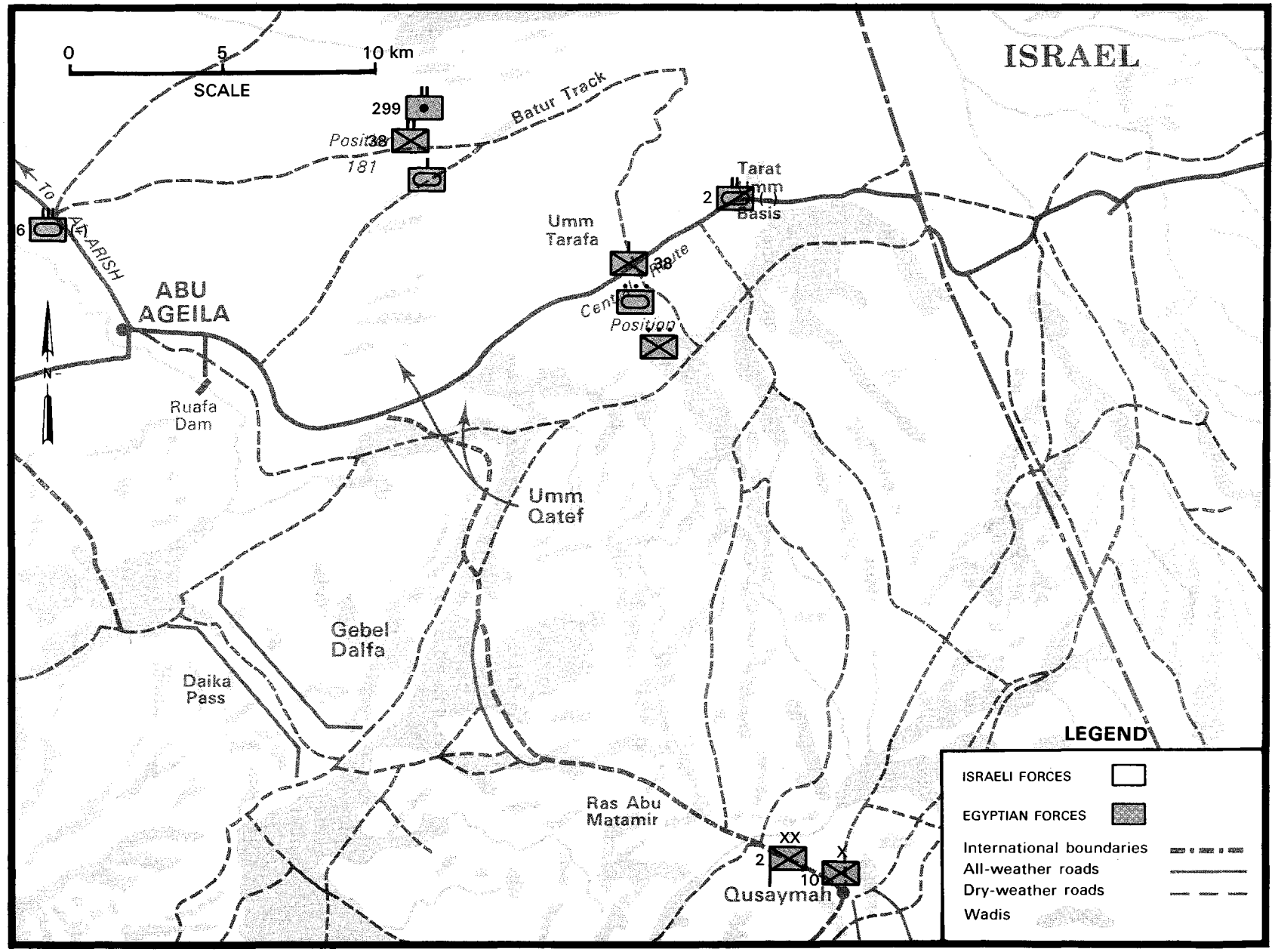
The primary mission of the reinforced Egyptian 12th Infantry Brigade at Abu Ageila was to stop an invading force—or at least inflict serious damage on it—until reinforcements arrived or the field army commander launched a major counterattack. To defend the area of Abu Ageila, the Egyptians deployed their forces in the following manner (see map 15).[39] Two infantry battalions defended the forward positions at Umm Qatef and positions along the Qusaymah Track. The 39th Infantry Battalion occupied the two lines of trenches at Umm Qatef, with the main trench running at the crest of the ridge. Guarding Qusaymah Track and the surrounding hills was the 37th Infantry Battalion. Trench systems connected positions and formed a continuous line. In front of these forward positions was a minefield 250 meters in width, along with barbed wire and antitank obstacles. Each infantry battalion received a platoon of three T-34 tanks. These tanks were dug in and would serve as antitank weapons, much like the Archers had in 1956.

Behind the second ridge west of Umm Qatef, the Egyptians scattered two battalions of artillery—the 330th Artillery Battalion, assisting the 39th Infantry Battalion, and the 334th Artillery Battalion, in support of the 37th Infantry Battalion.[40] Trenches connected the various artillery positions. At Umm Shihan, near the northern base of Gebel Dalfa, the Egyptian brigade commander stationed the bulk of the 288th Armored Battalion, whose mission was to counterattack against any breakthrough at Umm Qatef or to reinforce the forward positions if the situation demanded. Farther west, in the Ruafa Dam area, stood a second echelon composed of the 352d Infantry Battalion and the 332d and 336th Artillery Battalions. This force could serve as a second line of defense or provide elements for reinforcing the forward lines.[41] The Israelis thus faced a more formidable foe once they broke through Umm Qatef, for in 1956, the Egyptians had only one infantry company and an antitank battery at Ruafa Dam backing them up. In 1967, the Egyptian brigade commander stationed an entire infantry battalion and some twenty tanks behind Umm Qatef.

The outer ring of observation posts in 1967 also offered more of an obstacle to an attacker when compared with 1956 (see map 16). (The 10th Infantry Brigade at Qusaymah, which naturally had its own warning system, lies outside the scope of this study.) The 12th Brigade's first major observation post was located at Umm Tarafa, a small ridge located between Umm Qatef and Tarat Umm Basis. Here, the brigade commander stationed a company of in-



Map 15. Egyptian deployments at Abu Ageila



Map 16. Egyptian deployments around Abu Ageila

fantry (minus one platoon) from the 38th Infantry Battalion, a platoon of tanks from the 288th Armored Battalion, and two B-10 recoilless guns. Position 236, just south of Umm Tarafa, contained a platoon of infantry from the 37th Infantry Battalion, two B-10 recoilless guns, and two antitank weapons. A few other positions of platoon size were scattered on the way to Umm Qatef.[42]

In addition to the observation posts, the Egyptians placed forces at two important locations outside the main forward defensive perimeter. The 6th Tank Regiment, minus its 288th Armored Battalion, guarded the logistical center near the well at Awlad Ali. Its commander had two important missions: to block any Israeli attack coming from either al-Arish or Batur Track (a camel track that ran parallel to the central route) and to serve as the reserve for the brigade.

To prevent any enemy passage along Batur Track, the brigade commander positioned the bulk of the 38th Infantry Battalion, along with the 299th Artillery Battalion, at the hill area known as Position 181. A forward observation post, some ten kilometers due east from Position 181, consisted of a platoon from the 38th Infantry Battalion.[43] To support the infantry and artillery, Position 181 had either ten T-34 tanks or ten SU-100 antitank guns.[44] The manning of Position 181 proved a wise step, for the Israelis used this avenue of approach to attack Abu Ageila from the rear.

Tarat Umm Basis served as an important observation post, but unlike in 1956, the force assigned here fell within the security zone and thus was directly under the command of general headquarters in Cairo. The 2d Reconnaissance Battalion, minus one company, manned this key post, and its commander was to report any enemy troop movements both to GHQ and to the commander of the 12th Brigade.[45] This arrangement reflected a greater centralization of command in Cairo than had been the case in 1956.

Though the force at Abu Ageila was formidable indeed, consisting of sixty-six T-34 tanks, twenty-two SU-100 self-propelled antitank guns, and seventy artillery pieces, the Egyptians had created conditions that could result in a major command problem. Major General Sa'id Naguib, the commanding general of the 2d Infantry Division, had been stationed in Yemen just prior to his assignment to the Sinai at the end of May. Accustomed to fighting guerrillas in mountainous terrain, Naguib now had to adjust to a new division deployed in completely different terrain. In addition, the Egyptian commander of the 12th Infantry Brigade, directly under Naguib, lacked the flexibility of command that Boulos and Mutawalli had had in 1956. This state of affairs reflected the increased centralization in the Egyptian Army. Furthermore, the 12th Brigade commander's command post was located at Ruafa Dam—not behind the second ridge immediately west of Umm Qatef, as was the case in 1956. As a result, the Egyptian commander in 1967 would lose control of the battle.[46] When the well-trained Israeli force attacked Abu Ageila with a daring plan incorporating two tactical surprises, the confused Egyptian command suffered a brief, but fatal, paralysis.

Chapter 4

The Battle of Abu Ageila, 1967

> Sharon's division [at Abu Ageila] . . . fought a meticulously planned set-piece battle whose delicate combination of fire and movement would have delighted any staff officer addicted to sand tables and war games. Sharon combined heliborne paratroopers, foot infantry, tank battalions and concentrated artillery fire in a concentric attack totally unlike anything the Israeli Army had ever done before. The conduct of the battle was rigidly centralized, unplanned movements were ruled out, and there was very little scope for command initiative except at the very top.[1]

The strategic setting on the eve of the 1967 war differed dramatically from that in 1956: Israel now stood alone, while the Egyptians expected military support from Jordan and Syria. The Israel Defense Forces, which again opened hostilities, faced a large Egyptian field army in the Sinai. To penetrate into the enemy's depth, the IDF had to break through major formations near the border. If Israel was to emerge victorious from a war that would likely involve fighting on the Jordanian and Syrian fronts, it had to maximize its use of deception, surprise, and speed at the onset of the Sinai campaign.

These requirements placed great pressure on the senior Israeli commanders who made final preparations for taking the defensive complex of Abu Ageila. Their Egyptian counterparts, on their part, possessed a certain measure of confidence, for they knew that this time their operational reserves were positioned close to the frontline troops. In this new operational context, the IDF applied a distinctly different strategy, force composition, and tactics than it had employed at Abu Ageila in 1956. Ultimately, these innovations would lead to the surprising and impressive Israeli success at Abu Ageila and foster the collapse of the Egyptian Army on the second day of the war.

A Compromise Between Close and Deep Operations

Despite the presence of a seemingly indestructible foe at Abu Ageila, the Israelis were so able to exploit flaws in the Egyptian defensive system that they achieved victory in less than twenty-four hours. Much credit for the Israeli success in 1967 must go to Brigadier General Ariel Sharon, the *ugdah* commander, and his staff, who developed an intricate plan that departed in marked ways from the tactics employed in the 1956 battle. Nonetheless, successful strategic deception by the Israeli high command set the stage for Sharon's successful operation.

In the 1967 war, the Israelis intended to defeat the Egyptian Army in the Sinai as quickly as possible to avoid fighting simultaneously on two or more

fronts. To accomplish this objective, operational plans underwent several changes in the three weeks before the war, with the final version receiving approval by 1 June by the newly appointed defense minister, Moshe Dayan. Dayan hoped to defeat the Egyptians in three to five days, but he wanted to avoid seizing Gaza or the Suez Canal, the former because of its hostile Arab population and the latter because it might create an international crisis.[2]

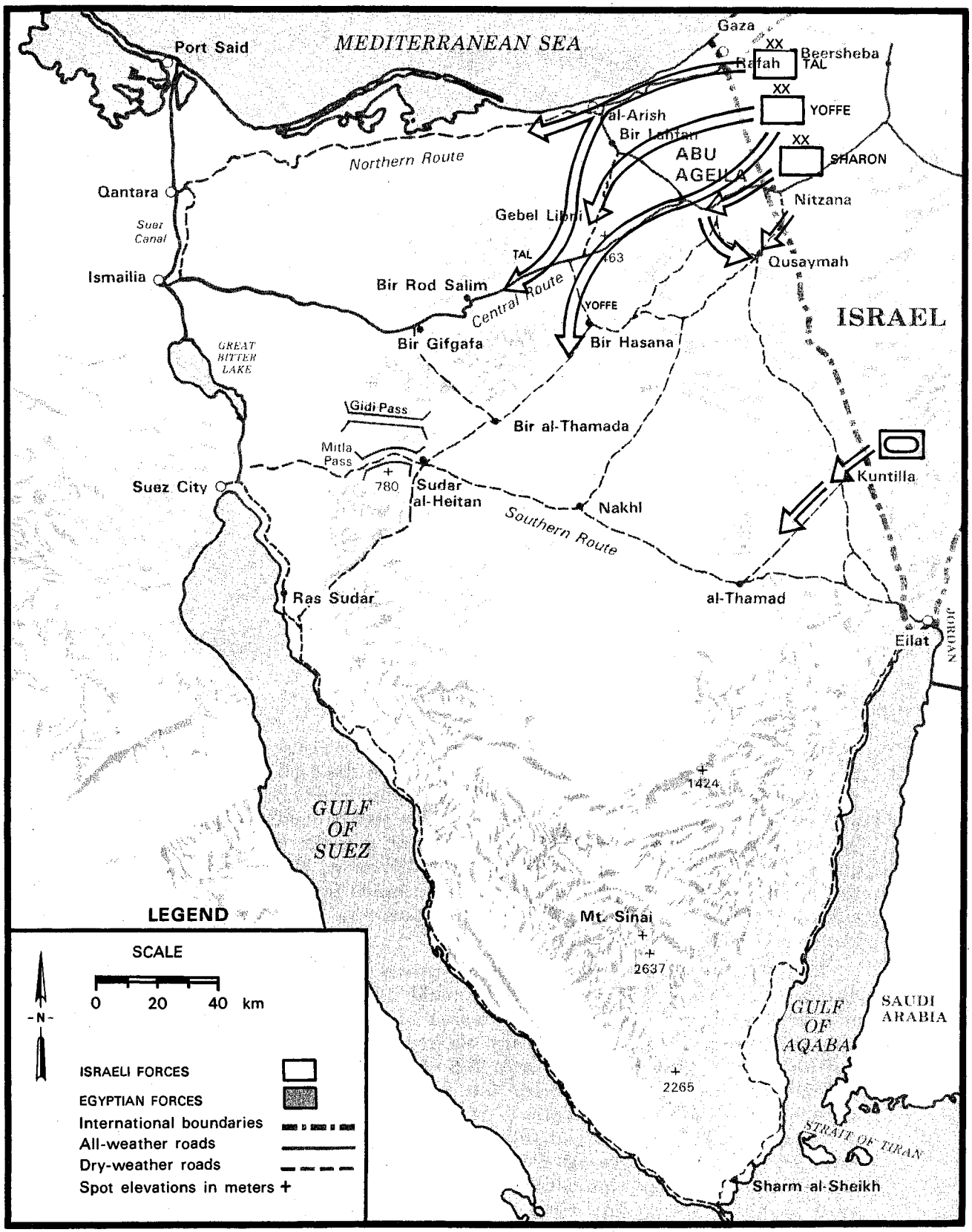
The Israelis drafted a detailed final plan for the first phase of the campaign, leaving subsequent phases general in scope. This approach reflected Israeli military doctrine, which views plans as only a basis for change and expects commanders to take the initiative in response to the friction of war. But the Israelis learned from the 1956 war that they must also plan carefully if they expected to break through Egyptian forward area defenses. In 1967, while the Northern and Central Commands maintained defensive postures, the remainder of the Israeli forces would concentrate on defeating Egypt.

The operational plan for the Southern Command called for the employment of three *ugdahs*, fighting in a three-phase campaign. First, the Israelis would penetrate the first line of defenses at al-Arish and Abu Ageila; second, they would destroy the second line of defenses at Gebel Libni and defeat any counterattack by Egyptian armor; and third, they would advance rapidly to the passes to prevent the retreat of the Egyptian Army. Support operations would take place at Kuntilla and in the Gaza Strip (see map 17).

Responsibility for the Sinai campaign fell on the shoulders of Brigadier General Yeshayahu Gavish, the front commander. Gavish, a graduate of L'Ecole de Guerre in Paris and former chief of the Training Department, planned to execute the initial main effort in the north at Rafah with an *ugdah* under the command of Brigadier General Israel Tal (who also commanded the Armor Corps). This *ugdah* included two armored brigades, a paratroop brigade, a reconnaissance battalion, and some divisional artillery. After taking Rafah, Tal was to seize al-Arish in a combined and amphibious assault involving a second paratroop brigade under the command of Colonel Mordechai Gur. Then, Tal was to send one force along the northern route to the Suez Canal, while a much larger force headed south toward the central route at Gebel Libni. Brigadier General Ariel Sharon, who also headed the Training Division, received a specially configured *ugdah* with the mission to take Abu Ageila.

Brigadier General Avraham Yoffe, in command of an *ugdah* consisting of two reserve armored brigades, was to move between Tal and Sharon with one brigade toward Bir Lahfan to prevent any Egyptian reinforcements from reaching al-Arish from Gebel Libni. While Sharon conducted mopping-up operations at Abu Ageila, Yoffe's second armored brigade was to link up with him at Gebel Libni by using the central route through Umm Qatef. With his two tank brigades, Yoffe was to help Tal defeat the Egyptian 3d Infantry and 4th Armored Divisions. Meanwhile, Sharon would concentrate his effort on taking Qusaymah and then head through Nakhl for Mitla Pass to cut off any Egyptian retreat from Kuntilla.[3]

This plan reflected a compromise by the Israelis between a concentration on the forward area battle and the deep battle. Israeli military strategy first called for the destruction of the frontline defenses at Rafah, al-Arish, and Abu Ageila. Success in this phase would depend on centralized synchroniza-



Map 17. The Israeli war plan (opening phases)

Photo not available.

tion of *ugdahs* and brigades, using the combined arms of infantry, armor, and artillery to seize forward defenses. A key to the forward and deep battle would be the operational maneuver to Bir Lahfan conducted by one of Yoffe's armored brigades. The Israeli General Staff expected to roll over the Egyptian 3d Division at Gebel Libni and then to conduct a major tank battle against a counterattacking Egyptian 4th Armored Division. For the phases of the campaign, the Israelis would rely heavily on tanks from the armored brigades belonging to Yoffe and Tal. Tanks would dominate the latter two phases of the campaign.

The IDF could have bypassed the Egyptians' strongest fortification at Abu Ageila altogether. Yoffe, for example, could have moved his entire *ugdah*—rather than just one of his two armored brigades—along the route to Bir Lahfan (positioned between Tal and Sharon). Or GHQ could have assigned Yoffe's second armored brigade to follow behind Tal through Rafah and al-Arish. Yoffe could have avoided the central route altogether, while Sharon merely pinned down the Egyptians at Abu Ageila. But according to Gavish, the front commander, the General Staff wanted to attack deep but did not want any one of its three *ugdahs* to overextend itself and leave its flanks or rear vulnerable to Egyptian counterthrusts.[4] In this regard, Abu Ageila loomed as a major thorn to any deep operations—as it had in 1956. In Israeli planning, Abu Ageila clearly remained the main gateway to the Sinai.

As mentioned earlier, the Israeli high command had developed a deception plan that led the Egyptians to expect the Israeli main effort in the south, between Qusaymah and Kuntilla. In response to this ruse, the Egyptian high command sent more forces to the south and reoriented its defensive concept for Abu Ageila, placing more emphasis on the area of Qusaymah than originally called for in Plan *Qahir*. As a direct result of this reassessment, the Egyptian commander of the 2d Infantry Division moved his command post from Abu Ageila to Qusaymah, where it stayed until the outbreak of war.[5] This action left the Egyptian division commander physically removed from the main battle and placed greater responsibility for Abu Ageila on the shoulders of a brigadier general.

Sharon's Plan

Sharon, the *ugdah* commander responsible for seizing Abu Ageila, took advantage of the Egyptian division commander's focus on Qusaymah. Sharon wanted to capture Abu Ageila as quickly as possible, certainly by late morning of 6 June or D+1, since he needed one of Yoffe's armored brigades to pass through Umm Qatef on the central axis for the deep battle at Gebel Libni, some sixty kilometers from the border. This scenario, drawn up by the General Staff, compelled Sharon to move directly against Umm Qatef along the central route rather than to attempt an indirect approach through Qusaymah that would have pitted the Israelis against the Egyptian 10th Infantry Brigade as it approached the southern flank of Umm Qatef.

As the Egyptians were placing themselves unknowingly at a strategic disadvantage by their redeployment of forces to the south of the Sinai, Sharon prepared his *ugdah* for a well-coordinated, combined arms assault on Abu Ageila. In 1956, the Israeli 4th and 10th Infantry Brigades had been mobilized on the eve of the conflict, which allowed the reservists little time to prepare for combat. Some of the problems at Abu Ageila had stemmed from this poor preparation. In 1967, however, a good part of the reserves were mobilized for over two weeks before the war commenced, during which time they underwent vigorous training in anticipation of the armed struggle. Hence, the IDF as a whole was much better prepared for combat in 1967 than in 1956.

In Sharon's case, specifically, his *ugdah* had been training for over two weeks. Yael Dayan, who spent most of this period in the field with Sharon, described a typical day for Israeli soldiers:

> . . . Their daily routine was simple. From 3:30 a.m. they were all in a state of readiness . . . They slept again from seven to nine and had breakfast at nine. Nine to eleven were hours of training, fortification, contests, and eleven to two rest again. Two to seven in the afternoon were hours of training, mostly marching—they did ten kilometers a day, fully equipped. At night, in rotation, 50 per cent of the soldiers were on watch, in ambushes or in a state of readiness in trenches.[6]

At night, the soldiers practiced "ad nauseum," according to Colonel Dov Sion, for assaults against a trench system, employing the same techniques that they would later use in attacking Umm Qatef.[7]

Such vigorous training helped prepare the reservists physically and psychologically for combat. The heightened tensions between Israel and her

Arab neighbors no doubt spawned a high level of motivation among the troops, who believed the survival of the Israeli state was at stake. In 1956, Yehuda Wallach, the commander of the 38th Task Force, did not have such a combat-ready, highly motivated force at his disposal.

To capture the fortification of Abu Ageila, Sharon prepared an elaborate plan based on a highly centralized command that he intended to decentralize in the midst of battle. In his view, "the attack on Abu Ageila was the most complicated [his] army [had] ever carried out."[8] In describing the main lesson learned from the 1956 battle, Dov Sion, Sharon's chief of staff, said: "In 1956 our forces had not combined to direct a single blow but had operated separately, without recognizing sufficiently the nature of either the area or the target."[9] Sharon wanted to ensure proper coordination of all forces in order to unnerve the Egyptian defenders through a concentrated assault at several critical points in the Abu Ageila defenses.

To accomplish his task, Sharon wielded a force that was truly a combined arms formation by Israeli standards of the time:

the 14th Armored Brigade
an independent tank battalion
a reconnaissance force
an infantry brigade
a paratroop brigade of two battalions
six artillery battalions
an infantry brigade minus
an engineering battalion (see figure 4)[10]

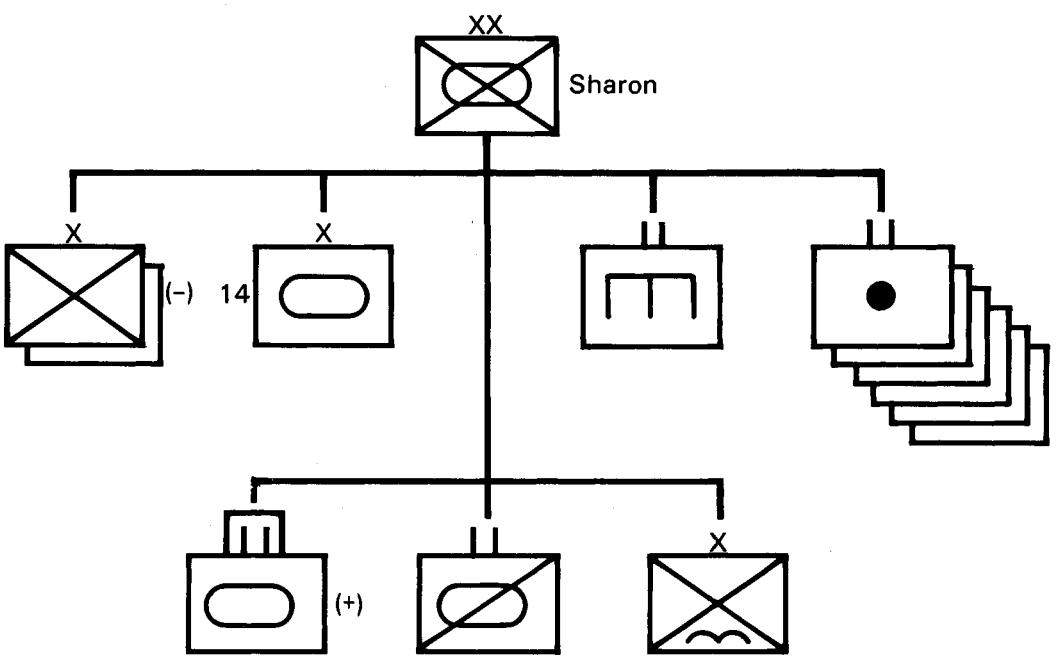


Figure 4. Sharon's *ugdah*

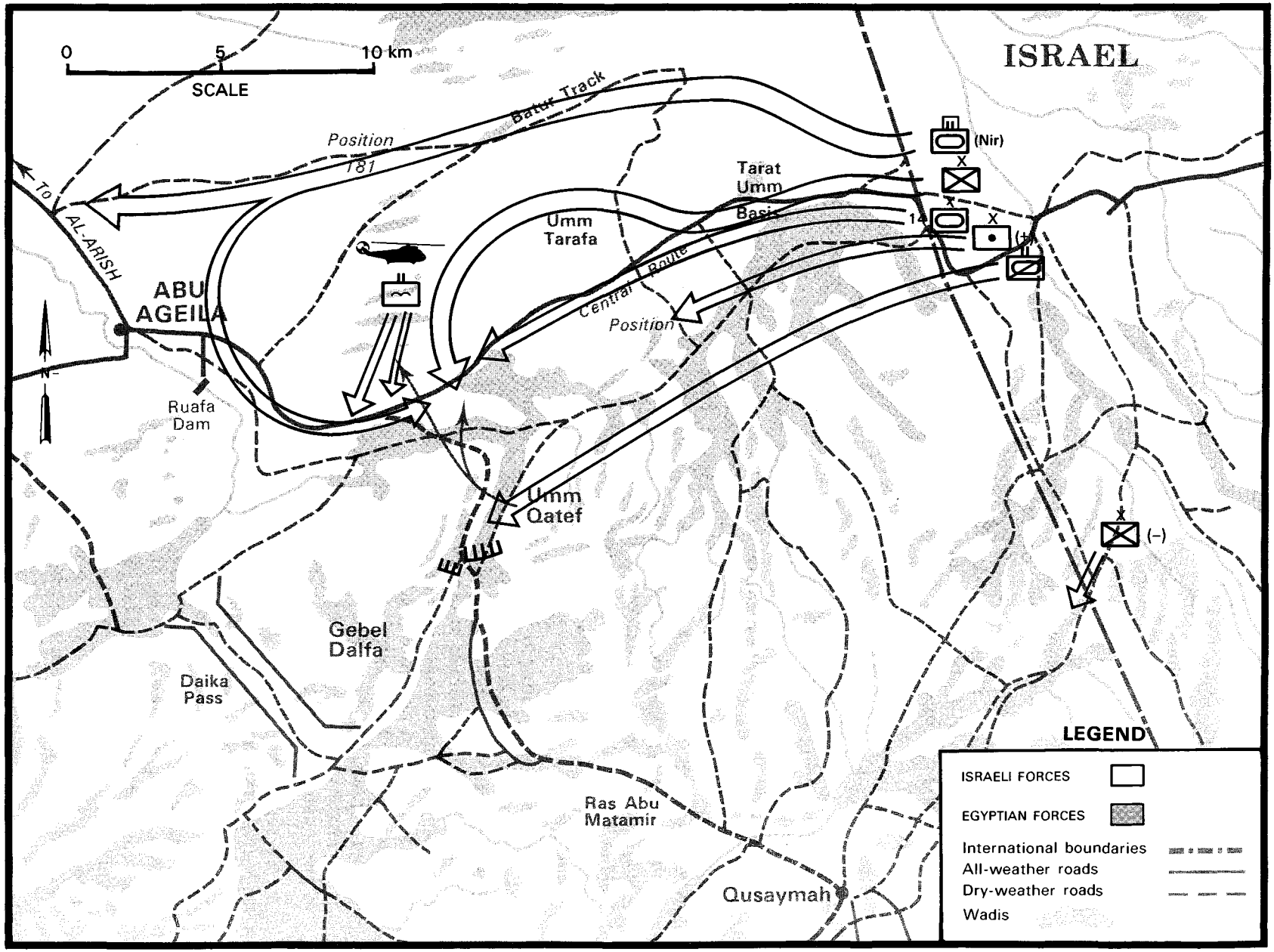
The size of Sharon's *ugdah* numbered around 19,000 men, a force somewhat larger than the Egyptians' 2d Infantry Division.[11]

To gain a better numerical advantage over the Egyptians for his assault on Abu Ageila, Sharon took steps to draw the Egyptian division commander's attention away from Abu Ageila, thus discouraging him from dispatching reinforcements from Qusaymah. To deceive the Egyptians, a reduced infantry brigade comprised of two reserve battalions of infantry and a small tank contingent of less than company size deployed to positions opposite Qusaymah, feigning an attack against the Egyptian 10th Infantry Brigade.[12] Sharon hoped the Egyptians would swallow the bait, and they did. The Egyptian high command, by informing its field commanders that the Israeli main attack would occur in the south, unconsciously helped steer the Egyptian division commander into Sharon's trap. If the Egyptians did not fall for this wile, however, Sharon wisely planned to position a blocking force on the Qusaymah Track, just south of Umm Qatef by way of a route that ran south of the Turkish Track (see map 18). This specially tailored force consisted of a tank company of AMX-13s, a company of motorized infantry, a platoon of engineers, and a battery of heavy mortars.[13]

Unlike in 1956, the Israelis were determined at the outset of their campaign in 1967 to send an armored force to the rear of Ruafa Dam with two missions: first, to block any Egyptian reinforcements coming from either Gebel Libni or al-Arish; and second, to assault Ruafa Dam and Umm Qatef from the west. The imperative to open the central route for Yoffe's second armored brigade coupled with the presence of the Egyptian 10th Brigade at Qusaymah militated against using Daika Pass to attack these objectives. But Sharon knew of the feasibility of using Batur Track, just north of the central route. The difficult mission of using this avenue fell to Lieutenant Colonel Natke Nir.

For this task, Sharon gave Nir an independent armored battalion of approximately forty-five Centurion Mark 5 tanks retrofitted with 105-mm guns—in essence, a mobile group organized into three armored companies, a company of mechanized infantry on half-tracks, a company of 120-mm mortars, a reconnaissance company, an engineer platoon, a platoon of SS-10 and SS-11 French antitank guided missiles, a reinforced maintenance platoon, and ten half-tracks of supplies (see figure 5). For his operation into the rear of Abu Ageila, Nir answered directly to Sharon, who must have experienced great anxiety about the fate of this mobile group intruded between the jaws of two enemy divisions.[14]

To reach Abu Ageila, Nir faced two major Egyptian forces: the infantry and artillery battalion at Position 181—reinforced by a tank or antitank company—and at least a tank battalion of the 6th Armored Regiment near Awlad Ali. The danger to Nir as he moved to Ruafa Dam was the possibility of a quick Egyptian reinforcement of Position 181 with tanks from Awlad Ali. Should he succeed, Nir was also vulnerable to attack by a tank regiment from the Egyptian 3d Division. The most risky part of Sharon's plan thus involved Nir's force. In the event of trouble at Position 181, Sharon was prepared to transport a battalion of paratroopers by helicopter to help Nir.[15] Once Nir reached the dam area, however, he was on his own until his expected



Map 18. Sharon's plan of attack

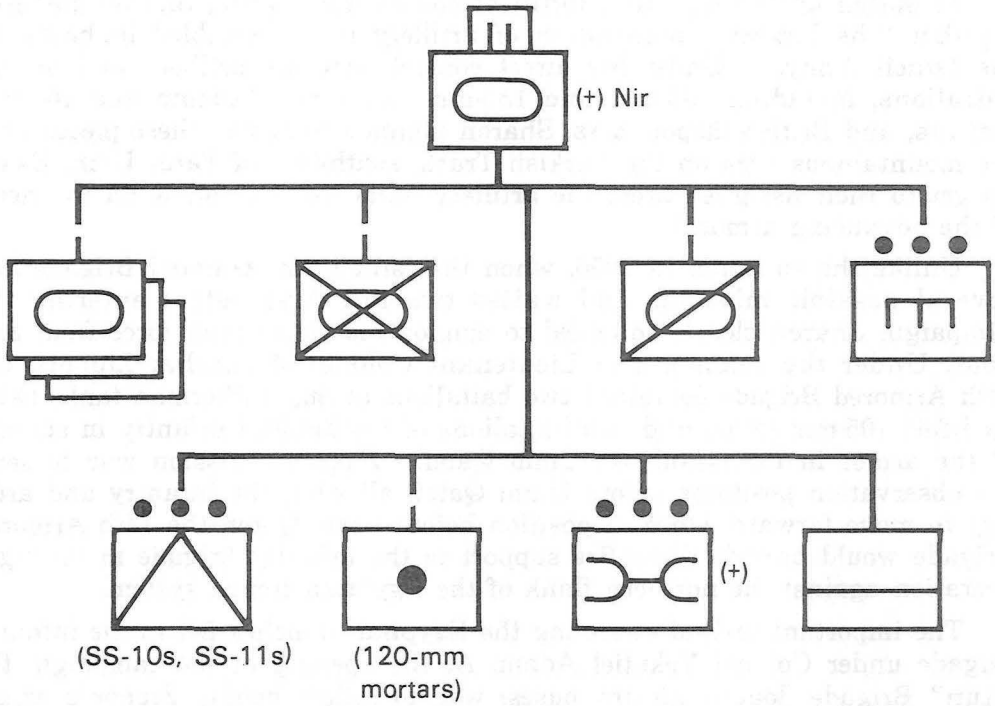


Figure 5. Nir's mobile group

linkup with Israeli forces breaking through at Umm Qatef. From Nir's perspective, timing was of utmost importance for the survival of his meager force in the Egyptian tactical rear.

Three Centurions of Natke Nir's battalion in readiness for a move into the rear of Abu Ageila



To soften up the Egyptian fortifications at Abu Ageila, Sharon gathered together "the largest concentration of artillery ever assembled in battle by the Israeli Army."[16] Under his direct control were six artillery and mortar battalions, including 105-mm and 155-mm howitzers, 120-mm and 160-mm mortars, and British 25-pounders. Sharon planned to deploy these pieces near the mountainous area on the Turkish Track, southwest of Tarat Umm Basis. To get to their assigned area, the artillery units were to follow on the heels of the advancing armor.[17]

Unlike the situation in 1956, when the Israeli 7th Armored Brigade had several possible missions and waited two full days before entering the campaign, Sharon clearly intended to employ his entire tank force from zero hour. Under the command of Lieutenant Colonel Mordechai Zippori, the 14th Armored Brigade contained two battalions of Super Sherman tanks (with modified 105-mm guns) and two battalions of mechanized infantry in support of the armor in its assault on Umm Qatef.[18] Zippori's mission was to seize the observation positions before Umm Qatef, allowing the infantry and artillery to move forward. Once in position before Umm Qatef, the 14th Armored Brigade would provide direct-fire support to the infantry brigade in its night operation against the northern flank of the Egyptian trench system.

The important task of capturing the Egyptian trenches fell to the infantry brigade under Colonel Yekutiel Adam. At the opening of the campaign, the "Kuti" Brigade, loaded aboard buses, was to follow behind Zippori's armor and artillery and dismount at Tarat Umm Basis. After a ten- to twelve-kilometer trek on foot through the sand dunes, Adam was to attack Umm Qatef from the north, with each infantry battalion taking one line of trenches. Rather than split their infantry brigade into two forces—one attacking the northern flank and the other the southern one, as had taken place in 1956—the Israelis opted instead to concentrate the entire infantry brigade in a single attack from the north, thus maximizing the effects of shock and surprise. In addition to these three infantry battalions, one of which was composed of reservists, Adam had a company of combat engineers. As his force cleared the Egyptian trenches, the *ugdah*'s battalion of combat engineers would move in from the east to clear the minefields in front of the trenches for the passage of Zippori's tanks.[19]

In 1967, as in 1956, artillery was "the heart (*qalb*) of the Egyptian positions"—the key to their defensive potency.[20] With the Egyptian artillery out of the picture, Sharon felt he had an excellent chance for quick success: not only would Umm Qatef lose much of its fire support, and hence its combined arms nature, but a bold military strike into the heart of the defensive complex might just unnerve the Egyptian defenders throughout. As noted after the war by the chief correspondent of the Israel Army Broadcasting Service: "Silencing the enemy artillery was the first objective in securing mastery of Abu Ageila."[21]

Sharon, a master paratrooper, assigned the critical mission of silencing the Egyptian artillery to his paratroop brigade led by Lieutenant Colonel Danny Matt. Using helicopters for transport, a battalion of paratroopers would land on a flank of Abu Ageila and then proceed on foot to assault the artillery positions, while the remainder of the *ugdah* carried out its synchronized attacks on Abu Ageila from the east and west.

In drawing up his bold and complicated plan, Sharon felt very much the paratrooper, and Yael Dayan, for one, discerned the special bond between the *ugdah* commander and his paratroopers:

> Arik's [Sharon's] voice changed some when he talked to Danny [Matt] the parachutists' commander. He had been the commander of the paratroopers before, still wore a red beret, and they were his boys. He knew them all by first name and they were his men, and somehow he gave me the feeling he was talking to a brother in whose hands he entrusted a hard job.[22]

Sharon was fortunate to have Matt's paratroopers, which were assigned to the *ugdah* at "the last minute."[23] Sharon's plan thus took its final shape just on the eve of hostilities.

A Comparison of Forces

In the critical area of leadership, the Israelis held a clear advantage over the Egyptians. The Egyptian division commander was new to the Sinai theater, and his chief of staff was new to his position. Although nothing is known of either man, their performance during the battle suggests weak leadership. The Israelis, on the other hand, clearly assigned some of their best commanders to fight at Abu Ageila, men who also knew the terrain well.

Sharon, a natural leader, but difficult to control, would prove to be one of Israel's top field commanders—although one of its most controversial. During the early 1950s, he commanded the elite and secretive Unit 101 that conducted daring reprisal raids across the border against Arabs. When the IDF merged Unit 101 with the paratroopers, Sharon played a major role in molding the Paratrooper Corps into the IDF's elite ground force. In the Sinai campaign of 1956, Sharon, who commanded the 202d Paratroop Brigade, drew criticism for his part in the Mitla operation, during which he disobeyed Dayan's explicit order and assaulted Egyptian positions at the eastern entrance to the pass at a needless cost of 38 killed and 120 wounded, while seizing no ground. A number of Israeli paratroopers refused to serve under Sharon after the war because of this fiasco, and Dayan, under pressure from many families of the fallen soldiers, removed Sharon from command after the campaign and sent him to study at the British Staff College at Camberley. After his return from England, Sharon held marginal positions in the IDF until his fortunes began to rise again in the early 1960s. In 1965, Sharon received command of both the Training Department and a reserve *ugdah*.[24] In 1973, he would lead Israeli forces in crossing the Suez Canal to the west bank, an operation he had helped the IDF plan before the war as head of the Southern Command. In 1982, he would be Israel's defense minister during the invasion of Lebanon.

For the execution of his complicated plan at Abu Ageila, Sharon was blessed with excellent officers. Danny Matt, the paratroop commander, had been with Sharon when Unit 101 merged with the paratroopers back in the early 1950s. In the 1973 war, Matt, by now a colonel, would lead Sharon's *ugdah* in crossing to the west bank of the Suez. Yekutiel Adam, the colonel commanding the attacking infantry brigade at Abu Ageila, rose to the rank of major general and served as deputy chief of the General Staff during the critical period of IDF reform after the 1973 war. He eventually lost his life in the Lebanese invasion of 1982, the highest ranking Israeli to die in combat.

Photo not available.

Mordechai Zippori, the commander of the armored brigade, would attain the rank of brigadier general and command the Armor Corps in the 1973 war. Nir, the Centurion battalion commander, clearly demonstrated his bravery during the 1967 battle at Abu Ageila and had to undergo numerous operations for wounds received at Ruafa Dam. Despite the seriousness of his wounds, Nir returned to the IDF and commanded a tank brigade in the 1973 war, ending his military career as a brigadier general.

The Israelis not only had the advantage in leadership but also in manpower and weapons. Sharon's plan gave the Israelis a marked superiority in numbers of troops at Abu Ageila—14,000 Israelis pitted against 8,000 Egyptians. When it came to tanks, the Israelis also possessed a clear advantage: against 66 Egyptian T-34 tanks, with their 85-mm guns, the Israelis set 150 tanks—AMX-13s, Centurions, and Israeli Shermans—with 105-mm guns. In addition, the Egyptian T-34 tanks were outclassed by the Centurions and Super Shermans' longer range guns—and the Israelis had 100 of these tanks. Moreover, the Egyptians dispersed their tanks, placing some in defilade positions—an unwise step that prevented their concentration in counterattacks against Israeli penetrations. For artillery, the Egyptians relied mainly on Soviet-made 122-mm field guns and 152-mm howitzers, about seventy in number.[25] The 122-mm Soviet guns outranged the Israeli 155-mm

howitzers by 5,000 meters and placed the Israelis at a distinct disadvantage in artillery, compelling them to respond with Matt's paratroopers.

Any advantages that the IDF held at the onset of hostilities could change dramatically, however, depending on how fast the Egyptians committed their tanks at Awlad Ali to the main battle and how the high command supported the defenders at Abu Ageila with the forces available to the 3d Division at Gebel Libni. But as we shall see, the Egyptian command fell short in these two critical areas.

The Exploitation of Egyptian Operational Vulnerability

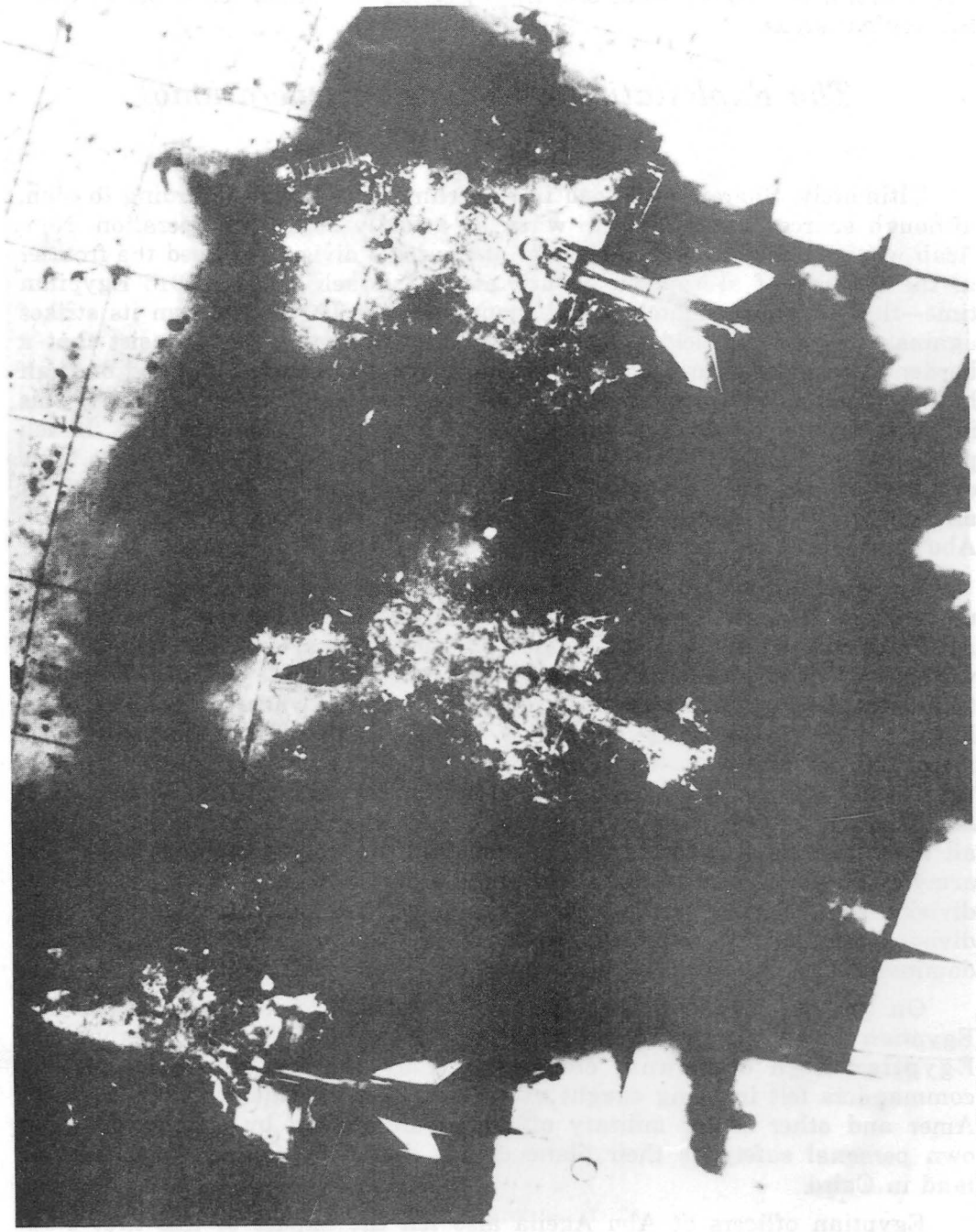
Ultimately, Sharon succeeded in encircling Abu Ageila according to plan, although sources disagree as to when he actually began his operation. Non-Arab writers claim advance elements of Sharon's division crossed the frontier in the vicinity of al-Auja on 5 June at 0815 Israeli time or 0915 Egyptian time—that is, approximately a half hour after the IAF had begun its strikes against Egyptian airfields. The Egyptians, on the other hand, insist that a border clash before Tarat Umm Basis had actually occurred one and one-half hours beforehand but that the Egyptian high command failed to react to this incident.[26] This controversy aside, after three hours of bombing runs, Israeli pilots had succeeded in destroying 85 percent of the Egyptian Air Force. This devastating air operation left the Egyptian defenders at Abu Ageila without air support. Thus, Sharon was able to maneuver his troops for the assault on Abu Ageila without the intervention of the Egyptian Air Force.

The Israeli air strikes caught Egyptian senior commanders away from their units. Field Marshal Amer; General Muhammad Sidqi Mahmud, the Egyptian Air Force commander; and Lieutenant General Anwar al-Qadi, the Egyptian G3 were all in an airplane with other senior officers en route to Bir al-Thamada to inspect the Egyptian troops stationed in the Sinai when the IAF launched its offensive. Unable to land for over an hour because of these air attacks, Amer did not arrive back at GHQ until 1030 Egyptian time or 0930 Israeli time; Amer suffered the additional humiliation of having to use a taxi to get from the Cairo Airport to his command post. Meanwhile, as the IAF struck, all the senior tactical commanders—including the front commander, the field army commander, the air force commander of the Sinai district, and all the division commanders—were at Bir al-Thamada awaiting Amer's arrival. Some division commanders, avoiding travel during daylight hours when the Israelis dominated the sky, failed to reach their units until that evening.[27]

On the morning of 5 June, the IAF had struck a major blow to the Egyptian Armed Forces. Moreover, surprise and shock reigned throughout the Egyptian high command, compounded by the disorientation senior commanders felt in being caught away from their headquarters. In addition, Amer and other senior military officials were shaken by concern for their own personal safety as their plane circled cautiously for an opportunity to land in Cairo.

Egyptian officers at Abu Ageila also felt the impact of this first blow. Major General Sa'id Naguib, the commander of the 2d Infantry Division, was

probably one of those commanders who arrived at his command post on the evening of 5 June. In reaching Qusaymah, he had traveled through an open area infested by IAF sorties. Thus, the 2d Infantry Division had been functioning without its commander during the initial critical hours of the land campaign, at a time when surprise, shock, and confusion permeated the Egyptian command structure.



Swift Sword: The Historical Record of Israel's Victory, June 1967

Three destroyed MIGs on a runway at Imshas during the 1967 war

Toward Umm Qatef

In the meantime, Sharon's *ugdah* began its operation according to plan. While Nir set off with his armored battalion on the Batur Track, Zippori divided the 14th Armored Brigade into two separate forces. Lieutenant Colonel Sasson took one armored and one infantry battalion down a path just north of the central route to flank Tarat Umm Basis, while a second force, under Lieutenant Colonel Herzel, also composed of one armored and one infantry battalion, moved along the Turkish Track toward Position 236. Behind these two armored forces came the engineer battalion, whose mission was to clear the road for the artillery battalions and the infantry brigade. The reinforced reconnaissance force took a path south of the Turkish Track to reach its designated blocking position on Qusaymah Track. Concurrent with these opening moves at the border, a reduced Israeli infantry brigade, supported by air strikes, began its probe of the Egyptian frontier positions at Gebel Sabha for the purpose of gaining the undivided attention of the Egyptian 10th Infantry Brigade stationed at Qusaymah.

At Tarat Umm Basis, Zippori encountered stiff resistance from the Egyptian 2d Reconnaissance Battalion, but after a fight lasting approximately two hours, the Egyptians finally retreated westward. The Israelis then continued their advance with tanks and half-tracks to their next objectives—Umm Tarafa and Position 236. Both Egyptian positions fell quickly. With the success of these engagements, the road to Umm Qatef became clear for the

Photo not available.

advance of Israeli artillery and infantry. By midafternoon, both Israeli armor forces, supported by mechanized infantry, were within range of Umm Qatef, and a fight broke out; at the same time, the IAF conducted strikes against Egyptian artillery positions and supply depots within the main defensive perimeter. The Egyptians managed to maintain accurate artillery fire, pinning



Brigadier Generals Sharon (left) and Gavish (center) at the battlefield, Abu Ageila

Swift Sword: The Historical Record of Israel's Victory, June 1967

down the Israeli tank force around Umm Tarafa. A frontal attack was clearly out of the question, and Sharon made preparations for a night assault.[28]

During the action, Sharon had followed closely behind his armor force, his advance headquarters consisting of three half-tracks: his own, the communications van, and the command post for the artillery. Other vehicles included two jeeps with machine guns mounted in front, two smaller jeeps, and the supply command car.[29] The success of the complicated and intricate Israeli plan depended on the commander's close proximity to the main battle, so Sharon located himself near Umm Tarafa to observe the battle.

Around 1300, Sharon ordered Adam to move up the infantry brigade that had been resting just inside Israel. Carried forward in a long train of civilian vehicles, the brigade made an easy target for the Egyptian Air Force. As Yael Dayan noted: ". . . The road looked like a highway on a holiday. Bumper to bumper, vehicles moved safely with the caravan of buses—in their original colors of blue and turquoise, original signs of a 'Egged Tours'—carrying the infantry brigade. The danger was obvious; they were fully exposed and blocked in."[30] Fortunately for the Israelis, 85 percent of the Egyptian Air Force lay destroyed on the ground and could not provide any air support to the defenders at Abu Ageila. Moreover, a mild sandstorm, lasting a couple of hours in the early afternoon, fortuitously provided the cover needed by the Israelis to move their artillery and infantry into their designated assault positions against Abu Ageila.[31]

Adam and his infantry brigade traveled on civilian transports as far as Tarat Umm Basis, where they dismounted and marched to Umm Tarafa. At this ridge, the dismounted infantry veered northwest into the sand dunes eight to ten kilometers to positions on the northern flank of Umm Qatef. By 2230, the Israeli infantry was ready for its assault on the Egyptian trenches.[32]

The Encirclement of Abu Ageila

While the 14th Armored Brigade headed toward Tarat Umm Basis, Nir embarked with his independent armored battalion on the long and perilous journey into the rear of the Egyptian defenses at Ruafa Dam. Nir had received Centurions for his mission because these tanks, with their wider track spans, were able to cross desert terrain better than the Super Shermans that comprised Zippori's armored force. At around 0920, the Israeli mobile group easily overran the Egyptian infantry platoon at the observation post east of Position 181.[33] Taking Position 181, where the Egyptians had positioned a large force of infantry, artillery, and antitank weapons, would prove much more difficult. Hampering Nir in his mission was his scant intelligence concerning Position 181; he was not sure what to expect there.[34]

The Egyptian defenses at Position 181, some two and one-half kilometers in length and three and one-half kilometers in depth, offered stiff resistance to Nir's first attack, and the Israelis would have to make at least one more assault to take the position.[35] Nir, unsuccessful in his first attack, withdrew his force some two to three kilometers and reorganized for another effort. He felt great pressure to succeed, knowing full well how much hinged on his

performance. Should he fail, Sharon might have to commit an assault battalion of paratroopers in a night operation to help take Position 181. Such an attack, however, would interfere with Sharon's plan for an assault on the artillery within Abu Ageila's main perimeter. Fortunately for the Israelis, the Egyptians remained passive, a tactical mistake that stemmed in part from their lack of astute and bold leadership.

To aid Nir in accomplishing his mission without the assistance of Matt's paratroopers, an Israeli helicopter from Sharon's headquarters took the task force commander aloft to observe the tactical situation for himself. Armed with this new data, Nir divided his force into three parts. His two tank forces made wide flanking maneuvers, while his company of mechanized infantry prepared for a frontal assault. The IAF provided close air support, including the use of napalm. By late afternoon, the Egyptians abandoned their positions, but in the struggle for Position 181, Nir took heavy losses, including a company commander, several platoon commanders, and eight tanks.

After reorganizing his force, Nir dispatched a tank company to Awlad Ali to establish a blocking position on the road between al-Arish and Abu Ageila. Despite assistance from the IAF, this tank force had to return after beating back an Egyptian armor counterattack between 1845 and 1900. At 2200, Nir received word from Sharon to bypass the Egyptian position at Awlad Ali and instead advance on Abu Ageila. To protect the paratroop landing site southeast of Position 181, Nir left part of his force at Position 181 and arrived at Abu Ageila around midnight with only a tank company of seven or eight tanks, a company of mechanized infantry, and the 120-mm mortar company.[36] Here, he divided his force, leaving one part to watch for any Egyptian reinforcements coming from the direction of al-Arish or Gebel Libni. With the rest of the force, Nir assaulted Ruafa Dam, as ordered by Sharon.

Controversy surrounds the initial deployment of the paratroop battalion under the command of Danny Matt. According to Israeli planning, the paratroopers were to land in helicopters on Gebel Dalfa and then proceed downhill to neutralize the Egyptian artillery. At the last minute, however, for reasons that remain unclear, Sharon changed the landing site to the sand dunes north of the central route.[37]

Official Egyptian sources dispute this Israeli version of events and instead argue that the paratroopers did in fact land on Gebel Dalfa in the early evening but had to withdraw because of fierce and accurate artillery fire.[38] In any case, Sharon, secure in the knowledge that Position 181 had fallen to Nir's forces, may have changed the location of the paratroop landing to the northern flank at the last minute. Even if the Egyptian sources are correct, Sharon, nonetheless, demonstrated a flexibility that proved decisive in the battle for Abu Ageila.

Sharon relied on the paratroopers to deliver the key blow that would knock out the Egyptian artillery and crumble the Egyptian defenses. Three waves of 6 helicopters, CH-34 Choctaws (known to the Israelis as S-58 helicopters), were assigned to transport 200 paratroopers to their landing site.

At 1900, the first wave of helicopters landed several kilometers north of the central route. These choppers drew the attention of the Egyptians, who promptly directed artillery fire on them. Fearing his helicopters might be

destroyed by this intense fire, Matt moved the landing site for the next waves to a position farther north. The remainder of the paratrooper force now had a longer trek through the sand dunes. To take full advantage of the fighting skills of his paratroopers behind enemy lines, Sharon opted to delay his timetable for the set-piece attack against Abu Ageila. Matt's main force finally arrived at the main perimeter around 2330.[39]

To complete the encirclement of Abu Ageila, the *ugdah*'s reconnaissance force had to position itself on Qusaymah Track to prevent the commander of the Egyptian 2d Division from dispatching troops to help the defenders at Umm Qatef. The Israeli force charged with this mission had to traverse difficult terrain and apparently experienced unexpected delays. It was unable to consolidate its blocking position until 0330 on 6 June, well after Sharon's division had begun its synchronized assault on Abu Ageila.[40] The feigned attack by the infantry task force opposite Qusaymah, however, accomplished its goal in diverting the attention of the Egyptian division commander from Abu Ageila so that there was no need for an Israeli blocking force on Qusaymah Track.

A Critical Moment in the Campaign

During these opening moves lasting over twelve hours, the Egyptian command's responses left much to be desired. Senior commanders appeared to be suffering shock and confusion at the destruction of the Egyptian Air Force on the ground in the opening hours of the war. More aggressive action on their part might have altered the outcome of the battle for Abu Ageila or at least delayed defeat. At one point in the operation, two difficulties had beset the Israelis on which the Egyptians might have capitalized. Nir had his problems at Position 181 and the reconnaissance force experienced delays in reaching its blocking position on Qusaymah Track.

As a result of these difficulties, a modicum of hesitancy and uncertainty surfaced among senior Israeli commanders, who now expressed reservations concerning Sharon's intricate plan. Late on the evening of 5 June, Gavish, the front commander, feared for the success of the operation and asked Sharon to delay his attack until the morning of the 6th, when the IAF could help him.[41] Apparently, even Major General Yitzak Rabin, the chief of the General Staff, joined in the discussion.[42] At this critical time in the operation, Yael Dayan became aware of anxiety among Sharon's men: "Toward ten o'clock I could sense an added nervousness. Commanders asked more often whether there were any changes."[43] At this point, based on his discussions with Sharon, Gavish decided to send a part of Yoffe's force at Bir Lahfan to help Nir in his assault on Ruafa Dam. At 2200, Colonel Avraham Adan received word to move out immediately with a tank force for Abu Ageila, but he was called back before reaching Awlad Ali because his help was no longer needed.[44]

The sudden dispatch of Adan to Abu Ageila indicates that at one point in the operation, the Israeli senior command had serious reservations about Sharon's ability to attain his objective. Indeed, the front command and GHQ even cut substantially into the size of Yoffe's operational maneuver force at Bir Lahfan to ensure the seizure of the forward tactical area at Abu Ageila.

At this critical point in the war, the centralized, ingenious nature of the Israeli war plan became clearly evident. With Yoffe's force at Bir Lahfan, Gavish had the flexibility to help Israeli forces at either Abu Ageila or al-Arish. By this time, Tal had seized Rafah but would not reach the outskirts of al-Arish until 0300 on 6 June and only take the city at 0900. Rather than keep his entire force at Bir Lahfan in case Tal experienced difficulties, Gavish willingly risked sending Adan to Ruafa Dam, even though Yoffe was engaged

Photo not available.

in a fire exchange with the Egyptian relief force. A setback at Abu Ageila would jeopardize Yoffe's second tank brigade's ability to pass through and smash the Egyptian second line of defenses at Gebel Libni.

Sharon, for his part, felt compelled to continue with his night operation to adhere to the timetable for the deep battle of phase two. He apparently possessed good intelligence on the Egyptian defenses at Abu Ageila and felt confident to continue with his intricate plan.[45] Fortunately for the Israelis, the Egyptians did not dispatch major reinforcements to Abu Ageila.

The Paratrooper Penetration, 5—6 June

The most difficult part of the operation still lay ahead for Sharon. Getting his various forces to their assigned positions before Abu Ageila was one matter, but coordinating their assaults on the defensive complex depended on the exercise of centralized command and control coupled with the acumen to decentralize authority to subordinate commanders at the proper moment.

While his main combat forces made last-minute preparations, Sharon ordered his six battalions of artillery to commence a short but massive bombardment of Abu Ageila. This deluge, of unparalleled magnitude, lasted from 2245 to 2315. Later, Sharon noted its unusual intensity by observing: "For half a hour the fire was tremendous—I have never seen such fire in all my life."[46] When the Egyptian artillery answered this barrage, it no doubt revealed its own position to the Israeli paratroopers poised to enter the defensive complex.

The Egyptians, by their own admission, seriously erred in not anticipating an Israeli attack from the north against their artillery positions behind Umm Qatef. No minefields or extensive array of barbed wire had been placed on their northern flank to slow down an attack by special assault forces. Furthermore, battery positions within the main complex, although designed to withstand artillery fire and air bombings, were not equipped to handle an attack by paratroopers.[47]

This Egyptian vulnerability was particularly significant since artillery formed the core of the defensive concept for Abu Ageila. Nor was such an attack from the north unexpected based on past experience. In the 1956 battle, Colonel Matawalli had traversed these northern dunes during his retreat on the night of 1—2 November, and the Israeli paratroopers used a route only a short distance east of that employed by the Egyptian 6th Infantry Brigade eleven years earlier.

For his attack, Matt divided his paratroop battalion into three companies, with each platoon targeted on an Egyptian gun emplacement. The paratroopers, armed with submachine guns, grenades, and knives, began their attack a half hour before midnight, fanning out to attack the artillery battalions behind Umm Qatef. Darkness slowed their progress, and some paratroopers experienced difficulty finding their way. Despite their initial advantage in surprise, the Israelis encountered some stiff resistance from the Egyptians, who recovered from their initial shock and committed infantry units in hand-to-hand combat. After over ninety minutes of fighting, Matt ordered the paratroopers to move against the batteries near Ruafa Dam. Then,



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Colonel Danny Matt's paratroopers in action after a night drop on Egyptian artillery positions

Sharon finally signaled Matt to withdraw his forces to avoid friendly fire from the Israeli tanks breaking through at both Umm Qatef and Ruafa Dam.[48]

Though the paratroopers did not destroy all the Egyptian batteries, they did achieve a major success by effectively disrupting Egyptian artillery fire. In essence, the Egyptians had lost the combined arms nature of their defense,

which helped the Israeli infantry and armor brigades in their assaults on Umm Qatef. In their operation behind the Egyptian first echelon, the paratroopers also helped demoralize Egyptian troops in the trenches by blurring the distinction for them between front and rear, by threatening an attack on them from two directions, and by creating the impression in the Egyptians' minds that they were being cut off from withdrawal or relief. When the Israelis attacked a convoy bringing supplies and troops to Umm Qatef from the direction of Ruafa Dam, the ominous explosions from successful Israeli attacks could be seen for miles around.[49]

Egyptian defenders at Umm Qatef became acutely aware that there was trouble in their rear. This realization adversely affected the fighting performance of some frontline soldiers, who now felt dangerously exposed to the possibility of a knife or bullet in the back. In fact, a number of Egyptians fell to friendly fire in the ensuing confusion.[50] Thus, the paratrooper battalion helped bring about the collapse of Abu Ageila by attacking the Egyptians at a crucial and vulnerable point and unbalancing their defenses.

Israeli Infantry into the Trenches

The second major tactical surprise achieved by Sharon occurred on the northern flank of the Egyptian positions at Umm Qatef. The Egyptians, who believed that the sand dunes in the north presented an insurmountable barrier to attackers, failed to mine their left flank. This omission, in retrospect, proved

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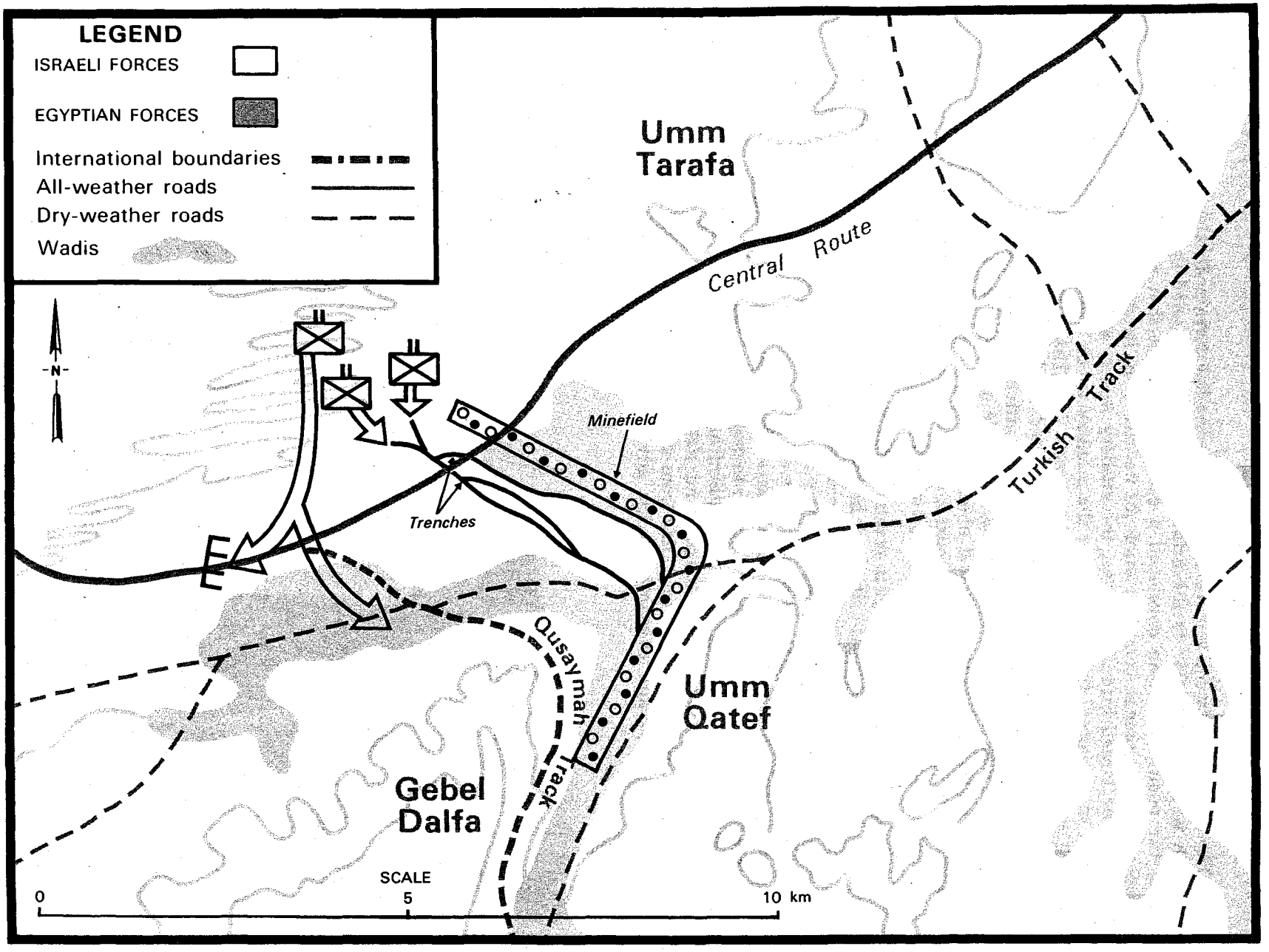
Photo not available.

a grave mistake, as the Egyptians admitted later.[51] Others had made the same wrong assessment before them. For example, S. L. A. Marshall, who visited Israel to gather material for his book on the 1956 war, had reached an identical conclusion: "Neither this ridge (Umm Qatef) nor the two behind it could be outflanked from the north because of an impassable natural obstacle."[52] Nonetheless, Sharon achieved two tactical surprises by attacking from the north: the first against the artillery and the second against the forward infantry—even though the Egyptians were awaiting his attack. In 1956, the Israelis had achieved no such surprises in the heat of battle.

The responsibility for seizing Umm Qatef—the key terrain at Abu Ageila in both wars—fell in 1967 to the infantry brigade commanded by Adam. To seize the position, Sharon developed a complicated plan that required close cooperation and precise communication for its execution. Before the commencement of the Israeli infantry charge, the artillery was to mark the site of the northern most part of the trenches for the infantry which would then attack—each of the three battalions taking one trench line. The vanguards in each battalion would carry fifty of their own colored flashlights—red, green, or blue—to mark the forward progress of their particular unit. A company of tanks from Sasson's tank battalion was to provide direct fire support for each battalion. The idea was to shoot just ahead of the advancing infantry to help clear the way. As the infantry occupied an area, the engineer battalion would begin clearing the minefield for the penetration by armor.[53]

Adam, however, did not plan to commit all three of his infantry battalions to battle at once (see map 19). Instead, he assigned the first two trench lines to his two battalions of regulars, while the third battalion—comprised of reservists—formed the brigade reserve ready to provide assistance to the other two battalions should the situation warrant. As soon as the two infantry battalions reached the central route, the reserve battalion would then go into action against the third trench line. In anticipation of an Egyptian counterattack with armor, Adam configured his third battalion so that one company possessed antitank weapons, bazookas, and 106-mm recoilless rifles to block the anticipated move of Egyptian tanks from the west. To ensure proper coordination and avoid any casualties to his advancing infantry from friendly

Photo not available.



Map 19. Adam's assault on the trenches of Umm Qatef

fire, Adam gained control of the six battalions of divisional artillery as their mission changed from general to direct-fire support.[54]

Adam's infantry brigade caught the Egyptians completely by surprise, and the Israelis experienced little difficulty getting into the two lines of trenches. But the Egyptians recovered quickly and began putting up a stiff resistance, even to the point of hand-to-hand combat with bayonets and knives. During the confusion, Israeli infantry in one trench became lost and crossed over into the next trench, where they ran into their colleagues from the other battalion. Only the flickering colored lights saved Israelis from falling to friendly fire.[55]

The infantry brigade managed to capture the Egyptian colonel in charge of Umm Qatef, whose bunker was located in the second trench line sited on the military crest. To stop the Israeli penetration, the colonel had been trying to communicate with his artillery in order to direct fire on the Israeli section of the trenches.[56] An hour or so after midnight, Israeli infantry units finally crossed the central route and began attacking the southern half of Umm Qatef, while the engineer battalion worked feverishly to clear a path through the minefield for the passage of Israeli armor.[57]

Adam, following Sharon's plan, committed his third battalion as soon as he received word that his other two battalions were attacking Umm Qatef south of the central route. The reserve battalion did not find a third trench line, for none existed, and after groping around in the dark for a while, Adam ordered it to break ranks and clear the area. His company of antitank weapons had already taken up positions on and near the central route to stop any Egyptian tanks moving from the direction of Umm Shihan to reinforce Umm Qatef.[58]

Israeli infantry after capturing the trench system at Umm Qatef



Mid-East Wars: The Israeli Commando's



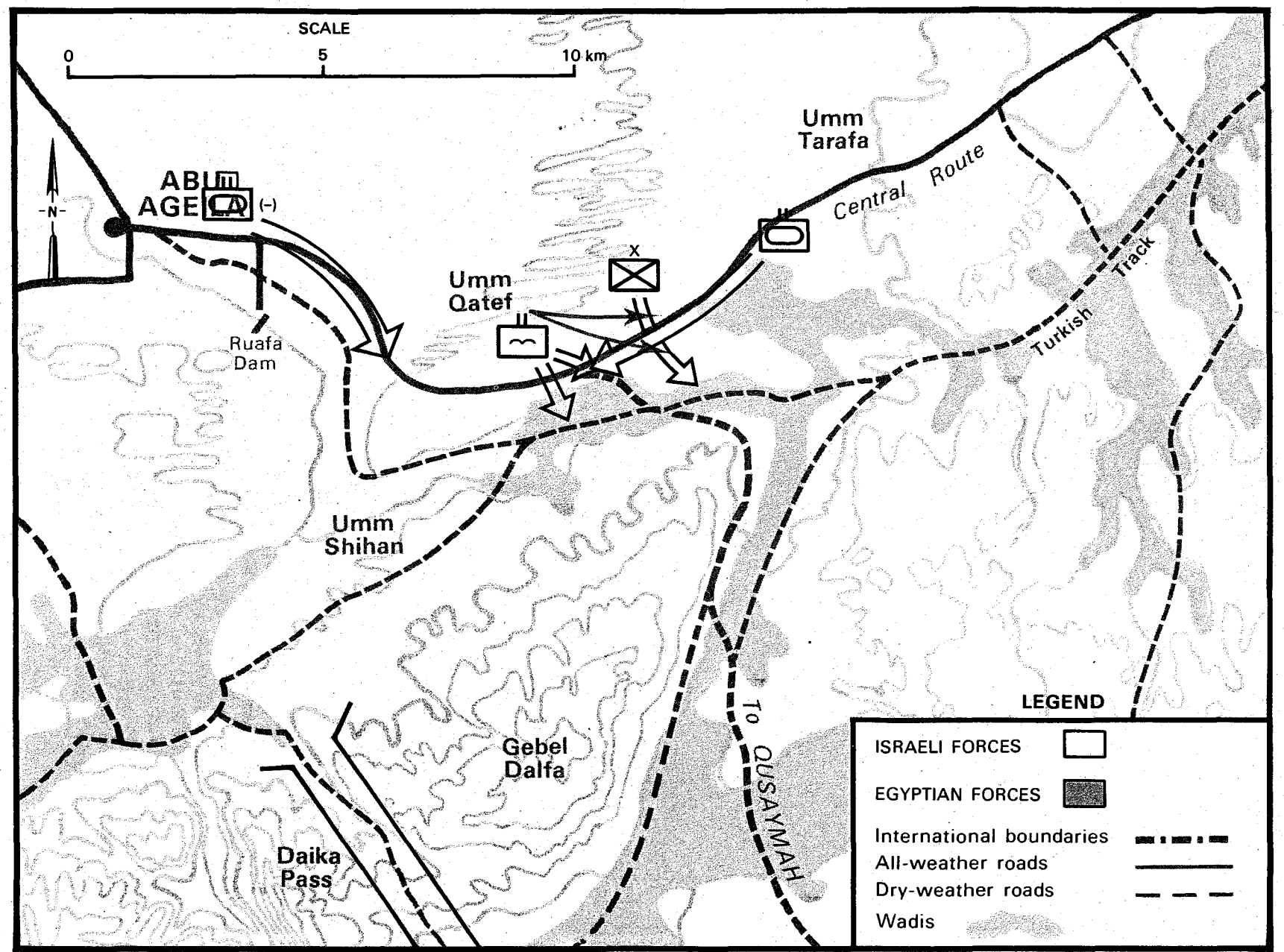
Courtesy of Maj. Thomas P. Odom

The remains of an Egyptian soldier at Umm Qatef, 1988

Penetration by Israeli Armor

Around 0230, the Israeli engineers managed to clear a small path for the passage of Sasson's armored battalion. Rather than commit his mechanized infantry first, Sasson dispatched a platoon of four tanks, led by another tank containing the company commander. As this armor unit moved cautiously through the narrow passageway, one Israeli tank hit a mine and became immobilized, preventing the movement of the other tanks in the battalion. The company commander decided to continue on with his mission in support of the third infantry battalion, which was already positioned on the central route behind Umm Qatef. The engineers now struggled at "a murderous tempo" to clear another path for the remainder of Sasson's battalion, and Israeli commanders became concerned over the fate of Israeli tanks within the main perimeter of the Egyptian defenses. As the platoon of Israeli tanks finally approached the reserve battalion of Adam's brigade in its blocking positions, control of the small armor force passed to the infantry commander. Eventually, the Israeli engineers succeeded in their task, and by 0400 on 6 June, the remainder of Sasson's tank battalion began entering into the main perimeter (see map 20).[59]

While the battle for Umm Qatef raged, Nir launched an attack on Ruafa Dam, which contained the headquarters for the Egyptian 12th Infantry Brigade. There, the Egyptian brigade commander had apparently remained throughout the battle.[60] Nir's attack from the rear must have come as a surprise to the Egyptians and served to deflect the Egyptian brigade commander's attention away from Umm Qatef to the situation directly threatening



Map 20. The Israeli penetration into the Abu Ageila defenses

Photo not available.

his own bunker. The Egyptian commander was thus experiencing immediate problems just as his troops were entering the most chaotic stage of the battle.

After seizing the dam area, Nir organized his forces for the push eastward to link up with Sasson's tanks approaching from Umm Qatef. Nir's force breached the central route and began to move cautiously in an easterly direction. At the same time, Sasson headed westward from Umm Qatef with his armored battalion. At this point in the battle, Sharon assigned Nir's battalion to Zippori, the commander of the 14th Armored Brigade. Zippori promptly ordered Sasson's tanks to stop firing. When Nir continued to receive fire, Zippori knew his men were not firing at each other, as had occurred in 1956, so he radioed to Sasson to continue the attack against the enemy.[61]

The Egyptians reacted belatedly to this initial penetration by Israeli tanks from the east. Rather than launch his entire force in a counterattack during the first Israeli penetration at Umm Qatef, the Egyptian commander of the 288th Tank Battalion (minus) remained relatively idle. Once Sasson entered the defensive perimeter with his battalion, the Egyptian commander ordered his crews to prepare a stopping line in the Soviet manner.[62] Accordingly, the crews transformed the T-34s into antitank weapons, and from around 0400 to 0600, Israeli and Egyptian tanks engaged in close combat. As the battle

Photo not available.

progressed, the Egyptian tankers found themselves surrounded by Israeli tanks. By 0600, the Egyptian defense had crumbled with only a few pockets of resistance still remaining for Israeli infantry to mop up. During this time, the second armored brigade from Yoffe's *ugdah* passed through Abu Ageila on the central route.[63] When the battle for Abu Ageila ended, the victory had cost the Israelis at least thirty-two men killed in action and nineteen tanks destroyed, while the Egyptians lost forty tanks and an unknown number of men killed.[64]

The Collapse of the Egyptian Army

Shortly after 0700 Egyptian time, or 0600 Israeli time, GHQ in Cairo learned of the loss of Abu Ageila.[65] The rapid fall of the well-fortified position no doubt surprised, shocked, and demoralized senior officers and influenced Field Marshal Amer to order a general withdrawal of Egyptian forces to the west bank of the canal.[66]

Further shock occurred when Cairo realized its grave mistake in failing to anticipate the movement of an Israeli armored force to Bir Lahfan. At first, the Egyptian high command failed to realize the serious threat to their

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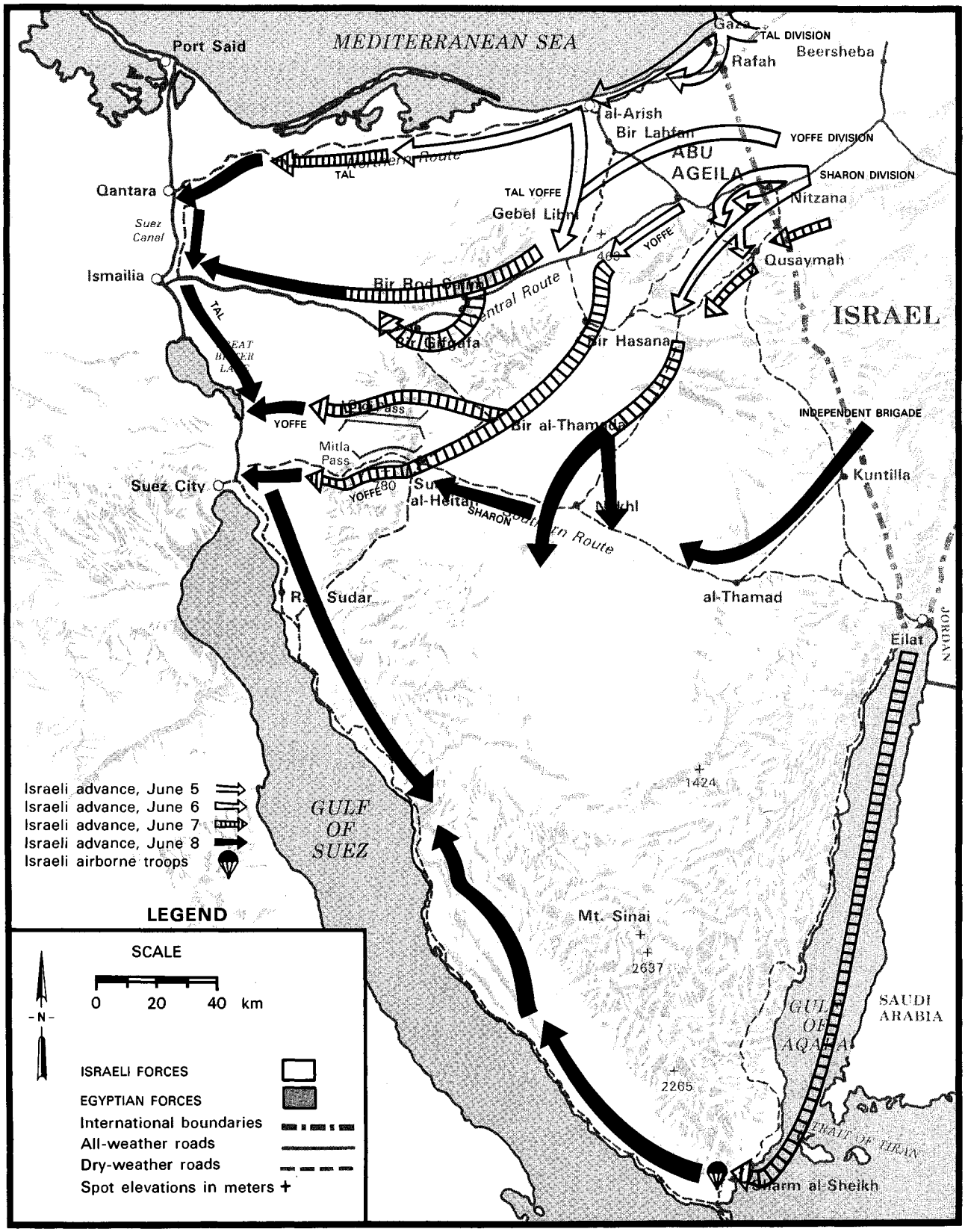
operational depth. Throughout 5 June, Amer still expected the Israeli main attack in the south, somewhere between Qusaymah and Kuntilla, and thus kept a good part of his army ready for this expected onslaught.[67]

By the late morning of the 6th, however, Amer was in a state of panic. The force sent by the Egyptian 3d Infantry Division to al-Arish had failed to break through at Bir Lahfan, and by noon, it was withdrawing to the second line of defenses at Gebel Libni and Bir al-Hasana. At this point, the Egyptian high command realized the gravity of its mistake in not anticipating a major operational maneuver along the route to Bir Lahfan. Now, the Egyptians faced two major Israeli forces descending on Gebel Libni, one from Bir Lahfan and the other from Abu Ageila.[68]

That afternoon at around 1630, Amer—badly shaken by recent events on the battlefield—issued a general withdrawal order to his forces in the Sinai, but one that failed to delineate any phases in the withdrawal. He just told the Egyptian Army in the Sinai to reach the west bank in one day's time. This decision eliminated the Egyptians' ability to manage the battlefield. Units simply raced to the Suez Canal, in some cases outpaced only by their division commanders.[69]

Through intelligence sources, the Israeli high command learned of the Egyptian general withdrawal order. Consequently, late on the 6th, Gavish held an important meeting with his *ugdah* commanders Tal, Yoffe, and Sharon. After some discussion and exchanges of views, Gavish decided to take advantage of the Egyptian Army's apparent collapse and ordered Israeli units to race to the passes ahead of the retreating Egyptian forces. Tal was to take the central route, while Yoffe headed for the Giddi and Mitla Passes; Sharon would try to cut off the Egyptian forces in the south. In conjunction with the land forces, the Israeli Air Force was to conduct deep interdiction strikes at the passes.[70] The insertion of Israeli paratroopers at Giddi and Mitla—timed to coincide with the arrival of Israeli tanks units—would have overwhelmed the Egyptians. But GHQ urgently needed its available paratroop brigade for the struggle in Jerusalem.

Gavish's quick thinking led to success (see map 21). A number of Israeli units reached the passes to block the retreating Egyptian forces, although

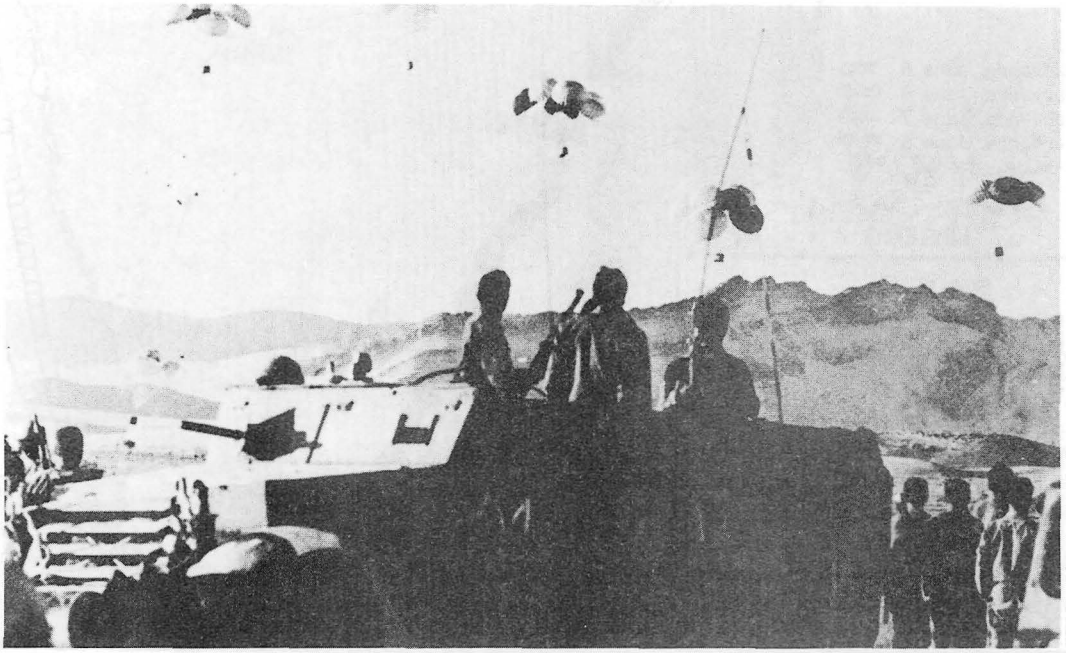


Map 21. The Six Day War: Egyptian front



Mid-East Wars: Israel's Armor in Action

Egyptian T-54 burning after the battle for Bir Lahfan



Mid-East Wars: Israel's Armor in Action

General Yoffe's division receiving supplies at Gebel Libni

Photo not available.

Photo not available.

many Egyptians had managed to escape to the west bank of the Suez Canal. Sometime during 7 June, Dayan dismissed his own strategic concerns and ordered Gavish to seize the Suez Canal and occupy Ras Sudar on the Gulf of Suez.[71] By the end of the next day, after four days of war, the Egyptian Army was in ruins, having lost 80 percent of its equipment. Israeli victories in the forward tactical areas of Rafah, al-Arish, and Abu Ageila had led to the IDF's successful pursuit of the Egyptians to the sealed off passes, where they were defeated. The Sinai was left completely in Israeli hands.

Sharon, for his part, found his next task after the battle for Abu Ageila a mere exercise in troop movement. After giving his *ugdah* a much needed rest during the remainder of 6 June, he dispatched a part of his force to take Qusaymah the following morning, the 7th. By the time the Israelis arrived there, however, the Egyptian 10th Infantry Brigade had already departed. In fact, the Egyptian division commander had crossed over to the west bank of the Suez Canal in the early hours of the morning of the 7th.[72] Naguib had lost the battle for Abu Ageila in less than twenty hours, as the IDF dramatically reversed its performance of 1956. In the campaign as a whole, the IDF had used its battalions, brigades, and *ugdahs* in an integrated and synchronized fashion to inflict a stunning defeat on the Egyptian Army.

Chapter 5

Conclusions

The astounding Israeli military victory in the 1967 war must be understood in light of the IDF's warfighting doctrine, its 1956 experience, and the subsequent changes the Israelis made in the structure of their armed forces between the 1956 and 1967 wars. A comparative study of the two battles of Abu Ageila serves as an excellent focal point for analyzing the fortuitous confluence of these three factors in the latter war. In 1967, the Israelis dramatically reversed their lackluster 1956 combat performance by seizing Abu Ageila in an exemplary fashion. The Egyptians, on the other hand, failed to achieve their 1956 level of performance. This was an unexpected development, since Abu Ageila held a central importance in Egyptian strategic planning. Furthermore, the Israelis attacked the position at night when Israeli air superiority, gained within the first few hours of the conflict, had no effect on combat.

The IDF fought with its own particular élan in both the 1956 and 1967 wars. Considerations of force, time, and space required the Israelis to develop a style of warfare based on an offensive spirit that emphasized the rapid completion of missions at all levels of command. The Israelis' lack of strategic depth dictated that the IDF take the fight into an enemy's territory as quickly as possible, while the possibility of fighting outnumbered and on several fronts compelled the IDF to plan for the rapid defeat of one enemy army so that it could shift its focus to another. To defeat an army expeditiously, the Israelis had to avoid an enemy's strength as much as possible and instead penetrate into its tactical and operational depth for a decisive battle.

For the Sinai, specifically, a victorious four- to six-day campaign must be executed in a single, continuous operation involving several battles that would feature coordinated military actions by *ugdahs* and brigades. To maintain unrelenting operational momentum, the IDF had to possess clear objectives, an appropriate military strategy, and a flexible, responsive command system at senior levels. Ideally, the Israelis' opening moves would be rapid, unpredictable, violent, and disorienting, throwing the Egyptian high command into a temporary state of confusion concerning the Israelis' intent. In this regard, surprise at the outset of the campaign was crucial, especially if it was achieved by deflecting Egyptian attention away from the main effort.

To wage a lightning war, Israeli doctrine and training stressed the principle that combat units in contact with an adversary should complete their missions rapidly to avoid surrendering momentum to the enemy. Israeli commanders were also taught to expect the fog of war and friction to create conditions that would force adjustments in any plan—no matter how good.

To strike a proper balance between tactical initiative and the maintenance of strategic aims required a flexible and responsive senior command that could work within the framework of a good plan and strategy so that junior commanders could exploit opportunities on the battlefield without jeopardizing the theater commander's ability to concentrate appropriate combat power at critical moments in a campaign.

In 1956, coalition warfare with the French and the British forced the IDF to adopt a war plan that went against the grain of its doctrine and military ethos. As a result of the requirements and constraints of the Sèvres Agreement, Dayan sacrificed mass and speed in exchange for the promise of British and French involvement on the second day of the conflict. In the war itself, the resulting slow pace of advance and the piecemeal commitment of forces impaired the IDF's ability to turn its initial strategic surprise into major tactical victories that involved seizure of key terrain and the defeat of sizable Egyptian forces. The IDF also failed to perform optimally owing to a number of internal problems. Chief among these were Dayan's low regard for the Egyptian Army and his concomitant Collapse Theory; doctrinal discomfort arising from the unresolved armor-infantry debate; and a loose Israeli system of command and control.

Dayan underestimated the fighting capability of the Egyptian Armed Forces in 1956, believing strong defenses such as those at Abu Ageila would collapse by being bypassed. Thus, when Dayan learned of the premature commitment of his 7th Armored Brigade, he opted to have his tank force bypass Abu Ageila altogether for a deep thrust into the Sinai—instead of first attempting to seize Umm Qatef. The latter step would have been more in keeping with Ben-Gurion's concern for avoiding a major campaign until the French and British initiated their participation. Then, when the Egyptian defenders at Abu Ageila exhibited more mettle than expected—even after being surrounded—Dayan, surprised and frustrated by the turn of events, pushed for a greater effort from his field commanders.

The doctrinal debate in the IDF on the eve of the 1956 war concerning the role of armor and infantry in large-scale maneuver warfare created confusion among Israeli commanders. Before the war, Dayan envisioned the Sinai battlefield as involving mainly infantry formations, supported by smaller armor units. Even though Dayan made a last-minute concession to armor in his assignment of a greater role to the 7th Armored Brigade in Operation Kadesh, Israeli armor was fragmented into small formations and never engaged in any major battle throughout the Sinai campaign. By the end of the third day of the war, for example, the 7th Armored Brigade had divided into three different armor task forces going in three different directions; yet none of these forces had seized any key terrain or defeated any sizable Egyptian force. The doctrinal debate concerning the role of armor and infantry needed to be resolved before the IDF could defeat the Egyptian Army decisively in a future campaign.

The Israeli command system in 1956 was still in its experimental stage for formations of division size. At the highest level in the operational chain of command, Dayan dashed around the Sinai from unit to unit to the detriment of operations at GHQ and the front command. At the tactical level, the *ugdah* had not yet crystallized into a full-fledged headquarters, and its

commanders exercised loose control over their forces. At Abu Ageila, the ambiguity concerning higher level command relationships encouraged the interference of the chief of the General Staff and the front commander in the tactical decisions of their subordinates. This intervention, however, brought little improvement to the tactical situation. In fact, coordination between brigades suffered as a result of this meddling.

After 1956, realizing that it could not attribute its poor combat performance to political factors, the IDF embarked on numerous changes based in part on its previous war experience. The Israeli Air Force became the premier service, capable of conducting preemptive strikes to gain the air superiority necessary for rapid ground support operations. On the land, the IDF solved its armor-versus-infantry controversy with a clear doctrine based on the employment of large armor formations in exploitation and deep operations designed to defeat an enemy's army in rapid fashion. With the demise of Dayan's Collapse Theory, Israeli planners took the Egyptian Army's fighting capabilities seriously and consequently devoted more attention to developing better techniques for assaulting fortified positions. Finally, the reserves underwent more rigorous training, and the system weeded out older individuals, who now joined combat support units. All these changes matured and professionalized the IDF so that in the next conflict, the Israeli Army could fight more in accordance with its warfighting doctrine.

Perhaps the key to the Israeli success of 1967 was the combination of masterful operational planning coupled with the interwar development of a better functioning command and control system for the front and *ugdah* commands. The plan for the Sinai theater of operations, in which speed was of utmost importance, contained a successful deception that focused Egyptian attention to the south, while Israel concentrated its forces in the north. The IDF expected to use its initial strategic surprise to seize two key Egyptian positions, in the process defeating the 7th Division at al-Arish and the 12th Brigade at Abu Ageila.

But the Israeli goal of conquering most of the Sinai depended on a judicious balance between the forward area battle and the deep battle. To win quickly against the Egyptians—especially since Israel faced the real possibility of fighting on the Syrian and Jordanian fronts—the Israeli General Staff developed a detailed plan for the first phase of the Sinai campaign that also sketched out a swift and coordinated shift to the next phase of the campaign. The Israelis cleverly linked the two key forward area battles at al-Arish and Abu Ageila with the anticipated deep battle of tanks in the central Sinai.

The brilliant part of the operational plan was the assignment of Yoffe's armored brigade to the route to Bir Lahfan. This move completely surprised the Egyptians and prevented them from reinforcing al-Arish. In addition to this advantage, the Israeli armored brigade at Bir Lahfan gave Gavish, the theater commander, the flexibility to support Sharon in the rear of Abu Ageila should the need arise. Thus, the Israelis placed themselves in an excellent position for the next phase of the campaign. The Egyptian 3d Division, which held the second line of defense at Gebel Libni, would face a two pronged assault—one from Bir Lahfan and the other from Abu Ageila. After defeating the 3d Division, the Israelis planned to drive into the Egyptian depth and defeat the 4th Armored Division in a great tank battle.

But the success of this plan depended on a better functioning high command than that of 1956. To effect this improvement, the Israeli high command, in exercises between the two wars, institutionalized the *ugdah* as the main tactical headquarters under a theater commander, who now possessed the means to coordinate the actions of brigades to achieve strategic aims. Lines of responsibility and authority, based in part on Laskov's concept of "optional headquarters control," provided for a balance between the maintenance of aim at the tactical level and the flexibility of command required for the decisive battle in the Egyptian depth. In this context, Gavish left the decision of whether to conduct a night operation to Sharon. Then when it appeared the Egyptian Army was in full retreat, Gavish met with his three *ugdah* commanders to plot the next, larger course of action.

In a short war, it was of paramount importance for the IDF to make the transition from the forward area battle to the next phase with an adequate amount of combat power and mass. The best test of the Israelis' war plan was its effect on the Egyptians. In the 1967 war, victory for the Israelis resulted in the destruction or capture of 80 percent of the Egyptian Army's equipment by the fourth day of the war. Moreover, the Israelis achieved this accomplishment without having to fight any major engagements with the 4th Armored Division at Bir Gifgafa, 6th Infantry Division at Kuntilla, the Shazli Armored Task Force at al-Matalla, or the 12th Infantry Brigade at Qusaymah.

After the seizure of al-Arish and Abu Ageila by the morning of the 6th, the Israelis were prepared to break through the second line of defenses and strike deep. Nonetheless, the Egyptian high command still had several options other than the general withdrawal order issued by Amer. For example, the Egyptians could have attempted a phased withdrawal from the Sinai spread over two or three nights; or they could have tried a hasty defense at the passes. Either course of action, if successful for even two or three days, might have invited superpower intervention to force an Israeli halt to military operations. Certainly, the Israelis would have suffered more casualties, and the Egyptians would have saved some face.

Despite a number of viable options, Amer panicked and unwisely ordered a general withdrawal—in one night—which caused the complete rout of his army. His decision no doubt stemmed from the shock of the rapid fall of al-Arish and Abu Ageila and from the seriousness of the threat to the Egyptian second line of defense and operational depth by Yoffe's presence at Bir Lahfan.

The stunning Israeli success stemmed in part from a unique set of Egyptian failings, in large measure self-inflicted. In the three weeks prior to the war, the Egyptians changed their war plans, command structure, senior personnel, and troop deployments in ways that undermined their army's ability to fight against a powerful foe. Consequently, widespread confusion resulted throughout the Egyptian Armed Forces so that by the eve of the conflict, the senior military leadership concerned itself more about events in Cairo than those in Tel Aviv. To unravel the sinews of a vulnerable Egyptian senior command, the IDF needed only to launch a bold and imaginative campaign that seized key terrain at the outset of war and threatened a penetration into the Egyptian operational depth.

Tactically, the Egyptians in 1967 had created flawed defenses at Abu Ageila in two key places on the northern flank. But it was Israeli daring and imagination that resulted in the exploitation of these vulnerabilities. The Israeli performance at Abu Ageila in 1967 clearly demonstrates that the IDF had devoted much time and effort to solve the pressing and complex problem of how to break through a forward tactical zone at its strongest points. Abu Ageila fell as a result of a small mobile group penetrating into the Egyptian rear at Ruafa Dam, a paratroop battalion breaking into the center of the defensive perimeter and destroying much of the Egyptian artillery, and an infantry brigade occupying the trench system from the north. The key to the impressive Israeli success was the ability of the paratroopers to disrupt the Egyptian artillery, thereby enfeebling a crucial element of the Egyptian defenses and undermining the combined arms nature of the resistance. Sharon's remarkable synchronization of his maneuver forces was paralleled by Gavish's exploitation of the entire theater of operations during the Egyptian retreat.

A comparison of the two battles of Abu Ageila demonstrates the critical importance of operational planning and a flexible command in the execution of a successful campaign designed to defeat an enemy rapidly. To win the 1967 Sinai campaign, the IDF established the necessary correlation and integration between the forward area battle and the deep battle, and only serious Egyptian mistakes obviated the occurrence of a climactic battle between large armor formations in the center of the Sinai. Inadequate or unrealistic preparations for either deep or forward area battles by attackers during an offense will surely result in the loss of the initiative to a well-prepared adversary and might even imperil subsequent phases of a campaign. The Israelis had learned by 1967 that to strike the enemy deep in a decisive battle first requires serious preparation, realistic planning, and imaginative thinking in the forward tactical battles.

NOTES

Chapter 1

1. Moshe Dayan, *Diary of the Sinai Campaign* (New York: Harper and Row, 1966), 3.

2. *Official Egyptian military sources*, Cairo, Egypt, hereafter cited as *OEMS*; *New York Times*, 31 October 1956:4; and Kennett Love, *Suez: The Twice Fought War* (New York: McGraw-Hill, 1969), 495—96. Information on the location of the 2d and 3d Divisions before the nationalization act comes from the *New York Times*, whereas that on the two armored brigades appears in Love.

3. Muhammad Haykal, *Qissa al-Suways* [The story of Suez] (1977; reprint, Beirut: Shirka al-Matbu'at lil-Tauzi' wa al-Nashr, 1985), 123—24, 126, 129—30; and Muhammad Haykal, *Cutting the Lion's Tail: Suez Through Egyptian Eyes* (New York: Arbor House, 1987), 120, 122.

4. On this important meeting, see Haykal, *Qissa al-Suways*, 150.

5. *New York Times*, 2 November 1956:3; Love, *Suez*, 492; Erskine B. Childers, *The Road to Suez* (London: MacGibbon and Kee, 1962), 231—32; Trevor N. Dupuy, *Elusive Victory: The Arab-Israeli Wars, 1947—1974* (1978; reprint, Fairfax, VA: Hero Books, 1984), 146; and Edgar O'Ballance, *The Sinai Campaign of 1956* (New York: Praeger, 1959), 50.

6. *OEMS*; Muhammad Kamal Abd al-Hamid, *Ma'raka Sina wa Qanat al-Suways* [The battle of the Sinai and the Suez Canal] (Cairo: al-Wa'y al-Arabi, 1960), 103; Moshe Dayan, *Diary*, 211—17; Love, *Suez*, 492; O'Ballance, *Sinai Campaign*, 50—51; and Dupuy, *Elusive Victory*, 144, 146—47. For the accuracy of reporting by Israeli military intelligence, see Raymond Cohen, "Israeli Military Intelligence Before the 1956 Sinai Campaign," *Intelligence & National Security* 3 (January 1988):134, 136. Cohen bases his evaluation on recently released Israeli archival material.

7. Haykal, *Cutting the Lion's Tail*, 125, 129; Abd al-Hamid, *Ma'raka*, 19; *New York Times*, 31 October 1956:4; Dupuy, *Elusive Victory*, 146, 213; O'Ballance, *Sinai Campaign*, 51—52; and Dayan, *Diary*, 211.

8. *New York Times*, 31 October 1956:4; O'Ballance, *Sinai Campaign*, 50—51; and Love, *Suez*, 538. Among Qadi's assignments after the 1956 war were deputy to Syrian Lieutenant General Jamal Faysal of the First Army in Syria during Egypt's union with that country (1958—61); commander of the Egyptian expeditionary force in Yemen until 1964; and the director of operations (G3) at general headquarters in the Six Day War. See Eliezer Be'eri, *Army Officers in Arab Politics and Society* (New York: Praeger, 1970), 140; and Muhammad Fawzi, *Harb al-Thalath Sanawat, 1967—1970* [The Three Years' War, 1967—1970] (Beirut: Dar al-Wahda, 1983), 24, 168.

9. *OEMS*.

10. Some literature refers to the brigade commander's name as merely Sami Yassa, and his rank varies between brigadier general and colonel. Unfortunately, *OEMS* did not have the commander's name; nor did they provide it upon request. *New York Times*, 31 October 1956:4; Dayan, *Diary*, 212; Love, *Suez*, 536; and Dupuy, *Elusive Victory*, 158.

11. *OEMS*.

12. Abd al-Hamid, *Ma'raka*, 65, 123; and Love, *Suez*, 536.

13. *OEMS*. Less detailed information appears in Abd al-Hamid, *Ma'raka*, 97—98; Love, *Suez*, 536, 538; Meir Pa'il, *IDF Campaigns Against Abu Ageila in Three Wars* (Tel Aviv: IDF Publication, n.d.), 12—13; and Dupuy, *Elusive Victory*, 158.

14. Dupuy, *Elusive Victory*, 159.

15. *OEMS*. For a more general summary in English of Egyptian deployments, see Love, *Suez*, 536, 538; and Dupuy, *Elusive Victory*, 158—59.

16. *OEMS*.

17. *OEMS*; Abd al-Hamid, *Ma'raka*, 98; Dupuy, *Elusive Victory*, 158; and O'Ballance, *Sinai Campaign*, 40.

18. S. L. A. Marshall, *Sinai Victory* (New York: William Morrow, 1958), 95.

19. The actual size of this reserve is given by *OEMS*.

20. Dayan, *Diary*, 126. For the same assessment, almost in exact terms, see Moshe Dayan, *Moshe Dayan: The Story of My Life* (New York: William Morrow, 1976), 246.

21. *OEMS*; Abd al-Hamid, *Ma'raka*, 96; Pa'il, *Abu Ageila*, 13; and Dupuy, *Elusive Victory*, 159. Most of the 26th Brigade was located in the Gaza Strip.

22. For a description of this secret conference, see Dayan, *Moshe Dayan*, 214—33; Donald Neff, *Warriors of Suez: Eisenhower Takes America into the Middle East* (New York: Simon and Schuster, 1981), 342—48; and Dupuy, *Elusive Victory*, 141—43.

23. A detailed treatment of this subject appears in Sylvia K. Crosbie, *A Tacit Alliance: France and Israel from Suez to the Six Day War* (Princeton, NJ: Princeton University Press, 1974), 29—79. See also Dayan, *Diary*, 34; and Ezer Weizman, *On Eagles' Wings* (New York: Macmillan, 1976), 150. For the critical, last-minute buildup of Israel's Armor Corps, increasing its total number of tanks by 250, see David Eshel, *Chariots of the Desert: The Story of the Israeli Armored Corps* (London: Brassey's, 1989), 27—29.

24. Dayan, *Diary*, 68.

25. Crosbie, *A Tacit Alliance*, 73, 77—79; and Hugh Thomas, *Suez* (New York: Harper and Row, 1966), 123. For a denial, see Chaim Herzog, *The Arab-Israeli Wars* (New York: Vintage Books, 1982), 117.

26. Dayan, *Diary*, 209.

27. Dayan, *Diary*, 210; Avraham Adan, interview with author, Tel Aviv, Israel, 2 November 1986; Yehudah Wallach, interview with author, Tel Aviv, Israel, 7 November 1986; Pa'il, *Abu Ageila*, 18; and Dupuy, *Elusive Victory*, 148—49.

28. Dayan, *Diary*, 33, 210; Dayan, *Moshe Dayan*, 234; and Yigal Allon, *Shield of David: The Story of Israel's Armed Forces* (New York: Random House, 1970), 237.

29. For an excellent discussion on the rise of paratroopers to prominence in the IDF, see Edward N. Luttwak and Dan Horowitz, *The Israeli Army* (New York: Harper and Row, 1975), 109—17.

30. Dayan, *Diary*, 85—86, 116; and Wallach interview.

31. Dayan, *Diary*, 220—21; Wallach interview; and Pa'il, *Abu Ageila*, 14.

32. Wallach interview; Dayan, *Diary*, 115; and Dupuy, *Elusive Victory*, 148, 159. Simhoni had been a member of *Palmach* (or shock companies), the army's elite unit during Israel's War of Independence. At the conclusion of the Sinai campaign, Simhoni, whose plane hit a sudden sandstorm and flew off course, was killed in an airplane crash in Jordan.

33. Ze'ev Eytan, letter to the author, 17 September 1987.

34. Dayan, *Diary*, 210; Wallach interview; Adan interview; Pa'il, *Abu Ageila*, 18; and Dupuy, *Elusive Victory*, 148—49.

35. Eytan letter; and Wallach interview.

36. Dayan, *Diary*, 221; Wallach interview; Adan interview; Ze'ev Eytan, interview with author, Tel Aviv, Israel, 4 November 1986; Pa'il, *Abu Ageila*, 15; and Eshel, *Chariots of the Desert*, 33.

37. Dayan, *Diary*, 91, 210; and Wallach interview.

38. Wallach interview; Gunther Rothenberg, *The Anatomy of the Israeli Army: The Israel Defense Forces, 1948—1978* (New York: Hippocrene Books, 1979), 101; and O'Ballance, *The Sinai Campaign*, 57.

39. Luttwak and Horowitz, *The Israeli Army*, 151.

40. For the Dayan-Laskov debate, see Shabtai Teveth, *Moshe Dayan: The Soldier, the Man, the Legend* (Boston, MA: Houghton Mifflin, 1973), 262—63; Luttwak and Horowitz, *The Israeli Army*, 131—32, 148—49; and Rothenberg, *The Israeli Army*, 100—101.

41. Brian Bond, *Liddell Hart: A Study of His Military Thought* (Princeton, NJ: Princeton University Press, 1977), 246, 253—55, 259.

42. Dayan, *Diary*, 220—21; and Rothenberg, *The Israeli Army*, 100.

43. Dayan, *Diary*, 39.

44. Wallach interview.

45. Adan interview; and Eshel, *Chariots of the Desert*, 36.

Chapter 2

1. Salah al-Din al-Hadidi, *Shahid 'ala Harb 67* [Witness on the 1967 war] (Cairo: Dar al-Shuruq, 1974), 143.

2. Dayan, *Diary*, 124.

3. For an account of the Mitla operation, see Ariel Sharon, *Warrior: The Autobiography of Ariel Sharon* (New York: Simon and Schuster, 1989), 144—57; Dayan, *Diary*, 77—85; Love, *Suez*, 500—501, 508—10; O'Ballance, *Sinai Campaign*, 83—89, 105—15; Marshall, *Sinai Victory*, 33—50, 67—68; Dupuy, *Elusive Victory*, 150—54; and Louis Williams, "The Sinai Campaign—Thirty Years Later: The Battle for the Mitla Pass," *IDF Journal* 4 (Winter 1987):54—60.

4. Haykal, *Cutting the Lion's Tail*, 177—78.

5. Haykal, *Qissa al-Suways*, 227—29; Haykal, *Cutting the Lion's Tail*, 178; Abd al-Hamid, *Ma'raka*, 94, 112; Love, *Suez*, 501—2, 530; and Dupuy, *Elusive Victory*, 154—55.

6. Abd al-Hamid, *Ma'raka*, 85; Love, *Suez*, 496, 502; and Dupuy, *Elusive Victory*, 177.

7. Dayan, *Diary*, 210; Pa'il, *Abu Ageila*, 18; Robert Henriques, *A Hundred Hours to Suez: An Account of Israel's Campaign in the Sinai Peninsula* (New York: Viking Press, 1957), 107; and Dupuy, *Elusive Victory*, 147—49.

8. Dayan, *Diary*, 86—87, 91—93; Wallach interview; Adan interview; Dupuy, *Elusive Victory*, 160—61; Marshall, *Sinai Victory*, 51—57; and O'Ballance, *Sinai Campaign*, 91—97.

9. Adan interview.

10. Abd al-Hamid, *Ma'raka*, 95; *OEMS*; Wallach interview; Adan interview; Eytan interview; and Love, *Suez*, 538.

11. Dayan, *Diary*, 93; and Dupuy, *Elusive Victory*, 161.

12. *OEMS*; Love, *Suez*, 538; Pa'il, *Abu Ageila*, 19; Dupuy, *Elusive Victory*, 163; and Marshall, *Sinai Victory*, 138.

13. Dayan, *Diary*, 93. For this engagement, consult *OEMS*; Marshall, *Sinai Victory*, 103—5; Love, *Suez*, 538; and Dupuy, *Elusive Victory*, 161—62.

14. Dayan, *Diary*, 91.

15. Menachem Shalev, "The Secrets of Mitla Revealed," *The Jersualem Post*, 31 October 1986:9. Here Shalev cites a paper given at a conference by Mordechai Bar-On who served as Dayan's bureau chief in 1956.

16. Dayan, *Diary*, 96.

17. Ibid.; and Teveth, *Moshe Dayan*, 269.

18. Dayan, *Diary*, 88, 92—93; Teveth, *Moshe Dayan*, 268—69; and Dupuy, *Elusive Victory*, 162—63.

19. Eytan interview; Love, *Suez*, 539; Marshall, *Sinai Victory*, 106; Pa'il, *Abu Ageila*, 19; Dupuy, *Elusive Victory*, 162; and Herzog, *The Arab-Israeli Wars*, 126.

20. Yehudah Wallach, letter to the author, 20 October 1987; and Dupuy, *Elusive Victory*, 164.

21. Adan interview; Eytan interview; Pa'il, *Abu Ageila*, 19—20; A. Harding Ganz, "Abu Ageila—Two Battles, Part 1: 1956," *Armor* 83 (May-June 1974):38—39.

22. Wallach letter. For the timing of the decision, see Pa'il, *Abu Ageila*, 20.

23. Dayan, *Diary*, 95—96; Wallach interview; Adan interview; Dupuy, *Elusive Victory*, 164; and Herzog, *Arab-Israeli Wars*, 126.

24. *OEMS*; Love, *Suez*, 539; P'ail, *Abu Ageila*, 19; and Dupuy, *Elusive Victory*, 163.

25. *OEMS*; O'Ballance, *Sinai Campaign*, 105; Pa'il, *Abu Ageila*, 19—20; and Dupuy, *Elusive Victory*, 164.

26. *OEMS*; Love, *Suez*, 539; Pa'il, *Abu Ageila*, 21; and Dupuy, *Elusive Victory*, 164.

27. Adan interview; Marshall, *Sinai Victory*, 108; and O'Ballance, *Sinai Campaign*, 103, 122.

28. Avraham Adan, *On the Banks of the Suez* (San Francisco, CA: Presidio Press, 1980), 158—59; Wallach interview; Eytan interview; O'Ballance, *Sinai Campaign*, 196; and David Eshel, *Mid-East Wars: Israel's Armor in Action* (Tel Aviv: Eshel-Dramit, 1978), 30.

29. Adan interview; Love, *Suez*, 540; Pa'il, *Abu Ageila*, 21; Marshall, *Sinai Victory*, 109—11; O'Ballance, *Sinai Campaign*, 121—22; and Dupuy, *Elusive Victory*, 165.

30. Love, *Suez*, 539—40; and Dupuy, *Elusive Victory*, 163—64, 166.

31. *OEMS*.

32. Adan interview; Eytan interview; Pa'il, *Abu Ageila*, 21; O'Ballance, *Sinai Campaign*, 125; Dupuy, *Elusive Victory*, 177—78; Pa'il, *Abu Ageila*, 21; and Herzog, *Arab-Israeli Wars*, 127. Israeli sources claim that part of an Egyptian reserve infantry brigade was located at the Abu Ageila road junction at the outset of the war. This force eventually withdrew to Gebel Lebni. It was this force that an IAF pilot mistook for a major Egyptian armor counterstrike force near Abu Ageila. See Pa'il, *Abu Ageila*, 13, 20; and Eshel, *Chariots of the Desert*, 32, 40, 42.

33. Adan, *On the Banks of the Suez*, 159.

34. Adan interview; and Marshall, *Sinai Victory*, 112—13.

35. *OEMS*.

36. Adan interview; and Dayan, *Diary*, 106—7.

37. Adan interview; and Pa'il, *Abu Ageila*, 21.

38. Pa'il, *Abu Ageila*, 21; and Teveth, *Moshe Dayan*, 270.

39. Dayan, *Diary*, 115.

40. Ibid., 116.

41. Ibid., 117. See also Pa'il, *Abu Ageila*, 21; O'Ballance, *Sinai Campaign*, 129; and Dupuy, *Elusive Victory*, 167.

42. Pa'il, *Abu Ageila*, 21—22.

43. Dayan, *Diary*, 121.

44. Wallach interview.

45. Dayan, *Diary*, 115; and Dayan, *Moshe Dayan*, 245. For a recent view agreeing with Dayan that Ben-Ari's position between Gebel Libni and Abu Ageila was vulnerable to an Egyptian counterattack, see Eshel, *Chariots of the Desert*, 49. A brief discussion of logistical and transportation problems during the campaign appears in O'Ballance, *Sinai Campaign*, 195; and Shlomo Barer, *The Weekend War* (New York: Thomas Yoseloff, 1959), 251, 253.

46. Dayan, *Diary*, 151—52; Eytan interview; and Dupuy, *Elusive Victory*, 193.

47. Dupuy, *Elusive Victory*, 179.

48. Adan interview; Marshall, *Sinai Victory*, 116—18; and Dupuy, *Elusive Victory*, 166.

49. Marshall, *Sinai Victory*, 119—27; Love, *Suez*, 541; and Dupuy, *Elusive Victory*, 166.

50. Marshall, *Sinai Victory*, 119; Love, *Suez*, 541; and Herzog, *Arab-Israeli Wars*, 127.

51. Love, *Suez*, 541.

52. Dayan, *Diary*, 118—19; *OEMS*; Abd al-Hamid, *Ma'raka*, 100; Pa'il, *Abu Ageila*, 22—23; Love, *Suez*, 543; Herzog, *Arab-Israeli Wars*, 128; and Dupuy, *Elusive Victory*, 167.

53. Abd al-Hamid, *Ma'raka*, 99; and Love, *Suez*, 543.

54. Abd al-Hamid, *Ma'raka*, 98; and O'Ballance, *Sinai Campaign*, 131.

55. Wallach interview.

56. Dayan, *Diary*, 126—27; Wallach interview; O'Ballance, *Sinai Campaign*, 192; and Dupuy, *Elusive Victory*, 167. There exists some controversy over who decided to remove Goder with Dayan claiming it was Simhoni.

57. Wallach interview.

58. Eytan letter.

59. Wallach interview.

60. Pa'il, *Abu Ageila*, 21.

61. Dayan, *Diary*, 118—19; Wallach interview; Pa'il, *Abu Ageila*, 22—23; and Dupuy, *Elusive Victory*, 167.

62. Dayan, *Diary*, 118.

63. Ibid., 119.

64. Haykal, *Cutting the Lion's Tail*, 179.

65. Dupuy, *Elusive Victory*, 178. Israeli sources claim the Egyptian high command, on the morning of 31 October, ordered one of its armored brigades on the central route to proceed to Gebel Libni and thence to relieve Abu Ageila, but its commander refused to advance owing to Israeli air strikes. See Dayan, *Diary*, 146.

66. Abd al-Hamid, *Ma'raka*, 75—76, 85—86; *OEMS*; Love, *Suez*, 501—2; and Dupuy, *Elusive Victory*, 155.

67. Haykal, *Cutting the Lion's Tail*, 181; and Haykal, *Qissa al-Suways*, 233.

68. *OEMS*; Abd al-Hamid, *Ma'raka*, 108; Haykal, *Qissa al-Suways*, 234; Love, *Suez*, 531—32; and Dupuy, *Elusive Victory*, 181. For further information on the withdrawal order for Abu Ageila—as understood from the Israeli perspective—see Dayan, *Diary*, 123—24.

69. Love, *Suez*, 544; and Dayan, *Diary*, 123—24.

70. Love, *Suez*, 544; and Dupuy, *Elusive Victory*, 182.

71. Pa'il, *Abu Ageila*, 24.

72. Wallach interview; Eytan interview; Dayan, *Diary*, 122—23; Pa'il, *Abu Ageila*, 26; Dupuy, *Elusive Victory*, 183—84; and Eshel, *Chariots of the Desert*, 46.

73. Love, *Suez*, 634; Dupuy, *Elusive Victory*, 215; and Herzog, *Arab-Israeli Wars*, 141.

74. Dayan, *Diary*, 151; and Dupuy, *Elusive Victory*, 177. Nasser claimed he lost only 30 tanks out of 200 at Bir Rod Salim to the Israeli Air Force. For this statement, see Love, *Suez*, 532. *OEMS* were vague on the combat status of the 4th Armored Division on 31 October.

75. *OEMS*.

76. Love, *Suez*, 544. See also, Marshall, *Sinai Victory*, 136.

77. *OEMS*. To help remedy the water problem, the Egyptians constructed underground cisterns for storing water. This information is the result of a discussion by the author with an American officer who visited the battle site in 1986.

78. Haykal, *Cutting the Lion's Tail*, 185.

79. Haykal, *Qissa al-Suways*, 235.

80. Dayan, *Diary*, 124; and Pa'il, *Abu Ageila*, 25. For a recent positive evaluation of the orderly Egyptian withdrawal from Abu Ageila by an Israeli military writer, see Eshel, *Chariots of the Desert*, 48.

81. Love, *Suez*, 545.

82. Hasan Mustafa, *Harb Haziran 1967* [The War of July 1967], vol. 1 (Beirut: al-Mu'assasah al-Arabiyya, 1973), 296, 303.

Chapter 3

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

2. For a general discussion of this period, see the works of Luttwak and Horowitz, Schiff, and Rothenberg cited in the bibliography. Doctrinal changes receive excellent treatment in Israel Tal's, "Israel's Defense Doctrine: Background and Dynamics," *Military Review* 58 (March 1978):22—37. For developments in the Israeli Air Force, see also Weizman, *On Eagles' Wings*, 158.

3. As quoted in Itzhak Betzalel, "David Elazar," in *Generals of Israel*, edited by Moshe Ben Shaul (Tel Aviv: Hadar, 1968), 81—82.

4. Luttwak and Horowitz, *The Israeli Army*, 63, 130; and Bond, *Liddell Hart*, 238—70.

5. On Tal's thinking, see Luttwak and Horowitz, *The Israeli Army*, 186—92. For a concise treatment of armor doctrine prior to Tal's tenure as chief of the Armor Corps, see Leo Heiman, "Armor in the Middle East," *Military Review* 43 (September 1963):16—20.

6. Dan Horowitz, "Flexible Responsiveness and Military Strategy: The Case of the Israeli Army," *Policy Sciences* 1 (1970):191—205; and Luttwak and Horowitz, *The Israeli Army*, 163—64, 172—76.

7. Gideon Avidor, "From Brigade to Division," *Military Review* 58 (October 1978):64—71; Yoram Movshovitz and Dan Petreanu, "The Artillery Corps—1948 to the Present," *IDF Journal* 4 (Fall 1987):18; and conversations with Israeli colonels attending the U.S. Army Command and General Staff College.

8. Luttwak and Horowitz, *The Israeli Army*, 150; and Shabatai Teveth, *The Tanks of Tammuz* (New York: Viking Press, 1969), 114—15.

9. Wallach interview.

10. Dupuy, *Elusive Victory*, 258.

11. Natke Nir, telephone conversation with the author, 5 October 1987. Other former Israeli commanders possessed a similar evaluation to Nir's; Wallach interview; Eytan interview; Adan interview; and Dov Sion, interview with author, Tel Aviv, Israel, 2 November 1986.

12. For a succinct discussion of the events leading up to the outbreak of the 1967 war, see C. Ernest Dawn, "The Egyptian Remilitarization of Sinai, May 1967," *Journal of Contemporary History* 3 (1968):201—24; and Dupuy, *Elusive Victory*, 224—30.

13. Fawzi, *Harb*, 72. For confirmation of the general lack of concern in Syria at this time, see Khalil Mustafa, *Suqut al-Jawlan* [The fall of Golan] (Cairo: Dar al-I'tisam, 1980), 214—17. Mustafa was a Syrian military intelligence officer for the Golan before the 1967 war.

14. Hasan Mustafa, *Harb Haziran 1967*, 94; and Edgar O'Ballance, *The Third Arab-Israeli War* (Hamden, CT: Archon Books, 1972), 99. The identification of the regular division comes from Mustafa.

15. An impartial treatment of this issue of the Egyptian request for the withdrawal of UN troops appears in a book written by the Indian major general in charge of UN forces during this period. See Indar Jit Rikhye, *The Sinai Blunder: Withdrawal of the United Nations Emergency Force Leading to the Six-Day War of June 1967* (London: Frank Cass, 1980).

16. Uzi Narkiss, *The Liberation of Jerusalem: The Battle of 1967* (London: Valentine Mitchell, 1983), 53. Major General Narkiss was in charge of the Central Command in the 1967 war.

17. The problem of suddenly creating a front command has received much attention in Egyptian military literature, but Western writers remain completely ignorant of the subject. Salah al-Din al-Hadidi, *Shahid*, 113, 141—42, 158—60; Abd al-Mohsen Murtagui, "al-Fariq Murtagui Rawiya al-Haqa'iq" [General Murtagui discusses the truth], unpublished manuscript, 28, 58—59, 62; Fawzi, *Harb*, 92, 103; Amin Huwaydi, *Adwa 'ala Asbab Naksa 1967 wa 'ala Harb al-Istiznaf* [Insight into the reasons for the setback of 1967 and the war of attrition] (Beirut: Dar al-Taliah, 1975), 38—40, 60—62; and Musa Sabri, *Watha'iq Harb Oktobir* [Documents on the October War] (Cairo: al-Kitab al-Misri al-Hadith lil Taba'a al-Nashr, 1974), 359. For a more detailed treatment of the Egyptian problems of command and control in the 1967 war, see George W. Gawrych, "The Egyptian High Command in the 1973 War," *Armed Forces and Society* 13 (Summer 1987):535—46.

18. Fawzi, *Harb*, 92; and Murtagui, "al-Fariq Murtagui," 114; and *OEMS*.

19. The only detailed discussion of Plan Qahir is by the then Egyptian chief of the General Staff. See Fawzi, *Harb*, 99—102. See also Dupuy, *Elusive Victory*, 240—41.

20. All the significant changes made in the Egyptian Army from 15 May to 4 June are discussed in detail in Fawzi, *Harb*, 104—15; and Murtagui, "al-Fariq Murtagui," 64—116.

21. Ze'ev Schiff, *A History of the Israeli Army: 1874 to the Present* (New York: Macmillan, 1985), 133; B. H. Liddell Hart, "Strategy of a War," *Encounter* 30 (February 1968):18; O'Ballance, *Third Arab-Israeli War*, 102; and Randolph S. Churchill and Winston S. Churchill, *The Six Day War* (Boston, MA: Houghton Mifflin, 1967), 104.

22. Fawzi, *Harb*, 106, 112; and Murtagui, "al-Fariq Murtagui," 90, 94—95.

23. Fawzi, *Harb*, 93; and Murtagui, "al-Fariq Murtagui," 120.

24. al-Hadidi, *Shahid*, 38—50, 154—55.

25. *OEMS*.

26. For a good book representative of this view, see Abd al-Hamid, *Maraka*.

27. al-Hadidi, *Shahid*, 45, makes such a comparison, arguing that in the process such myth making undermined the combat preparedness of the armed forces.

28. Abd al-Hamid, *Maraka*, 104—8.

29. *OEMS*.

30. Arye Hashavia, *A History of the Six Day War* (Tel Aviv: Ledory Publishing House, 1967), 81—82.

31. al-Hadidi, *Shahid*, 137—38; and Fawzi, *Harb*, 49.

32. al-Hadidi, *Shahid*, 140.

33. *OEMS.*

34. Yael Dayan, *Israel Journal: June, 1967* (New York: McGraw-Hill, 1967), 42.

35. Murtagui, "al-Fariq Murtagui," 150; and *OEMS.* Literature on the 1967 battle of Abu Ageila perpetuates the myth of an exact replica of the Soviet system, with three lines of defense and three trench lines. See Luttwak and Horowitz, *The Israeli Army*, 244—45; Dupuy, *Elusive Victory*, 257; O'Ballance, *Third Arab-Israeli War*, 121; A. J. Barker, *Arab-Israeli Wars* (New York: Hippocrene Books, 1980), 70; A. Harding Ganz, "Abu Ageila, Two Battles—Part II: 1967," *Armor* 83 (July-August 1974):15; and Sewall H. Menzel, "Zahal Blitzkrieg: The Sinai Campaign of 1967 Exemplified Modern Warfare," *Armor* 95 (November-December 1986):29. For an example in French literature, see Samuel Seguev, *La Guerre de Six Jours* (Paris: Calmann-Levy, 1967), 143, 147.

36. *OEMS.* For more general descriptions of Egyptian forces, see Dupuy, *Elusive Victory*, 258; and Pa'il, *Abu Ageila*, 35.

37. *OEMS* claim a figure of approximately 15,000. The figure of 18,450 comes from Dupuy, *Elusive Victory*, 624. For the number of 11,000 for a standard infantry division, see al-Hadidi, *Shahid*, 114n.

38. For the number of sixty-six tanks, see Luttwak and Horowitz, *The Israeli Army*, 244; Rothenberg, *The Israeli Army*, 141; Pa'il, *Abu Ageila*, 36. For the number of ninety tanks or a brigade, see, for example, Dupuy, *Elusive Victory*, 258. Apparently, at this time, the Egyptian Army had tank brigades and tank regiments, the former consisting of three battalions of thirty-three tanks each, while the latter was comprised of only two tank battalions. See Mustafa, *Harb Haziran 1967*, 94n.

39. *OEMS.* Little detailed information concerning Egyptian deployments exists in English. For a general agreement concerning types and locations of the various Egyptian battalions in and around Abu Ageila, see Pa'il, *Abu Ageila*, 35.

40. *OEMS.* For an Israeli source confirming the existence of four artillery battalions within Abu Ageila, see Pa'il, *Abu Ageila*, 35, 47.

41. *OEMS.* Confirmation from Israeli sources that the bulk of Egyptian armor lay outside the main defensive perimeter came from Natke Nir in a telephone conversation with the author, 5 October 1987.

42. *OEMS.*

43. Ibid.

44. Mustafa, *Harb Haziran 1967*, 193; and Eliahu Ben Elissar and Ze'ev Schiff, *La Guerre Israelo-Arab: 5—10 Juin 1967* (Paris: Julliard, 1967), 152.

45. *OEMS.*

46. Ibid. For the name of Naguib, see Dupuy, *Elusive Victory*, 239, 339. Mustafa, *Harb Haziran 1967*, 96, identifies the commander's name as Major General Muhammad Kamil Abd al-Aziz. *OEMS* do not divulge the name of the Egyptian divisional commander.

Chapter 4

1. Luttwak and Horowitz, *The Israeli Army*, 290.

2. For Dayan's thinking and the development of the final plan, see Dayan, *Moshe Dayan*, 287—347 passim; Yitzak Rabin, *The Rabin Memoirs* (Boston, MA: Little and Brown, 1979), 79—98 passim; and Weizman, *On Eagles' Wings*, 212—16, 220. These three men were the defense minister, chief of the General Staff, and director of operations, respectively.

3. For press statements made immediately after the war by Generals Gavish, Sharon, Tal, and Yoffe concerning the operational plan, see Israel Defense Forces, *Commanders of the Six Day War and Their Battle Reports* (Tel Aviv: Ramdor, 1967), 39—41, 45, 51, 59, hereafter cited as IDF, *Commanders.* See also Dayan, *Moshe Dayan*, 340—41, 359—61; and Rabin,

Memoirs, 98, 102. For secondary literature on the plan, see Luttwak and Horowitz, *The Israeli Army*, 233; Teveth, *Moshe Dayan*, 333; Dupuy, *Elusive Victory*, 243—44, 252; Nadav Safran, *Israel: The Embattled Ally* (Cambridge, MA: Harvard University Press, 1981), 243—45; and Herzog, *Arab-Israeli Wars*, 157.

4. Gavish, Yeshayahu, "The Southern Front in the 1967 War," *Safra Sayfa* 4 (1981):49 (in Hebrew).

5. *OEMS*; Mustafa, *Harb Haziran 1967*, 193; Hashavia, *History*, 84; and Ben Elissar and Schiff, *La Guerre*, 152.

6. Dayan, *Israel Journal*, 30.

7. Sion interview.

8. Churchill and Churchill, *Six Day War*, 122.

9. Dayan, *Israel Journal*, 35.

10. Pa'il, *Abu Ageila*, 37, 47; Seguev, *La Guerre*, 144; Dayan, *Israel Journal*, 27; Hashavia, *History*, 84—85; S. L. A. Marshall, *Swift Sword: The Historical Record of Israel's Victory, June 1967* (New York: American Heritage, 1967), 55; and Dupuy, *Elusive Victory*, 258.

11. Dupuy, *Elusive Victory*, 624.

12. Sion interview; and Pa'il, *Abu Ageila*, 37.

13. Marshall, *Swift Sword*, 56; Dayan, *Israel Journal*, 37; and Pa'il, *Abu Ageila*, 37.

14. Nir telephone conversation.

15. Ibid.; and Pa'il, *Abu Ageila*, 37.

16. Luttwak and Horowitz, *The Israeli Army*, 233.

17. Pa'il, *Abu Ageila*, 37; Seguev, *La Guerre*, 144; Hashavia, *History*, 85; Dupuy, *Elusive Victory*, 258; and Ben Elissar and Schiff, *La Guerre*, 149—50.

18. Pa'il, *Abu Ageila*, 37; Seguev, *La Guerre*, 144; Dayan, *Israel Journal*, 27; Hashavia, *History*, 84, 88—89; Marshall, *Swift Sword*, 55; Dupuy, *Elusive Victory*, 258; and Eshel, *Chariots of the Desert*, 73. Some sources claim the Israeli armored brigade contained Nir's force as its second tank battalion; others say Zippori had his own two tank battalions and that Nir's force belonged to Sharon's *ugdah*.

19. Pa'il, *Abu Ageila*, 37; and Dupuy, *Elusive Victory*, 259.

20. Mustafa, *Harb Haziran 1967*, 199. *OEMS* confirm the use of the word "heart" to describe the importance of artillery.

21. David Dayan, *Strike First! A Battle History of Israel's Six-Day War* (New York: Pitman, 1967), 10.

22. Dayan, *Israel Journal*, 46.

23. Ibid., 55. For Sharon's own description of the plan for capturing Abu Ageila, see Sharon, *Warrior*, 185—91.

24. Two officers who joined the quiet rebellion against Sharon later became chiefs of the General Staff: Mordechai Gur (1974—78) and Raful Eitan (1978—83). For a brief discussion of the controversy concerning Sharon, see Avner Yaniv, *Dilemmas of Security: Politics, Strategy, and the Israeli Experience in Lebanon* (New York: Oxford University Press, 1987), 95—96.

25. Dupuy, *Elusive Victory*, 244, 258; Mustafa, *Harb Haziran 1967*, 190; and Luttwak and Horowitz, *The Israeli Army*, 246.

26. al-Hadidi, *Shahid*, 183—86; and Huwaydi, *'Adwa*, 108—11. The Egyptians felt the border incident might have been a trial balloon to test Egyptian reaction, but if so, it jeopardized the surprise element for the Israeli air strikes. The matter remains unresolved at this point.

27. al-Hadidi, *Shahid*, 184—88; Fawzi, *Harb*, 134—35; and Huwaydi, *'Adwa*, 62—63.

28. Zippori's account appears in IDF, *Commanders*, 84—85. See also Dupuy, *Elusive Victory*, 258; O'Ballance, *Third Arab-Israeli War*, 122—23; and Ganz, "Abu Ageila—1967," 18. Israelis claim a faster fall; see Pa'il, *Abu Ageila*, 40; Dayan, *Strike First!*, 55; and Barker, *Arab-Israeli Wars*, 70.

29. Dayan, *Israel Journal*, 34.

30. Ibid., 40.

31. Dayan, *Strike First!*, 55—56; and O'Ballance, *Third Arab-Israeli War*, 123.

32. Adam's version appears in IDF, *Commanders*, 80—81. See also Seguev, *La Guerre*, 147; Ben Elissar and Schiff, *La Guerre*, 153; Dayan, *Israel Journal*, 40; Mustafa, *Harb Haziran 1967*, 196; and Ganz, "Abu Ageila—1967," 18.

33. Pa'il, *Abu Ageila*, 41.

34. Nir telephone conversation.

35. Material on the battle for Position 181 comes from various sources: Nir telephone conversation; Pa'il, *Abu Ageila*, 41; Seguev, *La Guerre*, 149; *OEMS*; Mustafa, *Harb Haziran 1967*, 194; Eshel, *Mid-East Wars*, 53—54; Ben Elissar and Schiff, *La Guerre*, 152—53; Marshall, *Swift Sword*, 56; Dayan, *Israel Journal*, 41; and Herzog, *Arab-Israeli Wars*, 159. Some sources claim the existence of T-54s at Awlad Ali.

36. Nir telephone conversation.

37. Dayan, *Israel Journal*, 58—59; Sion interview; and O'Ballance, *Third Arab-Israeli War*, 142—43.

38. *OEMS*.

39. *OEMS*; Dayan, *Israel Journal*, 48, 55—56; David Eshel, *Mid-East Wars: The Israeli Commando's* (Tel Aviv: Eshel-Dramit, 1979), 31—33; Dupuy, *Elusive Victory*, 259; O'Ballance, *Third Arab-Israeli War*, 124—25; Barker, *Arab-Israeli Wars*, 70—71; Ben Elissar and Schiff, *La Guerre*, 154; Pa'il, *Abu Ageila*, 42; and Luttwak and Horowitz, *The Israeli Army*, 246.

40. Pa'il, *Abu Ageila*, 41.

41. Sharon, *Warrior*, 192; Ben Elissar and Schiff, *La Guerre*, 154; Luttwak and Horowitz, *The Israeli Army*, 247—48n; and O'Ballance, *Third Arab-Israeli War*, 125, 128.

42. Marshall, *Swift Sword*, 58—60; and W. Byford-Jones, *The Lightning War* (London: Hale, 1967), 88.

43. Dayan, *Israel Journal*, 47.

44. Teveth, *Tanks of Tammuz*, 208—12; Pa'il, *Abu Ageila in Three Wars*, map 6.

45. The claim that Sharon possessed excellent intelligence concerning Egyptian defenses at Abu Ageila is suggested by the Nir telephone conversation; M. Barkai, "The Battle of Kuti's Infantry Brigade," *Ma'arachot* 190 (1968):22; and Mustafa, *Harb Haziran 1967*, 200.

46. Churchill and Churchill, *Six Day War*, 121.

47. *OEMS*; and Mustafa, *Harb Haziran 1967*, 199.

48. Eshel, *The Israeli Commando's*, 32—33; Pa'il, *Abu Ageila*, 42; Ben Elissar and Schiff, *La Guerre*, 157; and O'Ballance, *Third Arab-Israeli War*, 130—31.

49. Dayan, *Israel Journal*, 56; Sion interview; and Dayan, *Strike First!*, 56—57.

50. *OEMS*.

51. Ibid.

52. Marshall, *Sinai Victory*, 95. For a similar evaluation made at roughly the same time, see Robert Henriques, *A Hundred Hours*, 115.

53. Dupuy, *Elusive Victory*, 259; and Luttwak and Horowitz, *The Israeli Army*, 247.

54. For Adam's own words, see IDF, *Commanders*, 81. See also Barkai, "Kuti's Infantry Brigade," 12—24; Dayan, *Israel Journal*, 48; and O'Ballance, *The Third Arab-Israeli War*, 126.

55. Dayan, *Israel Journal*, 53. Arab sources confirming the use of different colored lights by Israeli infantry assaulting the trenches include *OEMS*; and Mustafa, *Harb Haziran 1967*, 198.

56. Barkai, "Kuti's Infantry Brigade," 12—24.

57. Pa'il, *Abu Ageila*, 42—43; and O'Ballance, *Third Arab-Israeli War*, 131—32.

58. Barkai, "Kuti's Infantry Brigade," 12—24.

59. Mustafa, *Harb Haziran 1967*, 199; Pa'il, *Abu Ageila*, 40; Dayan, *Strike First!*, 57; O'Ballance, *Third Arab-Israeli War*, 131--32; and Barkai, "The Battle of Kuti's Infantry Brigade."

60. *OEMS*.

61. Nir telephone conversation; Pa'il, *Abu Ageila*, 40—41; Dayan, *Israel Journal*, 61; Dupuy, *Elusive Victory*, 260—61; O'Ballance, *Third Arab-Israeli War*, 132n.

62. *OEMS*.

63. Ben Elissar and Schiff, *La Guerre*, 157—59; Mustafa, *Harb Haziran 1967*, 200; O'Ballance, *Third Arab-Israeli War*, 132—33; and Pa'il, *Abu Ageila*, 40.

64. Pa'il, *Abu Ageila*, 45; and Dupuy, *Elusive Victory*, 261.

65. Murtagui, "al-Fariq Murtagui," 157.

66. Dupuy, *Elusive Victory*, 267; Fawzi, *Harb*, 154; and Mustafa, *Harb Haziran 1967*, 220.

67. Murtagui, "al-Fariq Murtagui," 153. This is borne out by the movement of the 2d Armored Brigade (4th Armored Division) to this region during the 5th. The 2d was ordered to pull back to Bir al-Thamada only at 1100 on the 6th. For its commander's account, see Kamal Hasan Ali, *Mudarrabun wa Mufawwadun* [Warriors and negotiators] (Cairo: al-Ahram, 1986), 35—36.

68. Murtagui, "al-Fariq Murtagui," 148—49; and Mustafa, *Harb Haziran 1967*, 205—10.

69. Fawzi, *Harb*, 151—59; Murtagui, "al-Fariq Murtagui," 183—85; and Huwaydi, *'Adwa 'ala Asbab Naksa 1967*, 69.

70. Teveth, *Tanks of Tammuz*, 222—25; Herzog, *Arab-Israeli Wars*, 160—61; Luttwak and Horowitz, *The Israeli Army*, 249—50; and Dupuy, *Elusive Victory*, 270—71. Sharon implies that he never participated in this meeting; Sharon, *Warrior*, 202.

71. Dayan, *Moshe Dayan*, 363; and Yaacov Bar-Siman-Tov, "The Bar-Lev Line Revisited," *Journal of Strategic Studies* 11 (June 1988):150.

72. Murtagui, "al-Fariq Murtagui," 169.