

## The Actual Military Situation in the Middle East: From 1930's-1970's

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### Abstract

From 1945 to 1980 the Middle East experienced four major wars. Each one differed from its predecessor either in strategy, tactics, weaponry, or miscommunication. During those wars the Middle East conflict added other obstacles towards achieving a settlement. The continuing and increasing use of modern sophisticated weapons undoubtedly enhanced the start of new wars and ensured a continuation of the confrontations. It also ensured that the peoples of the Middle East remained in a state of constant insecurity while bringing the Super Powers into direct rivalry. This article examines the relationship between the military situations in the Middle East from the 1930's to the 1970's. These forgotten and often ignored wars are essential basic studies for new students of Middle East history, military history, security, and intelligence to study if they are to learn from mistakes of their predecessors. For faculty teaching about military conflict and Middle East studies having a grounded understanding of the Arab-Israeli wars is essential to comprehending the current state of affairs.

**Keywords:** Palestine/Security Conflict Resolution, Israel/Egypt Military Situation, Israeli Military Strategy/Egyptian Military Strategy, Military Campaigns, Arab Israeli Wars, October War

### 1. Military conditions leading up to 1948

Israeli military strategy was initiated at a much earlier date than that of the Arabs.<sup>1</sup> One of its early achievements was the development of Jewish military organizations based on geo-strategic areas. Jewish colonization had begun in the 1880s, but at that time settlers were looking for land most suitable for intensive modern cultivation. However, when, in the late 1930s, it became apparent that if partition were to take place in Palestine, it would be within the boundaries of land already owned by the Jew, settlements began moving towards the frontiers. In conjunction with their long-term strategy, colonies of European Jews brought to the 'homeland' sprung up overnight in strategically important locations: in the Jezreel Valley down towards Beisan; on the Plain of Esdralon and Afula; and on the Lebanese border in the North. Other colonies were found at Kfaretzim on the Jerusalem-Hebron road, and on the road going north to Nablus from Jerusalem. Even after the White Paper of 1939 had restricted land acquisition, the Jews still moved on, establishing eleven colonies in the Negev Desert. Their short-term strategy was the protection of these colonies, which were therefore eventually manned by trained paramilitary forces that were also part-time farmers.

The forerunner of Israeli's present defense organization was Hashomer (the watchmen), founded in 1908, an organization of volunteers responsible for guarding the small settlements. Following World War I and the establishment of the mandate system, anti-Jewish riots by neighbouring Arabs resulted in the need for a more extensive defense system and a more aggressive body than Hashomer. Fresh military strategy was required, resulting in the Hagana (defense), a secret organization that trained its members to use small arms and to fight in small independent units. At first the British helped in the mobilization of several Jewish battalions to give credence to the Balfour Declaration, and this enabled the Jewish military organization to accumulate some light military equipment. But British assistance did not last long and they were soon left to their own defences.

The Hagana prided itself on the fact it existed to defend the existence of the Zionist venture and that it never perpetrated any act of aggression. However, there were two breakaway terrorist groups, the Irgun Zuai Leumi and Lohamei Herut Yierael (also known as the Stern Gang), who did not follow Hagana's policy of non-aggression. These groups, with a combined membership of some 3,000 were responsible for acts of violence against the British Palestine Mandate Administration and terrorist activities against the Arab communities.

During the Period of the Arab rebellion of 1936-1939 the Hagana expanded and intensified its training in order to protect the Jewish settlers against sporadic attacks made by Arab irregulars.<sup>2</sup> The well-known "Night Squads" were formed at this time by a Scotsman, Captain Orde Wingate,<sup>3</sup> and the Israeli military defense strategy began to develop. Wingate believed that offence was the best means of defense, and this, coupled together with well-trained commanders who were willing to take the initiative in war, was a winning combination. His successes left indelible marks and greatly influenced the military thinking of the men he

<sup>1</sup> Professor Neville Brown- professor of Military Strategy. University of Birmingham – England. 1970s. the interviewer was Nabeel Jurdi.

<sup>2</sup> Captain Wingate (later General) was a Gentile who passionately believed in the Zionist venture.

<sup>3</sup> Ibid.

trained. Not only did his squads fight at night, but they dared to attack the Arab terrorists in their own villages.

When the Second World War broke out in Europe, over 30,000 Palestinian Jewish men and women volunteered to serve in the British army. At first they were given only non-combatant duties, but in 1944 the British agreed to the establishment and training of a Jewish infantry Brigade Group which eventually saw much action on the North Italian Front. Within Palestine itself, an independent underground striking force was organized and trained with British approval. This unit, known as the Palmach (assault groups), was used by the British in Palestine to provide guides, saboteurs, and advanced groups, and on intelligence assignments. The allies sent other members behind German lines to promote Jewish resistance to occupation forces. The largest were prepared to lead the resistance should the Germans and Italians invade Palestine. When the war ended so did British cooperation in supporting the existence of the Palmach, which was forced to continue its training underground with the Hagana.

The Palmach, under the direction of Yigal Allon, continued giving its members intensive training in guerrilla tactics. Its commanders worked constantly to improve the standards of training and studies were made of the enemy's structure and strategy in the hope of knowing their opponents' plans as well as their own. The Palmach became an inspiration for the Jewish community and around its four well-organized battalions the Jews laid their hopes for a truly successful resistance.

In the early years-the 1920's – the Arab states were not interested in Palestine as they had many internal problems of their own. The Egyptians and Iraqis were concerned with eliminating British rule in their territory, as were the Syrians with the French. The Lebanese were, generally, accepting French aid and tutelage. The idea of Arab unity, which had been prevalent during the First World War, was no longer the guiding force. In the late 1930's this situation changed and Arab discontentment with the policy of Zionism, which had heretofore been confined mostly to the Palestinian Arabs, began to grow, culminating in the disturbances of 1936-39. These resulted in a moral victory for the Arabs, for their success led to the introduction of the White Paper of 1939, which limited Jewish immigration.

During these early years both sides were developing some sort of military strategy. The British and the French were responsible for the defense of the Arab states and were guiding their military 'education' and build-up, while the Jews were left to their own devices. As World War II progressed the Hagana Leaders began to take a closer look at their future defense strategy in anticipation of an eventual attack by neighbouring Arab armies once the British and French had left the area. The Jews knew that they would be facing, not necessarily a better fighting force, but certainly one with more organization than they presently had. At that time the Hagana forces could hardly have been an "army," but were rather a series of small, uncoordinated units fighting each in its own region.<sup>1</sup>

On the Arab side the military situation was apparently very different. Up until the late 1930s the Palestinian Arabs themselves were about the only opposition that the Jews faced. They were a loosely-knit group organized into bands led by local chiefs. They had no military training as a unit, but a large number were veterans of former rebellions and had experience in guerrilla warfare. They lacked organization, manoeuvrability, training and equipment, and relied on the rifle as their chief weapon. During the war, some 6,000 Palestinian Arabs were given rudimentary training by the British in the handling of platoon weapons and a basic knowledge of some military tactics for use against the Axis Powers.

The military preparedness of the Arab states again was a different story. The best trained of the Arab forces was the Trans-Jordanian Legion with some 25,000 men armed with modern equipment and under British command. The Egyptian army, also British equipped and trained, was made up of some 40,000 men split into two divisions and two independent brigades. The other neighbouring Arab countries, Syria, Lebanon, and Iraq, also had armies but these lacked adequate training and equipment.

With the inception of the Arab League in 1944 came a rebirth of the idea of Arab unity and nationalism. Palestine became an emotional issue with the neighbouring Arab states who were facing an influx of refugees. The Egyptians reacted violently to the Palestine situation, not only by protesting to the United Nations and by demonstrating in the streets of Cairo, but by volunteering in large numbers for combat in Palestine. The result was a "Liberation Army" sponsored by the Arab League and made up of Egyptian and Palestinian Arabs, who began entering Palestine in late 1947 in an attempt to occupy territory being vacated by the British.

As Arab raids on Jewish settlements continued, Hagana leaders became concerned because of their lack of arms and equipment. Available arms generally amounted only to pistols, rifles, grenades, sub-machine guns and Molotov cocktails. Because of this wholly inadequate arsenal they began a worldwide search to buy arms, but due to an arms embargo enforced by the United Nations on Palestine they were forced to go underground in their

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<sup>1</sup> For a detailed study see Yigal Allon, "The making of Israel's Army: The development of Military Conceptions of Liberation and Defense" in Michael Howard, ed 1965 *The Theory and Practice of War: Essays Presented to Captain B.H. Liddel Hart on his Seventieth Birthday* (London: Cassell & Comoany, Ltd.), pp 337-371.

quest. Czechoslovakia was found to be sympathetic to their plight<sup>1</sup> and from the Czechs they were able to purchase German Mauser Kar 98K 7.92mm rifles, ZB-37 heavy machineguns, various other armaments, and aircraft. They were also able to purchase through black market channels various arms and supplies left by the Allies in Europe and the Middle East. Because of the UN embargo, these arms could not openly be brought into Palestine until after the British had left, although a large number were smuggled in.

Meanwhile, hostility toward the Jews was gaining momentum in the Arab states. This popular reaction in Egypt was intensified in early 1948 by an acute domestic situation resulting from cholera and smallpox epidemics, numerous governmental and military changes, and the still uncertain future of the Suez Canal and of the Sudan. There was also continuous conflict between King Farouk and opposing political parties such as the Wafd Party, the Muslim Brotherhood, and various leftist groups. Farouk was losing his power and felt that without popular support he would be unable to continue to control the government. Thus, submitting to the internal pressures of the masses and to the moral commitment of the Arab League to Palestine, Farouk ordered the Egyptian Army to enter Palestine along with forces from the adjoining Arab states.

## 2. The Israeli War for Independence

There are wildly conflicting reports as to the quantity of arms and military equipment actually in the hands of the Jewish fighting force when they faced the invading Arab armies in 1948.<sup>2</sup> It has been estimated that they had between eight and ten thousand rifles, 3,600 sub-machine guns, 900 light and medium machine guns, 700 to 800 two and three inch mortars, and 19 anti-tank guns.<sup>3</sup> They had been able to stockpile a large supply of arms outside the country, which would be brought in as soon as statehood was declared. These included 204 airplanes, 39 naval craft of various types, 40 tanks, 119 half-tracks, 416 guns, 24 heavy mortars, 158 heavy machine guns, 1,417 medium machine guns, 6,034 light machine guns, 52,391 rifles, 523 sub-machine guns and 1,755 pistols.<sup>4</sup> When independence was declared and the actual war broke out, the manpower of the opposing sides was about equal. The Arabs had the advantage of more arms, tanks and most importantly, aircraft, but the Arab forces lacked imagination, self-confidence, leadership and unity. The Egyptian Army, which was the largest force, had no clear military or political objective in mind and there was no coordination between it and the six other Arab military forces operating in Palestine.

The first four weeks of the war, prior to the first cease-fire on 10 June 1948, took a heavy toll on both sides. There was great confusion and lack of preparation amongst the Arab fighting units. Not only were they lacking regular supplies such as food and clothing, but they were also short of ammunition and spare parts for their British and American tanks and weapons. Field commanders complained of contradictory orders, while the troops felt they were fighting a "Political War" whose outcome depended not on their efforts in the field but on the political fronts in Arab capitals and the United Nations. Consequently, their morale was very low and their plight increased when they were later supplied with defective Italian grenades and Spanish field guns, as well as greatly out dated rifles.<sup>5</sup>

However, despite these inadequacies and setbacks, the Arab armies did make some gains during those first few weeks: a bridgehead was established by the Syrians across the River Jordan in Upper Galilee; the towns of Ramala and Lydda<sup>6</sup> came under the control of the Trans Jordanian forces; and the Egyptians advanced to within twelve kilometres of Rehovot, within easy linking distance of the Trans Jordanian forces.

The Arab forces should have made greater gains during the first four weeks of the war, since they were unopposed in the air. The Egyptian Air Force was known to have well over 120 aircraft, including 40 Spitfires and 25 Dakotas, which had been converted to carry small bomb loads. They also had fifteen Harvards, five

<sup>1</sup> The arms deal had been in the making prior to the Communist take-over of Czechoslovakia, but was allowed to continue. The Czechs had obtained a vast amount of second-hand material and were doing their best to rebuild it and sell where possible, scrap and salvage where not.

<sup>2</sup> The actual data of the 1948-49 war and prior were not available through our most reliable source, the International Institute for Strategic Studies in London, because that institute started in 1958 and its annual publication, *Military Balance*, was not begun until the late 1960's.

<sup>3</sup> See: Sgan-Aluf Shaul Rmati 1969 *Israel Defense Forces* (Jerusalem: Israeli Digest), p.8; Lt. Col. Nethanel Lorch 1968 *The Edge of the Sword: Israel's War of Independence* (Israel: Massada Press, Ltd.), p.37; Samuel Rulbant 1970 *The Israeli Soldier* (New Jersey: Thomas Yoseloff), p. 21; David Ben Gurion 1966 "Last Days of the Mandate" *Jewish Observer and Middle East Review* Vol.xv.No.19(May 19) p. 13. The writer notes that Michael Howard and Robert Hunter in their paper for the International Institute for Strategic Studies entitled "Israel and the Arab World: The Crisis of 1967" (October 1967) quote the authors, Jon and David Kimche of both sides of the Hill (London, 1960) as saying that "when the Mandate ended in May, the Israeli Army had numbered 35,000 men and women, with four guns, no heavy mortars and 1,500 machine guns between them." (P.5). It should be noted that these figures conflict drastically with those found by the writer.

<sup>4</sup> Ben Gurion 1966 op.Cit., p.13

<sup>5</sup> See Robert Stephens 1973 *Nasser* (London: Pelican Books), pp.76-79; and Mohammed Neguib 1955 *Egypt's Destiny* (London: Gollence), pp 15-20.

<sup>6</sup> Lydda lies within half an hour's drive of Tel-Aviv and is the site of the international airport.

Hawker Furies, and several miscellaneous trainers and transport carriers.<sup>1</sup> The other Arab forces also possessed aircraft of varying types; the Syrians were flying Harvards that were fitted with machine guns and racks for light bombs. The Arabs' possession of these aircraft posed a great threat to Israeli security, but as the war continued and the Israeli Air Force began to grow a great deterioration in Arab air supremacy became evident.

At the beginning of the cease-fire Israeli Defense Force (IDF) leaders began to assess the needs and capabilities of their fighting forces. They found that while their forces were determined, confident better trained and were fighting in terrain known to them, they were missing many opportunities due to lack of an effective central command organization, coordination and the necessary trappings and equipment of a proper fighting force. The cease-fire period was used effectively in the setting up of a regular army. Conscription and a reserve system were established to prevent chaos during mobilization, uniforms and ranks were assigned, a pay scale set up, supplies distributed, and an intensified training schedule worked out. While the Arab armies lacked combat experience and good leadership, a large number of the Israeli armed forces were seasoned veterans who had been actively engaged in the European theatre. It was these veterans who took up the training and command posts in the IDF once it had been effectively organized.

Since the Israelis were most threatened by Arab air power, they quickly set about building an air force. The first planes obtained were 26 Avia S-199 (C-210) fighters from Czechoslovakia, which were flown to Israel in Douglas C-54 transports and re-assembled. They were modified Messerschmitt BF 109's powered by Jumo 211F engines.<sup>2</sup> Although they were dangerous aircraft, having a high accident rate and poor landing ability, in the eyes of the Israeli Air Force, they were armed fighters approximately equal in performance to the Spitfires of the Egyptians. During the first cease-fire, the Israelis purchased 50 Spitfires MK 9's from Czechoslovakia, but they had a problem in getting them to Israel because they could not make the long flight without refuelling. Finally, in July, Yugoslavian authorities granted permission for them to use a deserted airfield, and 30 of the planes, flown by volunteers from various nations (including America, Britain, and South Africa), were ready for action by September. They also purchased three B-17 "Flying Fortress" bombers, ten Curtiss C-46 Commando transport aircraft and three Lockheed Constellations from United States' surplus stock.

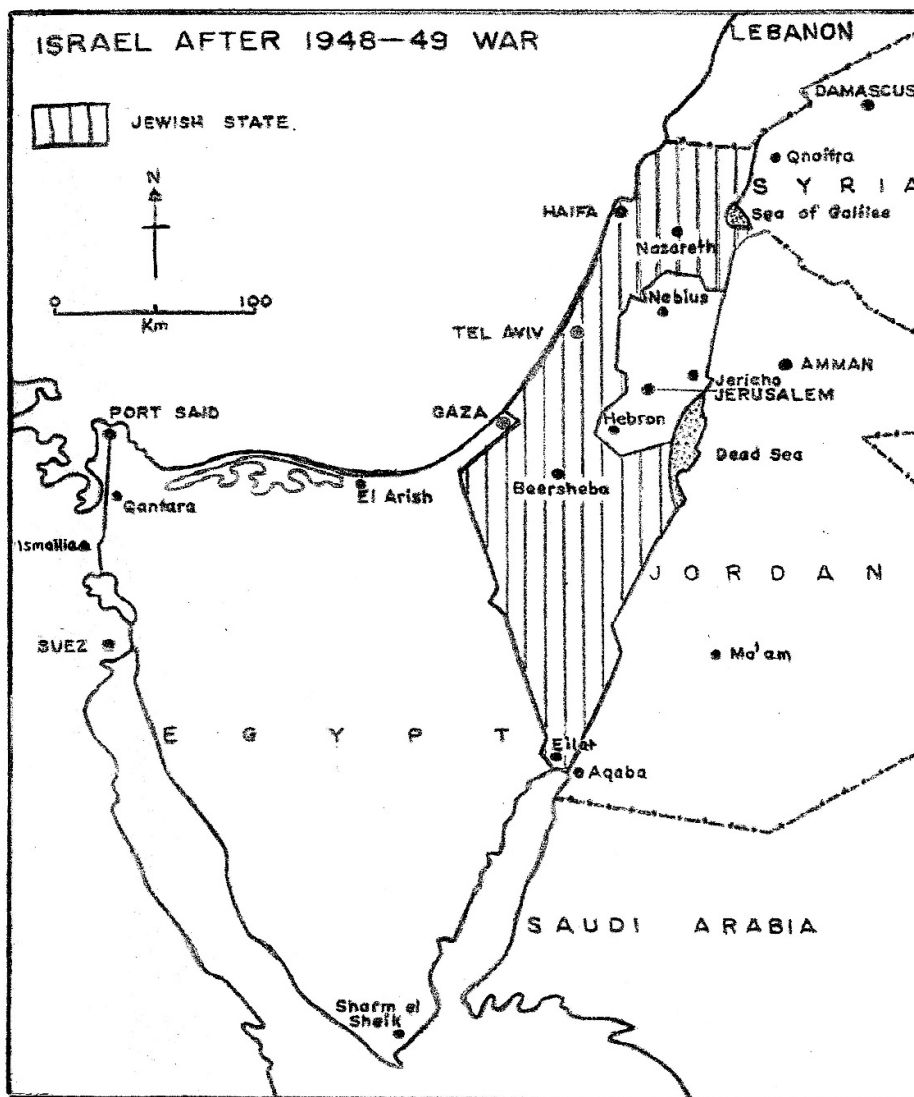
The Israeli Air Force grew quickly and soon proved to be far superior to the Arab forces. Israeli planes were still being flown by foreign volunteers or by European Jews who had combat experience, and this gave them an advantage over the unseasoned Arab pilots. More important still were the service facilities on both sides. The Arab lacked spare parts and competent ground crews, who were often forced to resort to stripping the more seriously damaged aircraft in order to maintain those machines that were still flyable. On the other side, the Israelis were not stripping planes but were rebuilding them from crashed or scrapped machines: a credit to Israel's growing aircraft industry. In 1948 they rebuilt nineteen Auster AOP 3's from 25 crashed or scrapped RAF machines, and when parts were not available they learned to improvise or make their own.

During the first cease-fire, the Israelis realized the need to change their military strategy. Because of the proximity to enemy territory of populated areas of Israel it was decided that an offensive strategy would be most beneficial in denying the enemy the advantages of offensive actions near these populated areas. When the cease-fire ended, they continued their offensive moves, fighting day and night in large bodies supported by artillery purchased from Czechoslovakia and France. Before the second cease-fire was called, they had conquered central and northern Galilee and had driven the Arabs from the captured towns of Lydda and Ramala, thus gaining access to Jerusalem and their settlements in the Upper Jordan Valley. It was from these areas, which for centuries previously had been inhabited purely by Arabs, that thousands<sup>3</sup> of Arab refugees fled into the neighbouring states. The Israelis continued their march and by the time the Armistice Agreement was signed they had cleared the Negev of Arab troops to the port of Eilat, which gave them access to the Indian Ocean, rendering it unnecessary for them to rely on the Suez Canal for their shipping. Map 1 shows the size of the Jewish state following the 1948-49 war.

<sup>1</sup> Robert Jackson 1970 *The Israeli Air Force Story* (London: Tom Stacy, Ltd.), p.29.

<sup>2</sup> Jackson 1970 op. cit., p.39.

<sup>3</sup> The actual number fleeing in 1948 is a subject of much controversy. In September 1948, the number was estimated by Count Folke Bernadotte who was then the mediator appointed by the UN, at 330,000. His successor, Ralph Bunche estimated the total a month later at 500,000. However, in the fall of 1949, the Economic Survey Mission estimated the total to be 726,000. Interim Report of Economic Survey Mission, an annex to, United Nations General Assembly, Final Report of the UN Economic Survey Mission 28 December, 1949.



**Map 1: Israel After the 1948-1949 War**

Original by Nabeel Jurdi, Ph.D. Reproduced by Michael Bozeman, Ph.D.

The Arab forces had been surprised and disillusioned by their loss of the war, although the reasons for defeat could be easily seen. The invading armies were militarily disorganized, politically divided and were supported by regimes who had no trust in one another. The armed forces soon saw that their rulers had failed them with their incompetence and greed. They had had to plan a military strategy for the war, but had failed to do so and could not even be trusted to pick commanding officers who had the necessary military training and abilities. It was this realization of the unpreparedness of their rulers that set off a chain of post-war coups in the Arab world in the years that led up to the Sinai campaign.

### 3. Towards the Sinai Campaign

Unlike the 1948-49 war, which involved a number of Arab states, the 1956 Suez Crisis was confined, on the Arab side, to Egypt which was emerging as the leader amongst the Arab nations. For the armed forces of the Middle Eastern nations, the period between the Armistice agreements in 1949 and the outbreak of the Sinai Campaign in 1956 was one of rebuilding and growth. The Arab rulers, fostering a continued state of belligerency, concentrated on rearmament schemes in the hope of appeasing their already agitated army officers who were angry, discontented and acutely aware of the many chronic ills which had befallen their countries because of the incompetence of those rulers.

The Israelis, on the other hand, were forced to adopt a counter-preparatory strategy in an attempt to avert the threatened renewal of the confrontation. However, they knew that if another war could not be prevented they



must win it quickly and without heavy casualties. Thus, many schemes were developed to build up the resources of the country; for example, the absorption of vast amounts of immigrants to bolster their manpower, and plans to aid economic development. Defense was their biggest concern, since they had to compensate for their numerical inferiority by military superiority.<sup>1</sup> Training was intensified on all levels with commanders being encouraged to take courses, both home and abroad, to broaden their general and military outlook. As new equipment and weaponry were introduced higher standards of skill and technical knowledge were demanded of the members of the armed forces. The military industry, which included factories manufacturing arms, ammunition and various chemicals, was also expanded. Also, a 9mm sub-machine gun, the Uzi was developed by Major Uziel Gal during the early 1950's, which was an adaptation of the Czech EK476 and had a telescopic bolt. During the war, they had produced 120mm mortars but by the mid-1950s were producing 160mm mortars that increased the artillery corps firepower.<sup>2</sup>

The War of Independence (1948-49) did not alter Israel's perilous geo-strategic position. She was still surrounded by "hostile" Arab countries, and her Mediterranean and Red Sea ports remained vulnerable to blockades and landings. In time of war it would be imperative that enemy invasion be thrown back before the densely populated civilian areas were reached. For this reason, a new military strategic doctrine was introduced, that of the pre-emptive counter-offensive, which proved itself militarily successful in the Sinai campaign and, later, in the 1967 June War. This was an "anticipatory" measure that would be taken when a high concentration of enemy troops signalled an imminent attack. According to Yifal Allon, "the recognition of the right of pre-emptive counter-attack increased the persuasive power of the defender's deterrent and thereby diminished the possibility of hostile action."<sup>3</sup> An enemy would not make movements that would justify such a pre-emptive counter-attack unless he was planning the first move himself-that of war or surprise attack.

On July 23, 1952, a coup d'état occurred in Egypt. The Revolutionary Command Council realized the need for a strong army, especially after the Suez agreement had given Great Britain the right to return to the Canal Zone if there were any aggression against Turkey or any other Arab state during the following seven years. It was during this period that Gamal Abdul Nasser came to power as leader of the Junta and began his years of leadership of the Arab world.

Two important events having a direct effect on the 1956 crisis took place in Egypt after Nasser assumed power. The first was the nationalization of the Suez Canal Company. This had three main purposes: a) to provide the foreign exchange needed for Egypt's economic and social development; b) to show that the Egyptian Government would not stand for continued degradation by the British; c) to demonstrate Nasser's determination to break away from dependence on the West. The second was the Czech arms deal. Because of the Tripartite Declaration signed in May 1950 by the United States, Britain, and France, limiting the quantity of arms supplied to the Middle East, the conflicting states were forced to look elsewhere for arms. Nasser, dismayed by the weakness and unpreparedness of his troops (as witnessed by a successful attack on the Gaza military installation by the Israeli Defense Forces)<sup>4</sup> and unable to obtain help from the West, turned to the Soviets for military aid. Thus, in September 1955 the Soviet-Egyptian arms agreement via Czechoslovakia was concluded, and can be regarded as both a political and military turning point in the development of the Middle East region, for it laid the cornerstone of the Soviet-Egyptian alliance.

The emergence of the Baghdad Pact prompted the arms agreement on the Soviet side because the Russians realized that a power vacuum was developing in the region, which formed what John Foster Dulles<sup>5</sup> called a "defensive bloc" and what the Russians called an "aggressive bloc" on their southern front. This gave the Soviets the incentive to make a move with the aim of out-flanking them. It was something the Russians could not live with. "Strategically the Czech arms deal with Egypt ... was tantamount to a leap-frog over the 'Northern Tier' states of the Baghdad Pact,"<sup>6</sup> and fitted Soviet plans well. The Arabs were joyful over the deal and could smell the "scent of victory" in the air. As Robert St. John puts it:

In their excitement, the Arabs convinced themselves that shortly their problems would vanish, Palestine

<sup>1</sup> The defense budget rose from IL 14,041,540 IN 1948-49 to IL 46,193,083 IN 1952/53. Israel Government Yearbook:1953/54 (Government Printer, 1954), p.130.

<sup>2</sup> Ibid, pp.109-111.

<sup>3</sup> Yifal Allon 1970 *The Making of Israel's Army* (London:Valentrine, Mitchell and Company), p. 53.

<sup>4</sup> The attack which was the largest military action since the 1948-49 war, took place on February 28, 1955, killing 38 Egyptian soldiers and wounding 30. U.S. State Department Bulletin April 18, 1955, pp.659-61. The attack made Nasser aware of his precarious military position and prompted him to claim: "The planned ...Jewish attack on Gaza...was the turning point ....It was the signal of danger which convinced us to look around for the measuring of peace and the balance of power in the area ...The West prevented the shipment of arms to us while ....providing them to Israel.." Kutub Kummiah 1968 Palestine, from Nasser's Speeches (Cairo), pp.20-22.

<sup>5</sup> Dulles was the American Secretary of State in the Eisenhower administration.

<sup>6</sup> Neville Brown 19721972 *European Security 1972-1980* (London: Royal United Services Institute for Defense Studies), p.23.

would be re-occupied by the Arabs. The Jews would disappear. The simple Arabs even believed that somehow this would mean more food, better housing, good clothes, and salvation for everyone.<sup>1</sup>

The 1955 Soviet-Egyptian arms agreement covered some 530 armoured vehicles comprising 230 tanks, 200 armoured troop carriers and 100 self-propelled guns, and some 500 artillery pieces. Also included were over 300 fighter aircraft (including MiG-15's), bombers and transport planes, plus sub-marines and destroyers for their navy.<sup>2</sup> With such an accumulation of weapons it became obvious to the Israelis that war plans were in the making.

Between 1949 and 1955 the Israeli Government had continued its policy of buying, reconditioning, and rebuilding used aircraft. After the Soviet- Egyptian arms agreement was made public, the Israelis realized that they would have to secure more arms, as the previous favourable arms balance was now upset. They found that the French, who were angry over Egypt's interference in Algeria, were willing to supply them with heavy equipment and aircraft. They purchased AMX tanks, half-tracks, heavy artillery, and some infantry arms, including the SS-10/11 wire guided missile, which could be used as an anti-tank weapon. They also purchased 30 Ouragan fighter-bombers with four 20mm cannons in their noses, and 60 of the new Mystere IVA's, which were much faster and better-armed aircraft than their predecessors. Their armaments included two 30mm DEFA cannons and two under wing Matra rocket pods, each containing 19 air-to ground projectiles and having also the ability to carry two 1,000 lb. bombs or twelve T-10 missiles.<sup>3</sup>

The Israelis began to feel more insecure in early 1956 when Egyptian-controlled Fedayeen attacks across their borders were increased and more and more Soviet arms were being flown into Egypt and other neighbouring countries.<sup>4</sup> To add to their predicament the blockade by Egypt on Israeli shipping in the Suez Canal and the Straits of Tiran was more tightly enforced. With the establishment of a joint Arab Command including Egypt, Syria, Jordan and Saudi Arabia, it became clear that the Arabs were merely waiting the right moment to attack. It was then that the Israeli Government made plans to introduce their newly established military strategy of the pre-emptive strike. The most important question in their minds at that time, though, was whether they were ready take such an initiative.

Prior to 1953/54 the Israeli Army had been more involved with development of internal unity (civic action)<sup>5</sup> than with military expansion. When Moshe Dayan was appointed Chief of Staff many changes were made in military development. He did not believe in the idea of everyone shouldering ploughs and shovels, but concentrated on training a fighting army and building up ground forces. An elite volunteer paratroop brigade was established whose spirit, daring and fighting ability became an idealistic example to other IDF members.

Priority was given to the establishment of rapidly moving armoured units.<sup>6</sup> In order to provide adequate air cover plans were made to provide the air force with aircraft of the same quality as the enemy's. At the same time the navy was strengthened in the hope that it would be able to protect Israel's ports in time of war.

On 28 October, Ben Gurion won the support of the Israeli Cabinet and opposition leaders for a plan drawn up as a joint Anglo-French-Israeli venture to attack Egypt. Britain, angry at the Egyptian Nationalization of the Suez Canal Company, and France, concerned about its Algerian interests which were being threatened by Arab intervention, agreed to provide Israel with aerial and naval protection. According to Yigal Allon, the threat to Israel's very existence was so grave that she would have taken the war initiative with or without Anglo-French support.<sup>7</sup>

The element of surprise was most important to the success of the Israeli strategy. Israeli intelligence (now rated as one of the best in the world) knew the location and strength of all the Egyptian brigades and battalions and the disposition of the air force, and this knowledge greatly aided the plan of attack. The intention was to capture Northern Sinai and to establish a defense line on the east bank of the Suez Canal.

Detailed descriptions of the battles of the Sinai Campaign are not pertinent to this paper. The Israeli High

<sup>1</sup> Robert St. John 1960 *The Boss: The Story of Gamal Abdul Nasser* (New York: McGraw), pp.210-211.

<sup>2</sup> General Moshe Dayan 1966 *Diary of the Sinai Campaign* (English Translation) (London: George Weidenfeld and Nicolson, Ltd.) p.4.

<sup>3</sup> Jackson 1970, *op. cit.*, pp.71-75.

<sup>4</sup> On August 13, 1955, the Syrian Chamber of Deputies had approved a budget for the coming year, 1956, of SL260,500,000 40% of which allocated to defense and internal security. On May 3, 1956, an arms agreement was concluded between Czechoslovakia and Syria which included 100 tanks, 100 armored cars, and 25 MiGs. The Syrians Defense Minister then reported that the Syrian Army would be ready to take revenge for the shame of its defeat in Palestine. Arab World 1972 Vol. II. Washington, D.C.

<sup>5</sup> "Civic action" included political and agricultural development.

<sup>6</sup> On the eve of the Sinai Campaign they had some 700 tanks, including 130 M-48 Pattons, 225 Centurions and 200 Sherman tanks mounted with modern French M-50 guns. They also had 200-500 self-propelled 105mm and 155mm guns and howitzers, 106mm jeep-mounted anti-tank recoilless rifles and SS-10/11 anti-tank missiles. Stuart Roberts 1974 "The Tiny Goliath Israel and its Armed Forces" (unpublished paper), p.12.

<sup>7</sup> Allon 1970 *op. cit.*, pp.56-57.

Command planned to hit the Arabs in Sinai as quickly as possible with all the arms and troops that it could muster, hoping to bring about the swift collapse of the enemy forces. Following a daring paratroop landing, which blocked the Mitle Pass and was perhaps the most significant landing of the war, the general concentrated attack was begun.

Within a week it was over. The Egyptians were taken completely by surprise and the Anglo-French ultimatum to them to move ten miles back from the Canal pushed the Egyptian High Command into a state of chaos. They saw that they were fighting two wars; one the threat from France and Britain, and the other the war with Israel. They found themselves constantly “looking over their shoulders,” having to maintain a force inside Egypt proper and at the same time to run a successful military campaign into the Sinai, a task which was beyond their ability. The Egyptian Air Force was not giving the ground forces the necessary air cover<sup>1</sup> and their losses were heavy, so it was decided that retreat was unavoidable.

Part of the Israeli strategy involved plans to capture as much of the enemy’s weapons and equipment as possible in order to redress the uneven balance of power. The mobile Israeli ground forces, supported by British and French air power and by their own rapidly -improving air force, completely overwhelmed the Egyptians who, in their retreat, left behind vast numbers of tanks guns, vehicles and electronic equipment, as well as food and ammunition.<sup>2</sup>

The Egyptians soon saw that they had powerful political support when both the big powers (the U.S. and Russia) and the third World countries (Afro-Asia and the Arab World) reacted negatively to the Anglo-French intervention; but they realized that vocal support would not help them on the battlefield. In a last-ditch effort Nasser ordered that the Canal be blocked (47 ships were sunk in it within 48 hours), and issued 400,000 rifles to civilians so that when the army was overwhelmed they could form resistance groups for their own defense. In support of Egypt, Syria blocked oil supplies to Britain and France by blowing up three pumping stations on the IPC pipeline, while Saudi Arabia banned oil shipments to them. Finally, on 6 November, seven days after Israel’s first pre-emptive strike, the United Nations was able to affect a cease-fire<sup>3</sup> and plans were made to establish a United Nations peace-keeping force in the Canal Zone to act as a buffer against further aggression.

In retrospect, the Sinai Campaign was in every respect not the swift and humiliating victory that the press and Israeli sources described. The Egyptians showed themselves to be strong in static defense but weak in mobility and counter-attack. From their entrenched posts, they fought well with their anti-tank, field artillery, and anti-aircraft guns and hold the defensive posts at Um Kalif and Um Shihan. The few counter-attacks they attempted were very limited and poorly executed and did not seriously influence the battlefield. Commanders utilized neither the equipment nor the forces that they had at their disposal. Communication and supply lines between the High Command in Cairo and the troops in the field were often disrupted by Israeli armoured columns working behind the Egyptian lines. Those orders that did get through were often countermanded, causing confusion at both ends. The real point is that the approaching Anglo-French expedition inhibited the Egyptian mobile reserve from deploying from west of the Canal.

In the Sinai Campaign the Israelis did what the Arab armies could not do- they closed the gap between society and technology. This was and still is the difference between winning and losing wars. Along with the arms supplies to the Egyptians went Russian philosophy, doctrines and ways of warfare. Unfortunately, the Egyptians were unable to adapt to the highly developed logistics of their new Soviet weaponry and being a relatively new army (they had been under British command until 1954) they had not developed the discipline necessary for a united fighting force. Their commanders had little actual command experience. Also, because of the lack of any degree of technical background, training of both troops and commanders took more time. It is difficult to compare the Egyptian Army of 1948-49 to that of 1956 because they were such a new army. It was only after the British left (in 1954) that the Egyptians began building their armed forces, organizing their troops, and learning about their newly purchased weaponry. It is obvious that a good army cannot be built in two years. Because the Egyptians, or the Arabs for that matter, lacked a technical background, it took a much longer period of time to teach them the necessary skills. It took an even longer time to train an officer because not only does he have to learn to command, but he should learn how things work better than his men so that he can be sure that they are properly done. This was just not possible in a two-year period. In most modern armies experience is the

<sup>1</sup> It has been suggested that the air force did not intervene because the pilots were unfamiliar with their new jet equipment and because of the threatened Anglo-French retaliatory air strikes. Roberts 1974 op. cit., p.16.

<sup>2</sup> Included were some 1170 sub-machine guns, 26 T-34 Soviet -built tanks, 52 Sherman tanks, 60 armored troop carriers, 260 Bren-carriers, 25,000 hand grenades, 700 light trucks, 800 heavy trucks, 55,000 mines and prodigious amounts of other equipment and ammunition. For an exact count see: Dayan, 1966, op. cit., Appendix 6, pp 227-229.

<sup>3</sup> Actually, Israeli and Egyptian U.N. delegates had accepted the resolution on 4 November, but the British and French continued their planned assaults on Port Fuad and Port Said in the hope of controlling the Canal. Finally the Americans intervened and forced them to accept the cease-fire by threatening to refuse the financial help that would be needed in securing alternative oil supplies. The Americans held tight to their decision, withholding financial support not only from Britain, but from Western Europe as well, until the British withdrawal on 3 December.



only thing one can use as a yard stick, the only thing that can be counted on. Experience is the only way to develop a good working army and the Arab commanders had none.

The Israelis were able to achieve a much higher quality of technology than the Arabs due to the advanced state of their general educational background. More important still, the Israeli Commanders were far superior and consequently the Israeli forces achieved a much greater flexibility. Commanders were given considerable freedom in their defensive strategy and, keeping in mind the general objective, they were allowed the prerogative to change their plans to fit the actual battle situation. They were also very daring in their actions, realizing that a non-aggressive war strategy based on the principle of “safety first” could place the troops at a disadvantage towards the defender.<sup>1</sup>

The Israelis drew upon two British strategists (one strategist in the strict literal sense and one strategist in the sense of a military practitioner in World War II) to develop their own theories. One was General Orde Wingate (who was discussed in the first section of this chapter) and the other was Sir Basil Liddell Hart who trained as a historian at Cambridge and served as an infantry officer with the British Forces, being wounded in the Battle of the Somme.<sup>2</sup> The Somme was an appalling experience for all concerned and even drove some people to pacifism. From that experience, Liddell Hart concluded that it was vitally important to make an intellectual study of war and by the time he was obliged to retire in 1924-25 from wounds sustained earlier, he was establishing himself as a student of tactics and expounding the new ideas of merchandized war. The tank was weapon on the battlefield and, unlike the tanks of 1974, the tank of 1925 was invulnerable and could not be stopped by the infantry. They might over-harass a tank, but it was an impregnable moving fortress on the battlefield. Liddell Hart's theory was that tanks are used as a spearhead, coupled with aircraft to form mobile artillery. The infantry is then put in armoured mechanized transport, preferably with caterpillar tracks, and the result is an instrument for a concentrated spearhead attack that breaks through the enemy lines before he knows what happened, and then fans out to disorganize his rear. This is the notion of the expanding torrent-the notion of advanced mechanized warfare which was taken up not only by Liddell Hart but by De Gaulle in France who was thinking along the same lines, and by the new German army in the 1930s.

The Israelis did not use Liddell Hart's idea of the expanding torrent until the 1956 Campaign when they had acquired tanks and by that time the theory was rather commonplace. Liddell Hart was also very interested in what he described as the strategy of the indirect approach, which the Israelis may have copied.<sup>3</sup> This type of strategy can be related to British historical experience. England has never been able to put a large army on the Continent, so when faced with countries like France and Germany there was a tendency to use sea power in the Mediterranean as much as possible to form encircling alliances, which is a form of the indirect approach.<sup>4</sup> Another example would be depriving France of her colonies that would cripple her foreign trade. In the 1956 and later 1967 wars the Israelis can be seen following Liddell Hart's beliefs in offensive action. He felt an offensive action is often the best remedy for inferior forces and the Israelis have a perception of themselves as always being numerically inferior. Whether this is true in actual quantitative analysis is not the issue, but if an army believes this to be true they must seize the initiative and not rely on defensive action. Thus the strategy followed by the Israelis in 1956 and 1967.

In differentiating between the two armies in 1956 one can see the biggest difference is that the Israeli Defense Forces have come up the hard way. They have learned, step by step, the very difficult art of war. The Egyptians, on the other hand, and the Syrians, have had so much political activity their senior officers have little combat experience. There is the occasional exception, but they are few.

The Sinai Campaign brought no immediate political gain to Israel, but it did give her free navigation of the Gulf of Aqaba<sup>5</sup> and a temporary reprieve from constant acts of terrorism, which had placed her frontier regions in a state of continuous apprehension. She also knew that if the United Nations Emergency Force stayed in

<sup>1</sup> The casualties of the combined Israeli Defense Forces totaled 172 killed, 817 wounded, three missing and one captured. A large proportion of the dead were commanders who had been leading their troops in the battles. Dayan 196 op. cit., Appendix 5, p. 226.

<sup>2</sup> Following an eight-day bombardment of the German trenches the British infantry, in a tremendous surge forward, advanced upon the Germans carrying such things as picks and shovels. They had been quite sure that the Germans would be so dazed by the bombardment that there would be nothing left for the infantry but to thrust forward to occupy the trenches, collect all the prisoners and wait for the cavalry break-through. Instead, as soon as they went over the top in July 1916, they met a hail of German machine gun fire which resulted in over 60,000 casualties that first day. The British made practically no headway (or none worth making) and whenever the Germans were forced to give up a small area, they merely consolidated a bit further back.

<sup>3</sup> See Michael Howard, ed. 1965, op. cit. Liddell Hart was quite pro-Israeli and often lectured at the Israeli Staff College in his later years, his books being prescribed reading.

<sup>4</sup> For more on this strategy see: B.H. Liddell Hart Strategy: The Indirect Approach 1954 (London: Faber and Faber. Ltd.).

<sup>5</sup> Ibid.

<sup>6</sup> The Navy lost no ships during the war and managed to capture the Egyptian destroyer, Ibrahim El Awal, when it had attempted to shell Haifa.

position along the Canal she would not be subject to any joint Egyptian-Syrian-Jordanian attack. Although the Arabs felt their losses strongly<sup>1</sup> the Egyptians too considered themselves victorious, in a political sense. They had won a moral victory over Western imperialism and were now the masters of their own country.

#### 4. The birth of the Six Day War.

Between the Sinai Campaign and the Six Day War -roughly from 1957 to 1967- political developments as well as significant military operations were taking place in the Middle East. These affected the well being not only of the Arab states, but of Israel. Over the decades both parties to the conflict increased their defense expenditures very markedly in real terms. Both sides were rearming, but the Israelis recovered much more quickly, particularly their air force and armoured corps. One consequence of this was the superb Israeli Air Force of 1967.

In 1956 the Israeli army had very inferior mechanical transport, particularly unsuitable for bouncing across the stony desert. Many transport vehicles had been called up from civilian use, any peacetime painting or advertising on them having been covered with mud rather than being repainted. Of course, such transport was not always in the best of condition and was not designed for the rough treatment that it received in combat. Also, when being used in the field it was withdrawn from the domestic economy, which therefore presented an additional hardship. During the few days that the Israelis took to accomplish their great “left hook” around the Egyptian position, about 40 per cent of their transport broke down beyond immediate repair. It was for this reason that the build-up of the armoured corps, which was in effect mechanized infantry, became important in the development of Israeli strategy following the Sinai Campaign. It required little imagination to conclude that if the Israelis had been fighting for air superiority (which would have taken them in 1956 significantly longer than in 1967), instead of starting off with the guaranteed Anglo-French involvement, their “left hook” would have been a great deal slower, and due to their increasing mechanical breakdowns might even have come to a halt.

In fact, it is very improbable, indeed, that the Israeli Defense Forces as a whole could have been successful in 1956 without the intervention of Britain and France, since their air power was much less sophisticated and could not have had a decisive effect. The deficiencies in their landing forces would then have been shown. Mr. Neville Brown, a member of the International Institute for Strategic Studies, an academic consultant at the National Defense College (Latimer, Buckinghamshire) and a senior lecturer of International Politics at the University of Birmingham, feels that,

Whoever says that the great Israeli victory of 1967 proves that the Israelis could have done it alone without Anglo-French collusion in 1956 are rationalizing their own emotional proclivities. In so doing they are not making a serious analysis of the situation and the changes that took place which is an important thing to realized.<sup>2</sup>

The Israelis learned several important lessons from the Suez Campaign which have affected their strategy ever since. Under the leadership of British-trained Israel Tal (who was later dubbed “Mr. Armor”) the armoured corps grew and developed important tactical innovations. Mobility became most important in tank manoeuvres, as did the tactic of deep penetration as a counter-strike to the Arab’s static tank formations. In 1956 the Israelis faced the Arabs with old Sherman tanks that had been mounted with French M-50 guns and the light AMX-13 tank. After the war they began to purchase more modern tanks and equipment. The capture of great quantities of vehicles of all types also helped to remedy their crucial transport problems.

At the same time the air force was being built up so that in any future assaults the Israelis would be capable of facing the enemy alone, without having to rely on outside intervention. Emphasis was put on size, firing power, flying altitude,<sup>3</sup> flying distance and manoeuvrability. The air force was developed into a multi-purpose unit which would be able to support rapidly moving land forces as well as engaging in air combat, attacking land or sea targets, and carrying other transport. All roles were important because in the future a swift military victory could be envisaged without aerial superiority.

During the years between the Sinai Campaign and the Six Day War changes were also being made in the Arab states. In 1964 a joint defense and economic cooperation treaty was signed by the states of the Arab League<sup>4</sup> establishing the United Arab Command. This unified command was to build and “beef-up” the combined armed forces and to strengthen their military positions along the Arab/Israeli borders. The Arab states were all trying to replenish their stocks of arms and equipment through deals with Western and Communist countries: Lebanon was negotiating to purchase some 24 Mirage III fighters from France; Iraq was dealing with

<sup>1</sup> Besides the loss of large amounts of equipment and of eight planes some three thousand Egyptians were killed in the war (Israeli estimates).

<sup>2</sup> From a taped recorded interview with this writer, 6 March 1974.

<sup>3</sup> Being able to fly low in order to avoid the enemy’s radar screens.

<sup>4</sup> Originally the Arab League consisted of Egypt, Syria, Jordan, Iraq, Libya, Algeria, Morocco, Tunisia, the Yemen, the Sudan, and Saudi Arabia. Today Bahrain, Kuwait, Lebanon, Oman, Qatar, the United Arab Emirates, and the People’s Democratic Republic of Yemen are added to the original list of members.

the British; Syria with Czechoslovakia; while Algeria, the Sudan and Libya were also involved in the arms market. Egypt was no exception and, regardless of her motives, was committed on many different fronts, which absorbed many of her natural resources. On the economic front the Egyptian Government, while preoccupied with military problems, was trying to redistribute the wealth, property and opportunities amongst the people who had been repressed for so long. At the same time industrialization in the form of light industry and the Aswan Dam project was taking place inside Egypt. Socially, the government was trying to fulfil the basic needs of the people; while on the military front there were military adventures in Yemen, Algeria, and in the Arab/Israeli struggle. However, once the Egyptians were able to disentangle themselves from involvement in Yemen<sup>1</sup> they could concentrate on rebuilding, re-equipping, training and organizing their armed forces.

During the early 1960s the Arab states were unified in their attitude toward the Israelis, realizing that although war was inevitable it would not be forthcoming for some years. At first, it was difficult to unify the forces because Egyptian troops were not welcome on Syrian, Lebanese or Jordanian territory due to the delicate balance of their internal politics. However, with the advent of a new, more radical regime in Syria and with Jordanian and Lebanese reactions to Israeli retaliatory raids as a result of Fedayeen activities, this situation soon changed and the Arab states began to combine their forces.

In 1965-66 the Egyptian army totalled 180,000 men plus some 120,000 in the National Guard and in organized reserve units. The men were organized into two armoured divisions, four infantry divisions, one parachute brigade (three battalions) and 12 artillery regiments.<sup>2</sup> They had at their disposal more than 1,200 tanks and assault guns (including 400 T-34 tanks, 350 T-54's, 60 JS-3's mounted with 122mm guns, 150 SU-100's with 100mm guns, 30 Mark III Centurions and 20 AMX-13's). The air force was the second largest unit, having a total strength of between ten and fifteen thousand men with three to four thousand in reserve. It had some 500 aircraft, including 40 helicopters and 60 transport aircraft. Its fighting and bombing squadrons were supplied with Tu-16 medium jet bombers, 11-28 light jet bombers, MiG-21 jet interceptors, MiG-19 all-weather fighters and MiG-15, MiG-17, and Su-7 fighter-bombers. An anti-aircraft command was also in operation and was provided both anti-aircraft guns (85mm) and approximately 100 Soviet SAM-2 "Guideline" surface-to-air missiles.<sup>3</sup> The Egyptian navy consisted of about 11,000 men. It was supplied with six destroyers, nine submarines, fourteen Osa and Komar-class missile patrol boats equipped with Styx short-range cruise missiles, six sub chasers, a small number of minesweepers and escort vessel, and about 44 patrol vessels. When combined with the Arab forces, their total was raised by the addition of 60,000 Syrians, 40,000 Jordanians and 85,000 Iraqis.<sup>4</sup>

During this same period (1965-66) the Israeli forces totalled 250,000 men (including the reserves who could be mobilized within 48 to 72 hours). The regulars were divided into four brigades, one of which was a paratroop infantry brigade. There was also a separate armoured command of divisional strength. When the reserves were fully mobilized an additional 24 brigades could be added. They had some 600 tanks including Centurions, Super-Shermans, M-48 Pattons and AMX-13's. They also had mounted 155mm howitzers on Sherman chassis and 105mm howitzers on AMX chassis. The total strength of the air force was 8,000 men with 450 aircraft. It had squadrons made up of Mirage III-C inceptor fighter-bombers and Magister trainers, which could be armed. It also contained two squadrons of S-58, Alouette, and Bell-47 helicopters, 40 transport aircraft and one battalion of Hawk surface- to-air missiles. The navy, with 3,000 men, was equipped with two destroyers, one frigate, two submarines (plus two on order which would be delivered before the June War) nine MTB's, and two landing

<sup>1</sup> An estimated 70,000 Egyptian troops were involved in the Yemen adventure.

<sup>2</sup> The battalion or regiment is the lowest level of the class military formation that we are dealing with in this section. It is generally made up of several companies and totals several hundred men. It is composed of one arm-either infantry or artillery. Several battalions of mixed arms are then grouped together into brigades. Brigades can vary as their mixture of arms-they may be specialized armored brigades or infantry brigades. The Russians even tend to have independent artillery brigades. The make-up of the brigade is often varied to suit its function. If it is a specialized armored brigade it will have more armored battalions with perhaps one infantry battalion. A brigade is classically defined as being the smallest formation that is capable of independent action for any length of time against a sophisticated opponent. The largest assembly in the military formation is the division. It holds the advantage over the brigade because it has a more sophisticated command structure which enables it to deploy its brigades with a certain degree of flexibility and intelligence. There are normally three brigades in a division, but there have been variations on this. Presently, partly for manpower reasons, the British have only two brigades per division. During the 1950's the American have more than five per division but have now returned to the classic three brigade division. This triangular pattern of military formations is generally adhered to the world over.

<sup>3</sup> The SAM-2 missile is used against high-flying aircraft. The missiles were originally designed to intercept aircraft coming through the stratosphere but also known to have hit planes flying at low altitudes. Their main disadvantage proved to be their immobility, and the effective counter-measures which were soon developed by the Americans.

<sup>4</sup> International Institute for Strategic Studies 1965 *The Military Balance 1965-1966* (London: IISS), pp.38-39. See the *Military Balance 1966-1967* for an accurate count of equipment each of the belligerents had at the outbreak of the Six Day War.

craft.<sup>1</sup>

During the second half of the decade Israel developed substantially in the scientific and technological fields. As her military strength grew and gained in maturity and sophistication, so did her military doctrine and organization. Before looking at the Israeli doctrines set by such statesmen as strategist Yigal Allon and Foreign Minister Abba Eban, one ought to study the development of strategy in general. The importance played by doctrine in any army should not be exaggerated. The reality of the matter is that military commanders are presented with certain options, which, unless they have been heavily indoctrinated give them the freedom of choice. There is always a danger of becoming too doctrine-bound. Such was the case of the French army in both world wars. Although the French officers Corps had a strong tradition of professionalism it lacked self-esteem, was much too conservative and was intellectually dull. This resulted in 1914 in the French assumption that modern technology meant that the war was going to be a great offensive battle that would end in a fortnight's time. Consequently, when the Germans thrust westwards through Belgium the French cavalry charged up through the Ardennes – a steep, dense area – in the hope of cutting off the Germans and decimating their army in one fell swoop. Instead they ran into a large German machine gun nest. Their casualties were catastrophic and they achieved nothing. This naïve faith in offence changed to a naïve faith in defense 25 years later when they were behind the Maginot Line. By contrast, the Israeli army is intelligent and youthful and has a highly imaginative officer corps, not too much tied by any doctrines. One ought not to exaggerate the importance of doctrines or strategy<sup>2</sup> except to people who are so inadequate they want something to cling to.

Israeli military doctrine is based on several important premises.<sup>3</sup> Firstly, in order to avoid damage to the heavily populated civilian areas, wars must not be fought on Israeli soil. Secondly, Israel must seize and retain the initiative, as was done in 1956 with the pre-emptive counter offensive (and again in 1967). Thirdly, because of the high mobilization needed, wars must be short so as not to affect too gravely the economic situation and so as to forestall political pressure from outside countries (the upper powers). Fourthly, Israel must be prepared to face its enemy on all borders at the same time in order to quell a simultaneous offensive; and must face them without outside help. Fifthly, heavy casualties must be avoided at all costs. In 1948 Israel lost some 6,000 men out of a population of 650,000. In a country, which has such close-knit family ties and which relies heavily on manpower for economic growth, these casualty figures were exceptionally high and had a far-reaching effect on morale.<sup>4</sup>

Commenting on their doctrines Abba Eban claimed,

Our policy of containment and deterrence has been maintained. This policy has two objectives. In the specific context of security, it aims to protect our land and lives. In its political aspect, it aims to induce new currents of thought in the Arab mind. We want to create doubt-and eventually resignation and despair-about the dream of eliminating Israel from the world's map.<sup>5</sup>

Prior to the third Arab/Israeli military confrontation in June 1967 the IDF was narrowing the gap in quality between regulars and reservists, developing a tighter, stronger system of regional protection, and perfecting a more powerful, more streamlined anti-aircraft defense system. New jets and super Perlon helicopters were acquired, the anti-aircraft alignment and control system was greatly improved, and expenditure on defense increased substantially (between 1964/65 and 1967/68 the defense expenditure rose from 22.3 to 35.3 per cent of the total government expenditure). With the creation of a unified Arab command, the continuation of Arab verbal threats, the increase of Fedayeen activities along the Lebanese/Israeli and Syrian/Israeli borders, the substantial increase in Arab defense budgets (see Appendix I) and the continued development of Arab military strength, Israel was left with no alternative but to take her part in the Middle East arms race.

The build-up of weaponry and of tension continued until June 1967 when the Israelis were placed in a perilous situation. They were faced with an economic recession due to Egyptian blockage of Israeli shipping in the straits of Tiran,<sup>6</sup> with continued terrorist activity and a growing concentration of Arab troops along their borders. The Israelis saw this situation developing and decided to pre-empt it, with results that we all know. They had stated that you must seize and maintain the initiative. This they achieved by striking first.

<sup>1</sup> The Military Balance 1965-1966, op. cit., p. 34-35.

<sup>2</sup> If an army is operating in relatively limited theatres at a given time (as in Israel) strategy and tactics tend to merge.

<sup>3</sup> From Stuart Roberts 1974 op. cit. and Yigal Allon 1970 op. cit., pp.61-62.

<sup>4</sup> In 1973 the loss of 3,000 men out of a population of 3,180,000 was again catastrophic. It would have a comparable ratio to Britain's population if there was a 53,000-man loss in Ireland, or is comparable to a loss of 200,000 fighting men by the United States. (The figures are based on the percentage of the population in Britain and the United States as compared to Israeli population figures. Taking the U.S. as 100 per cent, the British population is 26.7 per cent, the British population is 26.7 per cent and Israel's 1.51 per cent; making the British population 17.7 times that of Israel and the U.S. 66.3 times that of Israel).

<sup>5</sup> Abba Eban 1965 Interview Jewish Observer and Middle East Review Vol. XIV, No.27, July 2, 1965, p.14.

<sup>6</sup> For an extensive study and review of the Israeli economy prior to the 1967 June War see: Eliyahu Kanovsky 1970 The Economic Impact of the Six Day War (New York: Praeger Publishers).



In 1967 there was so much talk as to whether Nasser really wanted to go to war that an equal case made that he did not. What he wanted to do was to establish himself, make known, and then merely wait until some negotiation could take place.<sup>1</sup>

Two vital developments occurred after the Israeli victory in 1967. On the Arab side the fear of Zionism and Israeli expansionism was crystalized for the first time since the establishment of the Jewish State. On the Israeli side the myth of superiority was carefully fostered. Whether the Israelis fought well all the time was not the issue, but the press and Israeli public relations specialists were able to convince not only the Arabs but in some cases a large amount of the world's population of the myth of the invincible Israeli soldier. Of this myth, Major Robert Elliot, a member of the International Institute for Strategic Studies says that,

For years, I have had a great deal of difficulty convincing my senior officers that the Israelis are not ten feet tall. They are men, they bleed like you and me.<sup>2</sup>

The Israelis have motivation and training on their side, plus a confidence in their officers and equipment, but certainly they are not invincible.

What the Arab armed forces lacked in the 1967 June War was strategic mobility. This is concerned with the problem of deployment for a limited war situation in its logistical, political and tactical aspects. Logistics could also mean the maintenance of equipment and the movement of men and materials. One thing that can fairly be said is that all armies, especially the newly developing ones, tend to underrate the importance of logistical deployment. There is a tendency to have as many people as possible in tanks and the idea is fostered that these tanks offer great protection and are almost unconquerable. Therefore, new armies often tend to move behind their tanks, thinking that the tanks will act as a shield to clear their path of the on-coming enemy.

The basis of the use of armoured warfare is a feeling that one is fundamentally invulnerable in a tank, which is an important psychological factor. In fact, it can be most unnerving to ride in a tank. It is noisy and uncomfortable, and vision is severely limited. The Arabs' Russian-made tanks are difficult to handle and give a limited field of view. They are also very cluttered vehicles, having many projections that may injure the unwary. If a crewmember hurrying to move a gun around bangs himself on an ammunition box or some other projection, his concentration will naturally be disturbed. Therefore, the Russians select physically small men for their tank crews.

In 1967 the Arab states directly involved in the dispute – Egypt, Jordan and Syria – had just over 1800 operational tanks, the majority being the Russian-made T-34, TP-76, and T-54 and T-55 tanks. The T-34's and TP-76's were older, much lighter tanks with lighter guns. The T-54/55's mounted with 100mm guns were much heavier and harder to manoeuvre. They did have several American and British-made tanks (the Jordanians especially) but the Russian ones were most used in battle. In fact, the few Sherman tanks they did have were mounted with 75mm guns and were used mainly at static defense points rather than in open combat.

The Israelis were equipped with some 820 tanks including Centurions, Super-Shermans, M-48 Pattons, and AMX-13's. These tanks were much easier to handle than the Russian tanks and had much more room inside. The Israelis were also using several older tanks which proved to be much too light for actual combat, having been designed as reconnaissance vehicles modified by the mounting of larger guns. In combat, they would open like paper boxes when hit, and they caused much loss of life.<sup>3</sup> There was also a number of old Sherman tanks mounted with 76mm guns. These performed satisfactorily and have now been mounted with 105mm gun, probably the best tank gun in the world now.

The most effective tanks in use in the Middle East are the Centurion and Patton tanks. They are well designed and are adaptable to the stalking kind of warfare prevalent in desert areas, where the unevenness of the terrain often enable tanks to reach an attacking position undetected. The Russian tanks can only depress their guns four degrees below the horizontal, while the Centurions and Pattons can depress an all-important ten degrees. This enables them to hide behind ridges for protection and still to fire their guns without having to rise too high on the ridge.<sup>4</sup> The Russian tanks must climb to the top of the ridge to fire, thus rendering themselves an easy target.<sup>5</sup> The Western tanks also have an advanced range-finding system, eliminating the visual judgment that is necessary in the T-54 and T-55 tanks.

The Arabs had an effective anti-tank weapon in 1967 in the light Russian-built, wire-guided anti-tank missile, the "Snapper." It was carried on a jeep-type vehicle, had a range of 7,650 feet and was capable of

<sup>1</sup> For a detailed study of the 1967 June War see: Michael Howard and Robert Hunter 1967 *Israel and the Arab World: The Crisis of 1967* (London: IISS) Adelphi Paper No. 41; Charles Yost 1968 "The Arab-Israeli War: How it began" *Foreign Affairs* (U.S.A. Council on Foreign Relations) January 1968, Vol.46, No.2; or Louis Sohn 1968 *United Nations in Action: Ten Cases from United Nations Practice* (New York: The Foundation Press, Inc.), pp.111-195.

<sup>2</sup> From a tape-recorded interview with this writer, January 14, 1974.

<sup>3</sup> The Russian tank, the PT-76, acted in the same manner and several them were captured and used by the Israelis.

<sup>4</sup> For a detailed diagram see the Appendix of *Insight on the Middle East War* by the Insight Team of the Sunday Times 1974 (London: Andre Deutsch).

<sup>5</sup> The Soviet tanks are better suited to a massed, closed-packed charge. This is in accordance with Soviet tactical strategy.



penetrating 13.7 inches of armour. It was not heavily used in 1967 because until the early 1970's there was a strong bias against anti-tank guided missiles in the tank-minded Soviet army. The fact that the "Snapper" is a Soviet invention does not invalidate this point. As anti-tank weapons the Israelis had S-10 and S-11 missiles mounted on weapon carriers, and the 106mm recoilless guns that were mounted on jeeps for quick mobility through the desert. Alone, they were no match for the tanks, but by moving in groups of four to six they would join tank battles, harass the enemy by hitting him from unexpected angles and quickly move away before the tank crews had realized what had hit them. This proved to be very demoralizing for the Arabs, who were facing a losing battle with the fast-moving Israeli tank forces.

One of the big problems that faced the Arab forces, particularly the Egyptians, in the Six Day War was that they did not have dependable air support. In any case, the Israeli Air Force's "Young Tigers" (as the Israeli pilots are referred to) were far superior. The Israelis were said to have lost only four planes in every 100 sorties flown in the war.<sup>1</sup> Unlike the Arab pilots the Israelis are very carefully picked and go through rigorous training and are, in fact, kept in training all the time so as to be always mentally and physically ready for war. They do much more flying than any other aircrew, civilian or military (up to 45 hours per month). And when not in the air are constantly sitting on the airstrips waiting to go. During the June War, they each flew up to eight sorties a day, and sometimes even ten, which is quite remarkable. Their well-trained ground crews reduced servicing and rearmament time to the barest minimum, allowing a seven-and-a-half-minute turn-around time per aircraft.

### 5. The Six-Day War

The strategy and tactics of the June 1967 War were unchanged from the wars of 1948-49 and of 1956. The Arab armies were again preparing for a defensive war. It seems that until 1967 the memory of the British, and to some extent their influence, was still strong. For example, the British officers in the old Jordanian Legion strongly urged the Legion to get ready for a defensive war. There were two reasons:

First, the British, although having a strong anti-Zionist tradition, were responsible for laying the foundations for the creation of the Jewish National Home. Because they were early committed to its non-extinction, an offensive action against it might place the internal security of the state in doubt.

Secondly, they were preparing for a war fought under conditions of Arab parity, which in itself is naïve. A fact of modern air warfare is its great rate of attrition, with its great dividends for marginal advantages in quality, particularly with respect to electronics; and its great possibilities for pre-emptive strikes on airfields. Modern air warfare is rather like sea warfare and is unlikely to end in a state of parity. In sea and air battles, one cannot hide himself topographically. One cannot dig in and spread himself in woodland. One is exposed to the full force of the opposition and the mobility of the patterns of military force in question permits high concentration. Any aerial equilibrium will be highly unstable.

In 1967 it would have been naïve to assume air parity. In a sense, it is doubly naïve to assume air parity on the Jordanian side, because even if one were to assume that the Egyptians could hold the Israeli Air Force in the Sinai, the Egyptian Air Force could not offer cover to Jordan and the Jordanian Air Force is too weak. When the Jordanians talked about air parity they were using a linguistic trick.

The Arab states had little idea of modern air power. For example, a Phantom can carry eight tons of armaments on each sortie over a short run. If one has 25 Phantoms in a squadron 200 tons of explosives will be delivered per sortie. Under high performance conditions at the beginning of the war as many as seven sorties a day can be flown, as the Israelis show in 1967. Some of the planes may be shot down, but a phantom squadron will drop at least 1,000 tons of bombs a day. A highly mechanized army division, well equipped with artillery and engaged in intensive combat, is unlikely to expend more than 1,000 tons of ammunition a day.<sup>2</sup> The Jordanians, the Egyptians and the Syrians were quite unaware of this and they were astonished that such a bombardment could be maintained even during the night using illumination flares.

One important outcome of the Six Day War is that it greatly distorted economic development and social and political stability in the region. The economic distortions were in the form of the diversion of resources into military expenditure. Israeli occupation of the conquered Arab territories during the war increased Israel's territorial size (see Table 1 and Map 2) and given her more securely defensible borders. These occupied territories were vital to Arab economy. The occupation of the Golan Heights, Judea and Samaria, Gaza and the Sinai transformed the Israeli economic recession and social instability into an economic boom.

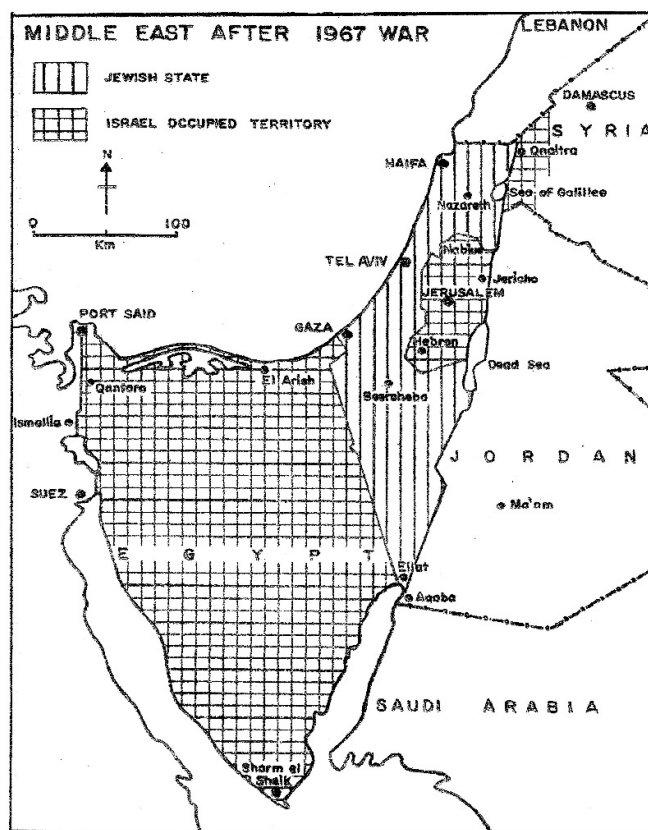
<sup>1</sup> In the 1973 Yom Kippur War this was lowered to one in every 100 sorties. The Jerusalem Post December 5, 1973 p.2, quoting the American weekly Aviation Week.

<sup>2</sup> The Phantoms were not in use in 1967, but the Mirages were, which were equally effective.

Table 1  
 The Occupied territories

Occupied Territories	Area (sq. mi.)	Population
Golan Heights	4.44	Not Available
Judea & Samaria	2,270	623,600
Gaza	140	379,300
Sinai	23,622	Not Available
Total	26,036.44	1,002,900

Source: Israel Government, Ministry of Defense Four Years of Military Administration 1967-71, Data on Civilian Activities in Judea and Samaria, the Gaza Strip and Northern Sinai (Jerusalem Government Printer, 1973), pp. 15& 144.



Map 2: Middle East After the 1967 War

Original by Nabeel Jurdi, Ph.D. Reproduced by Michael Bozeman, Ph.D.

There were many lessons to be learnt by both sides following this third confrontation. The Israelis learned the importance of air supremacy and the necessity of avoiding and destroying guided missiles. They also learned that tanks could smash their way through almost anything, so that in the future they would put more emphasis on armour.

The Arab troops again lacked the aggression necessary for good performance in battle. They lacked interest, aptitude and judgement and this, coupled with poor morale, spelled defeat. They realized that the first requirement of an effective army is to be highly trained and well led. As a result, training was intensified and new officer training colleges established. It also became apparent that the Arabs were incapable of competing tank for tank and aircraft for aircraft in close combat with the highly efficient and daring Israelis. A different, more effective means of fighting had to be found. Weapons such as the "Sagger" anti-tank missile and the sophisticated SAM missile systems would have to be perfected.

Apart from the many factors that have helped the Zahal (IDF) to be a superior fighting force during the past military confrontations ('48-49, '56, '67), one element stands high. This is the Israeli knowledge of Arab military forces; their number, training methods, organization, fighting ability in the air, at sea, and on land; and the type of weaponry used in the battlefield. On the other hand, the Arabs' knowledge of the IDF had been slight.

There is an old proverb that says “know your enemy”, but to know one’s enemy one should first know himself. What the Arabs knew of themselves in the last three wars was little enough and what they knew of the Israelis was even less. The image which the Arab world had created about the Israeli soldier, his strength, leadership and ability to fight was distorted. They looked at him as a weak, humble, and as a “contract” soldier. On the other hand, the Israeli Intelligence Unit had exactly the same distorted image of the Arab soldier: that he was backward, inferior, cowardly, and lacking the ability needed to master the new strategic, sophisticated weaponry. For this mistake the Israelis paid dearly later, and they have found that the big gap between the Arabs’ social and technical structures is narrowing much more quickly than they had expected.

The Arab Armed Forces, and particularly Egypt, were in bad straits in 1967-68, but they seemed to have the determination to organize and develop the necessary skills. The army began to build up a little during the fracas in 1968-69, and then diminished again when the Israelis made many over-flying raids into the Nile Valley and deep into Egypt. Egypt’s main objective during 1968 was to play a waiting game. The army was broken and the ruling establishment was in severe trouble, maintaining a hold on power only with the utmost difficulty. Militarily, it was strengthening its defences all along the Suez Canal, and the foundations of a modern army were being laid.

Following 1968 and prior to the Yom Kippur War in 1973 – a period known as “no war-no peace” – two main military and political events took place that set the stage for the fourth Arab/Israeli War. The first resulted from the June 1967 war, the occupation of Arab territories that was to become the main political issue for any Arab/Israeli settlement. The second was the “war of attrition” which took place during 1969-70.

Immediately after the Six Day War, and particularly during the “war of attrition”, a massive campaign was launched to give the Egyptian army a thorough, overall re-organization, re-equipping and re-training. Hundreds of Soviet experts were imported to supervise a rigorous training program, which included the establishment of military colleges for officers. Not only were recruits taught strategy, logistics and tactical information, but they were also required thoroughly to learn the mechanics of the new Soviet-supplied equipment. During this period, the Egyptians learned the value of ‘shock effect’ through use of tanks and artillery, a strongly endorsed Soviet tactic. The Soviets did not believe in self-propelled artillery and have none, so the Egyptians went without also. At that time the Egyptians employed Russian methods all along the front lines particularly along the Bar-Lev Line, a chain of fortifications dug by the Israelis along the Eastern Bank of the Canal during 1969. They used artillery barrages fired from mounted static positions on the west side of the Suez Canal, and by the end of 1969 these had caused much damage to the Israeli-occupied side of the Canal. Israeli victims in the Canal region and on the West Bank frontier amounted to 350, including more than 50 civilians and more than 1500 wounded. Terrorist attacks alone cost the lives of almost 100 soldiers and 40 civilians.<sup>1</sup>

Israeli strategy is in accordance with American beliefs, being based on offensive action, mobility, and technology (but the Americans go further in command and control devices, comfort and technological gimmicks). During 1969, the Israelis launched a program of “escalation for the sake of de-escalation” that was intended to cause the Arabs to voluntarily reduce the level of hostilities. A prolonged series of punitive and damaging raids were made into Lebanese, Syrian and Jordanian territory, but the most spectacular was an amphibious assault on Egypt across the Gulf of Suez which resulted in the killing and wounding of several hundred Egyptians within a ten-hour period. Unfortunately, this policy had the opposite effect to that intended, for these strikes boosted the moral of the Arabs and restored their determination to resist.<sup>2</sup>

It was during the “war of attrition” that the idea of crossing the Suez Canal was formulated. While the Egyptians were continually attacking Israeli soldiers behind the Bar-Lev Line they were also practicing Canal crossings using new bridging techniques and Russian equipment specifically designed for the purpose. Time and again the bridging procedures were practiced by the army, until they became almost a conditioned reflex. Their drills were held at El-Ballah, where the Canal forks for a few miles and where the Egyptians still controlled both banks. This gave them the opportunity to practice in the water currents.

During these extensive military operations, the Egyptian officers and soldiers were trying to restore some of their lost pride and fighting credibility, and to prove that they were not inferior to their Israeli counterparts. During 1967-70 the Egyptian military establishment was requesting from the Russians more advanced missiles to be deployed on the West Bank of the Canal. The Russians only agreed to offer the SAM-2 and SAM-3 missiles.<sup>3</sup> In January 1970 President Nasser and his Chief of Staff, General Mohammed Fawzi, left on a secret

<sup>1</sup> The New Leader Vol.52, No.19, October 13, 1969, p.9.

<sup>2</sup> See Dwight J. Simpson 1970 “Israel: A Garrison State” Current History (January), Vol.58, No.341, pp1-6 & 47, for a more detailed account of this policy of “escalating to deescalate”, a method also employed by the United State in Vietnam against the North Vietnamese and the Vietcong.

<sup>3</sup> The SAM-3 “Goa” is a surface-to-air close range missile for use against low-flying aircraft. It is controlled from the ground by a radar system which tracks both missile and target, calculating the missile’s path. It has a range of seventeen miles. The SAM-2’s and SAM-3’s are cumbersome, taking eight hours to dismantle, and are essentially designed for fixed or semi-permanent sites.

mission to the Soviet Union, supposedly to request more advanced missiles to intercept the highly sophisticated Israeli Phantom planes which can fly at low altitudes. They did not receive these at that time, but a more important event took place following the visit when one of the most dangerous political strategies appeared in the Middle East in the shape of 17,000 to 20,000 Soviet military 'advisor' and 'technicians.' The Soviet advisors were mainly skilled in air defences and under their direction some 65 missile sites were built. Two hundred jet pilots, manning five MiG-21 squadrons, also arrived to provide protection for the missiles' air defense screen.<sup>1</sup> Israeli intelligence knew of the missile sites, but did nothing about them at the time.

The cease-fire that was finally reached at the beginning of August 1970 permitted the IDF to reinforce its resources and weaponry and to integrate highly sophisticated equipment into their combat inventory on a heretofore-unprecedented scale. Between 1969 and 1970 the Israelis received delivery of 74 F-4E Phantom tactical fighter aircraft and 100 A-4S Skyhawk tactical bombers (both American-made). The Phantom is a strategic multipurpose aircraft which when fitted with a revolver cannon exceeds the rate of fire of the MiG and Mirage by four times. This represents a great tactical advantage. It can be fitted with nuclear weapons. The Skyhawk is a lightweight attack aircraft for land-based or carrier operations and is adept at rooftop flying to avoid radar-controlled defences. The Israelis became better prepared and more confident, and their deterrent power was thus increased, with the use of such fine aircraft.<sup>2</sup> It is important to quote fully here the speech of Israeli Foreign Minister Abba Eban given at a Labour Party debate, which outlined Israel's strategic doctrine from 1967 to 1973.

We had sufficient preponderance to deter any likely assault, or if any assault took place to defeat it with such speed and, therefore at such small cost as to strengthen our power of deterrence still further.

In that event, there would be no time or occasion for the conflict to get caught up in the Great Power rivalries, so that Israel's autonomy of political movement would remain intact. With no hope of changing the established situation by force, our neighbours would find negotiation to be their only option.

So long as this appraisal of the military balance was valid, all the other aspects of Israel's official policy were at least intellectually coherent. Israel's policy, diplomacy posture, as well as her social and domestic priorities all fell into place. Once the first link in the sequence of assumptions fails to stand firm, nothing else is solid. The whole chain comes under the need of review.<sup>3</sup>

By mid-summer 1972 the Russians had so many advisors and personnel in Egypt that they could have vetoed any military plans President Anwar Sadat might have tried to put into action. Sadat, unhappy over this situation and at the fact that he was unable to obtain from the Russians the requested large quantities of arms, ejected all Soviet military personnel and their families, 40,000 in all, in July.<sup>4</sup> He told the world that the Egyptians resented the Russian's arrogance towards them, and their attempts to dictate how they should use their arms.

In early 1973 Soviet-Egyptian relations improved somewhat when the Russians agreed to provide the Arabs with large supplies of the newly introduced SAM-6 and SAM-7 missiles. The development of these highly sophisticated surface-to-air missiles was an innovation in strategic weaponry. The characteristics of the SAM-6, "Gainful", and SAM-7, "Strela" missiles were not known to the outside world, since they were so newly developed that they had not appeared on any battlefield. The SAM-6 provides a rapid-reaction defense against aircraft flying at low and medium altitudes. At a speed of 2.5 Mach at a six-mile range, a pilot has just fifteen seconds to take evasive action (pilots rarely fly as fast as Mach 2.5 and never do so near the ground). Both missiles are highly mobile and 'home' in on the infra-red heat radiation of an aircraft's jet exhaust. The SAM-7 is so light that it can even be fired from the shoulder, although as a consequence of this lack of weight, its hits are not always lethal and it is only effective against subsonic aircraft.

The emergence of the guided missiles made the technology gap between the Arab and the Israelis much less relevant. In the case of a plane versus a plane it is important to have the better and more advanced plane; but when each side is using ground-to-air missiles against enemy planes the relative merits of the missiles become less critical. One can never say that a technology gap is completely inconsequential, but its significance is enormously diminished.

Concurrently, the Israelis were introducing a new high-speed long-range missile gunboat with heavy firepower in order to improve the country's military protection. The Reshef carries two 76mm deck guns, several heavy calibre machine guns, four depth charges and seven Israeli-made Gabriel surface-to-surface missiles.<sup>5</sup> The

<sup>1</sup> U.S. News and World Report July 31, 1972 Vol.73, No.5, pp 30-31.

<sup>2</sup> Israel Government Yearbook 1971-72 (Jerusalem: Government Printer), p. 106.

<sup>3</sup> The Guardian cited in Middle East International February 1974, No.32, p.16.

<sup>4</sup> The Lebanese daily paper Al-Anwar released so-called "new evidence" in March 1974 regarding the withdrawal of the Soviet advisors from Damascus and Cairo. The paper advocate that it was the Russian civilians who were withdrawn, not the advisors and technicians. The supposed pullout, the paper claims, was actually a part of the military and political strategy to indicate that with the Russian withdrawal, Egypt and Syria would be unable to maintain any offensive war against Israel. Al-Anwar "Dangerous Secrets on the October War" Beirut, Lebanon, March 1, 1974, No.4781, p.9 (in Arabic).

<sup>5</sup> The Los Angeles Times February 3, 1973, Part I, P.5.

Gabriel was developed as a counter to missile-launching ships such as the Egyptian Osa class, which sank the Israeli destroyer "Eilat" in 1967 and which operated on Israel's French-built Saar class gunboats until the introduction of the Reshef. The Israelis claim that the Gabriel's automatic homing guidance system is impervious to enemy electronic countermeasures.

The introduction of sophisticated weaponry by both parties, the continued occupation of Arab territories, and the existing policy of "no war- no peace" were the main causes of a fourth Arab/Israeli confrontation.

## 6. The Yom Kippur War

Methods of warfare have changed and the structure of armies has perforce changed correspondingly. The most profound change in the Egyptian and Syrian armies has been that they are now capable of a degree of technology which they did not have in previous wars, and which they could not have used had they had it. Today the techniques of war are heavily grounded in technology, and the whole procedure of training in the Arab armies had therefore to become more scientific. This is consistent with two factors: first, the Arabs benefited from several years of sustained and intensive programs of military assistance from the Soviet Union in the form of equipment, advisors and technical help. Second, the Egyptian and Syrian armies had to be trained to handle the more advanced equipment, and it is now apparent that they learned their lessons well.

The fourth Arab/Israeli confrontation, though very limited in its scope of operations, had international as well as national repercussions. It accelerated the start of the world energy crisis; brought the United States to a "level-3" worldwide alert; and produced the most serious rift between the West and Syria, who were aided by the rich Arab oil-producing countries of Saudi Arabia, Kuwait and Libya. The most dramatic change of this war was that the Arabs wanted to reverse the humiliation and defeats of 1967. They wanted in this context to teach the Israelis that they were brave rather than cowardly men; civilized rather than backward; superior rather than inferior. It is their success in this that has brought the Israelis back to their senses and to the conference table.

At present, it is very difficult to assess the military achievements of the Arabs in the 1973 war, since no one knows what their original objectives were. However, whether they won or lost tactically, the Egyptians as well as the Syrians were manifestly impressive. They fought extremely hard and with considerable military professionalism. For the first time since the creation of the Jewish State in 1948 the Arab governments have achieved a noticeable measure of cooperation and communication.<sup>1</sup> They have shaken the very foundations of Israeli defense thinking, which assumed that the Arab troops, being inferior, could never effectively employ modern strategic weaponry and methods of warfare. Given that assumption, the Israelis could afford to follow a strong diplomatic line and to continue to hold the occupied territories. In nineteen days of fighting the Egyptians and the Syrians had shattered the myth of Israeli invincibility and thus demonstrated serious flaws in the Israeli military structure. One Arab diplomat stated: "We may never be unanimous and we will probably never speak in one voice.... but for the first time we are now speaking against a common background and, with a few exceptions, for a common goal."

Whatever the circumstances, the Yom Kippur War will be remembered as Israeli's 'darkest hour.' With Egyptian and Syrian forces taking the initiative for the first time, the surprise attack on Israel by the Arab Forces was the first of its kind. The crossing of the unique<sup>2</sup> water barrier, the Suez Canal, and the capture of the Israeli stronghold, the Bar-Lev Line, was demoralizing for the Israeli Defense Forces. The Israelis had thought these to be impenetrable barriers and had hoped that they would secure their borders, but in a matter of hours they found that this was not so. In the process the Egyptians destroyed more than 100 Israeli tanks and assembled on the east of the Canal 500 of their own tanks and a complete missile system. On the Northern front the Syrian thrust came from the center, opposite Kuneitra and to the South. The deepest Syrian penetration was as far as Kafr Naffakh, less than ten miles from the key bridge over the River Jordan which connects the Golan Heights area occupied in 1967 with Israel proper. By their actions they "had, at a stroke drastically narrowed the performance gap, man-to-man, weapon-to-weapon, between themselves and the enemy which almost everyone took for granted. It was by any standards a great achievement."<sup>3</sup>

The Israelis also learned that the Arabs did not have to hold Sharm el Sheikh in order to block Israeli

<sup>1</sup> During previous Arab/Israeli wars, the lack of military communications was mainly due to the fact that the Arab armies, such as those of Syria and Jordan, remained strictly hierarchical bureaucracies. They demanded a large amount of paper work and "red tape" which extended the time taken to make important military decisions.

<sup>2</sup> The Suez Canal is unique because of the steepness and irregularity of its banks, which prevent amphibious vehicles from either descending into or ascending out of it without the provision of some type of gangway. On top of these banks a sand embankment 30 to 60 feet high had been built as part of the defenses of the Bar-Lev Line. The Israelis had also added so-called secret weapons at each strong point along the Line-tanks with 200 tons of oil which could be pumped over the surface of the water. When ignited the oil would turn the Canal into a moat of fire. The Arabs knew of these tanks and managed to sabotage the pumps prior to the crossings, thus rendering them useless.

<sup>3</sup> Newsweek December 24, 1973, p. 16. Once the fighting began eight Arab nations sent combat-armed forces to aid Syria and Egypt. Even Iraq, which only weeks before had been on the verge of outright hostilities with Syria, shipped in troops.



shipping, for a blockade could be set up in the Bab-el-Mandeb Straits which would be just as disruptive. The Arabs succeeded in showing how Israel's formidable defensive strategy could be destroyed by the ingenuity of modern and sophisticated weapons. The present military situation has now given a new face to warfare in the Middle East, a new element of importance in the battlefield and a psychological boost to the morale of the Arab commanders and their soldiers. General Dayan now speaks of a better Arab soldier. He says:

The surprise lay not only in the event of attack but also in the quality of the Arab soldiers and the type and plenitude of their weapons. The Israelis pay tribute to the bravery of the Egyptian infantry men... These were different men from those of 1967. This time they stayed and fought, and when they were forced to withdraw they did not throw away their boots and run. This time they withdrew properly.<sup>1</sup>

The Arab plan of attack was perfectly executed and the timing was ideal. Intensive training under realistic conditions had allowed the soldiers to gain experience under conditions faced in actual war. The Canal crossing was practiced hundreds of times and even a mock-up of the Bar-Lev Line had been erected so that the engineers could practice assaults over it. The stage had to be perfectly set for the actual crossing: a moonlit night with a moon rising at a certain time, a night when the water currents in the Canal would be suitable for the crossing operations. They wanted a night when the enemy would be completely unprepared and they wanted it to be during the month of Ramadan, so as to catch the Israelis completely unawares. The night of October 6th seemed to fill all their criteria, especially since it fell on the eve of an important Jewish holiday.

Israeli military opinion had always expected that any planned offensive against them would take place within a limited front. They assumed they would be able to detect such an offensive in time to use their superior air force and mobile tanks and artillery to quell it before much damage was done and before the enemy could gain much ground. In this case, Israeli expectations were wrong as the elusive Egyptian offensive was launched all along the front line. Israel was so surprised by the enormity and scope of the offensive that during the first few days she did not know where, when or how to mount her first counter-attack. The fact is that Israel had to regain that initiative, and thus the war was prolonged slightly. Israel ran into trouble. There was a great deal of over-confidence in the Israeli Army.

In the October War the Israelis found that the SAM-6 and SAM-7 missiles could not be easily dealt with. To insure against the use of the same jamming techniques the SAM-6's guidance radar could be switched to different frequencies during the early part of its flight, which depended on radar guidance. In the final stages, however, the new missiles operate by homing on to the aircraft with heat-seeking infra-red sensors which would guide the missiles to the hot exhaust of the planes' jet engines. The Israelis tried several different counter-measures. At one point, they tried pouring out of the aircraft large amounts of thin metallized strips called "chaff" which had been 'tuned' to a multiple of radar wavelengths in the hope of blurring the plane's radar image. This proved ineffective because the exact wavelength of the SAM's radar was not known. They also tried dropping high heat intensity flares from the planes to act as a decoy to confuse the heat-seeking sensors, but again this was ineffective because the Russians had equipped the sensors with filters that could distinguish between infrared frequency from jet exhaust and the lower frequency of the flares. They also tried turning violently into and across the missiles' path with the aim of breaking its homing lock, but to no success.<sup>2</sup> In fact, the Arabs had the ZSU-23 anti-aircraft gun, which shoots 4,000 shells per minute, to use against the Israeli planes when they dived low to avoid the on-coming missiles. During the first week of the war around 80 Israeli planes were lost, the clear majority due to the combined use of the SAM-6 and the ZSU-23 (and overall approximately 150 during the entire period of the war). This was twice as many as were lost in 1967, when the Israelis lost 2.0 aircraft per 100 sorties. In 1973, however, the Israelis made more than 11,000 sorties, four times the 1967 number, so that they lost only 0.9 aircraft per 100 sorties.<sup>3</sup>

The Egyptians did come across one important tactical problem with the use of the SAM missiles. This concerned air reconnaissance. Because of poor communication between Egypt's air force and her air defences, several Egyptian planes were also shot down by the SAM-6, which cannot distinguish friend from foe. Newsweek magazine claims that 40 of the 120 Egyptian planes lost and four of the twelve Iraqi planes were shot down by the Arabs' own missiles.<sup>4</sup> The overwhelming point is that through the use of these new SAM-6 missiles Arabs have found a very important antidote to Israeli air power. In 1967 the Egyptians may have run under the weight of the air power directed against them, but any army in the world would have done so under the same

<sup>1</sup> The Sunday Telegraph December 9, 1973, p. 7.

<sup>2</sup> Insight Team 1974 op. cit., pp.95-97. The Americans had hoped the Israelis would be able to capture a SAM-6 missile intact so that it could be examined and effective counter-measures designed to jam its radar guidance system for the future. The Israelis were successful in capturing some damaged SAM-6's that had been left by the Egyptians, but the vans which contained their guidance equipment had been removed. The Jerusalem Post Nov.28, 1973, p. 1. Conversely Syrian troops had managed to capture from the Israelis top secret American electronic and radar equipment on Mount Hermon which was quickly turned over to Soviet Technicians The Guardian Jan.11, 1974, p. 4.

<sup>3</sup> The Observer Review December 9, 1973, p.31.

<sup>4</sup> Newsweek November 26, 1973, p. 11. The article did not quote Newsweek's source, however.

circumstances in an open desert landscape that does not offer the same protection as the jungles of Vietnam.

There are many arguments as to why Israel did not strike first this time, as they had in 1956 and again in 1967. Was it because of Israeli military strategy or because of the Egyptians' deception of that strategy? Did Israel know about the attack but not want to believe it, or, due to mistakes in her intelligence unit, did she find out too late even to act effectively? Was it that the Arab society is more mature today than in the past, and that this was reflected in the Arabs' military performance? Or was it a combination of all these factors? One thing seems certain and that is that Israeli intelligence has not maintained its previous superiority. For the past, few years, Israeli intelligence had been concentrating on Palestinian commando activities, domestic and abroad. And since manpower in Israel is low the Israeli intelligence staff has had to withdraw a considerable number of its political agents from Arab countries. From experience Israel thought the Arabs could not wage both a conventional war and terrorist activities successfully and contemporaneously. The most important aspect, however, is that Israel ignored the accelerating role of Arab social progress and military preparations.

A good intelligence service will gain its information through bribery of people in the opposing society. A major reason why Israel's intelligence, having been super active in the past, and finding things harder now is that today, is they are finding it much more difficult to bribe prospective informants in Cairo and Damascus. Not long ago they used to be able to find out what was happening in Arab cabinet meetings and Arab summits. This astonished not only the Americans but the non-Arab participants as well. It is very clear that just before the Yom Kippur War Israeli intelligence had no information on cabinet discussions in Arab capitals.

Israeli intelligence did observe an Arab build-up, but what they did not anticipate was a coordinated attack. One does not know for certain that no Israeli intelligence officer predicted such an attack, but intelligence information is very often ignored. For example, the Russian Intelligence Service was clearly warning Stalin of German plans in 1941, as was the British Intelligence Service through the British Embassy in Moscow. Stalin was receiving endless intelligence reports on the invasion and at one level his mind accepted the warnings, so that he pleaded with the Germans not to upset their good relations. At the level of making concrete military preparations against invasion his mind refused to receive the warnings.

The same thing seems to have happened prior to the October War. After 1967, Egyptian activities along the Canal were viewed lightly by the Israelis. Every autumn the Egyptian army held manoeuvres and when armour began assembling at the end of September it was apparently thought that such exercises were going to be held again. The Israeli army had even ignored the advent of new embankments and fortifications that had been erected in the previous nine months, thinking that they were merely an exercise to keep the Egyptian troops occupied. The American Central Intelligence Agency (CIA) noted the enormity of the formations, which were reaching division size, and were concerned about the extensive logistical support that was surpassing that of previous years.<sup>1</sup> They continually warned the Israelis of this, but they continued to reject the idea that an assault was expected. It seems apparent now that for some reason the Israelis simply did not want to believe the intelligence reports. Shimon Peres, Israeli Minister of Transportation, claimed: "One of the problems was that we didn't want to believe our own intelligence, we didn't want to believe that Sadat was going to do it."<sup>2</sup> Abba Eban said, "The Ministers of Defense knew of enemy concentrations but couldn't accept the verdict of immediate war."<sup>3</sup>

Perhaps if the Israelis could have intercepted actual command orders, or had been able to record messages transmitted between Arab capitals as in the past, they would have been able to accept their intelligence information. But for the first time the Arabs did not reveal their attacking plans. This time there were no war dances, nor a publicized "year of decision." In a speech given prior to the war Sadat never even mentioned war details:

Brothers and sisters, perhaps you have noticed there is a subject which I have not broached. This is the subject of battle. I have done this deliberately. We know our goal and we are determined to attain it. We shall spare no efforts on sacrifices to fulfil our objective. I promise nothing. I shall not discuss any details. However, I only say that the liberation of the land, as I have told you, is the first and main task facing us. God willing, we shall achieve this task. We shall realize it and we shall attain it. This is the will of our people; this is the will of our nation. It is even the will of God.<sup>4</sup>

<sup>1</sup> On September 26, the Americans launched a SAMOS reconnaissance satellite on orbit over the Middle East to observe Arab preparations and for future intelligence missions. The Americans and the Russians received their intelligence through satellite reconnaissance. The Egyptian's preparations must have been extremely subtle for satellite reconnaissance to fail to pick up any sign of the Egyptian offensive that was about to take place. I believe that the later stages of the Egyptian maneuvers probably were observed. See the Sunday Times (London) April 7, 1974, p. 11. For more study on the uses of satellites for military operations see: Neville Brown 1971 "Military Uses of Satellites" in David Fishlock, ed. A Guide to Earth Satellites (London: MacDonald), pp.121-133.

<sup>2</sup> The Sunday Telegraph December 9, 1973, p.7.

<sup>3</sup> Ibid.

<sup>4</sup> The Sunday Times December 9, 1973, p. 34.

There was also a military error in that Israel was surprised that the Egyptians were able to cross the Canal in so short a time. According to General Dayan the Israeli engineers had calculated that it would take twenty-four hours to establish bridges across the Canal and that heavy equipment could not be got across the Canal inside of forty-eight hours. This would give Israel enough time to move its armoured reserves to the front lines.<sup>1</sup> The Israeli engineers also thought it would take quite a long time for the Egyptians to solve the problem of the great sand barriers that were built along both sides of the Canal. They never envisaged the Egyptians finding a way to break through the barriers so that tanks and other equipment could be taken through to the Canal in a few short hours.<sup>2</sup>

The present perception of Israeli military and intelligence failure generally has drawn attention away from the vital role played by the Arab soldiers and officers alike on the battlefield. Israel has tended to assume that there exists one and only one power in the region capable of imposing its will upon and dictating to the others. This was, and still is, Israel's first and foremost mistake. After 1967 and during the "war of attrition" the IDF had mainly restricted itself to developing into a suitable instrument for the implementation of a deterrent strategy. Such a strategy has the aim of punishing the opponent and overpowering him based on the past experience that the Arab armed forces were unable to put together a coordinated offensive, nor had they the ability to take any decisive or successful military decisions. Israel's basic assumptions and tactics, built on her experience of the past situation in the Middle East, have much to do with her present failure. The Jerusalem Post writes:

We would deceive ourself [sic] if we attribute the failure to specific individuals or to military intelligence.

Investigations may show some mistakes, but also it is possible that investigations might show few obstacles that we have no solutions for.<sup>3</sup>

The 1970s Egyptian army is undoubtedly better than that of 1956 and 1967, but further improvement is still necessary. On the Israeli side, the over-confidence that was so apparent after 1967 has started to disintegrate somewhat. Israeli morale was in many places very low during the early days of the October War, but it improved again which General Sharon "pulled the rabbit out of the hat" with his assault and daring crossing of the Canal. It has been a truism of war for 2,500 years that it is very dangerous to be in possession of the further side of a waterway.<sup>4</sup> Many people say that the Egyptian army should have deployed farther to the South, it was too hesitant.<sup>5</sup>

The Zahal (IDF) had proved its worth and superiority once again by its ability to counter-strike successfully on both the Egyptian and Syrian fronts. But they were very unhappy about the high losses of both equipment and men. Many tanks and planes were lost to weapons such as anti-tank and anti-aircraft guided missiles, whose importance the Israelis had underestimated. The Israelis knew from the "war of attrition" of the Arabs' Russian-made Sagger anti-tank missiles,<sup>6</sup> and they failed to change their tactics to account for their effect. In the first three or four days of battle they suffered heavy losses that could have been avoided had they altered their battlefield tactics and sought a means of 'deflecting' the missiles. The Israelis have long worked on the premise that you fight tank against tank, plane against plane, man against man; and the introduction of these missiles has caused a few Israeli strategists to stop and think. Hesitation on the battlefield could be very costly indeed. Both sides used tanks very freely in the recent war and both sides had a few anti-tank guided missiles. Probably they realize now that they might have been much better off had they had more anti-tank guided missiles and had they used their tanks more carefully.

The 1973 war has left many unsolved problems. In this war the Egyptians feel that they have been deceived in the question of the cease-fire. They agreed to the cease-fire and then the Israelis violated it, resulting in three more days of fighting and the loss of 67 square miles of land. This is the third time that this has happened. The Egyptians felt that they did their part and that the Israelis "beat them to the punch" again. The Israelis did it at

<sup>1</sup> The Sunday Times December 16, 1973, p. 33.

<sup>2</sup> A young Egyptian officer in the engineering corps developed a new method of getting through such sand barriers by using high pressure water jet.

<sup>3</sup> The Jerusalem Post January 5, 1974, p. 3.

<sup>4</sup> Sun Tzu The Art of War (500, B.C.).

<sup>5</sup> For a detailed study of the breakthrough see The Sunday Telegraph Dec. 23, 1973, pp.6-7, or the Sunday Times Dec.30, 1973, pp. 29-30.

<sup>6</sup> The Sagger is a short range (1 mile) wire guided missile, which is carried in a "suitcase" which doubles as a launch platform. It is carried by one man and since it has such a short range the operator can be viewed by his target tank for a full ten seconds before the missile hits the tank, giving his opponent ample time to machinegun the operator. By their use of these weapons, there is no doubt that the Egyptian soldiers had gained much confidence and nerve. Later in the war the Israelis received the TOW, an American wire-guided missile which is more sophisticated than Sagger, having a telescopic sight and a minimum range of 700 feet, compared to 1600 feet for the Sagger. It is more cumbersome and expensive. Another important Arab weapon was the RPG-7V (Rocket- Propelled Grenade), an anti-tank, bazooka-type launcher fired from the shoulder. It was capable of blowing the turrets off Centurions and Pattons, but had to be fired from no more than 300 yards in order to be effective. Again it took great courage for the operators to face tanks at such close range.

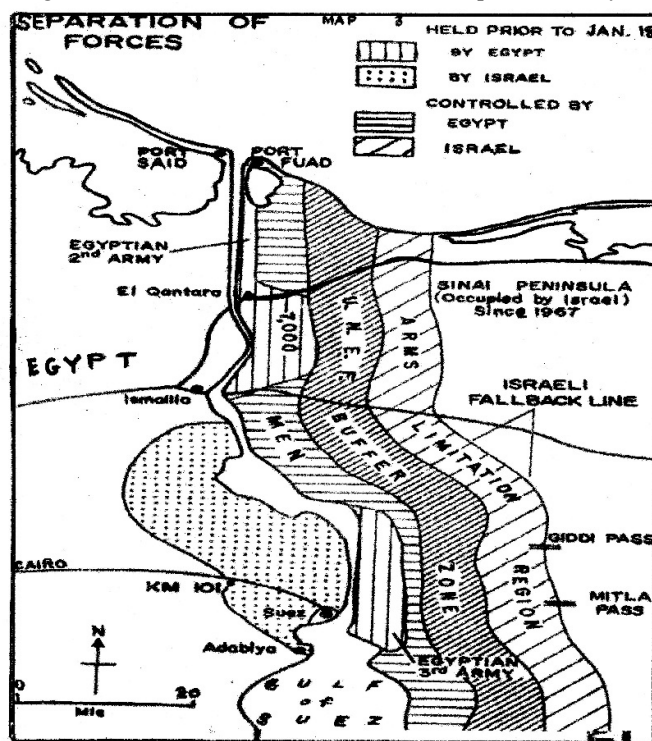
the end of the 1956 war and they did it again in the Golan Heights in 1967. The 1973 conflict ended with an agreement in principle signed by the Israeli and Egyptian Chiefs of Staff on Friday, January 18, 1974, concerning the disengagement of forces along the Suez Canal front (see Map 3). Similar agreement in principle has been signed by Israel and Syria providing for disengagement in the Golan Heights area (see Map 4). What has not been decided, however, is the eventual price of disengagement. After disengagement, General Sharon and other key figures in the Israeli Knesset, especially in the right-wing Likud Party, were angry over the agreement signed between the Israelis and Egyptians. Sharon stated,

We are withdrawing now without peace. We are withdrawing now without Egyptian declarations of non-belligerence. We are allowing Egypt to post 7,000 soldiers with artillery and tanks on the Eastern side of the Canal.<sup>1</sup>

The Israeli Digest goes on to say that,

Because of the fortunes of war, Israel is prepared to accept an Egyptian military presence on the East bank, something which it did not countenance in 1971.... The result is a political and strategic advance of major proportions for Egypt -which makes sense for Israel only if it is assured that the advance will not simply be parlayed into a better starting point for new war or better leverage to push Israel back to the 1967 borders.<sup>2</sup>

In Tom Schelling's Arms and Influence the author, has addressed himself to what he terms "compellence." His theme is that it is much less difficult to deter one's protagonists from doing certain things than it is to compel them to adopt other courses of action. This notion seems particularly relevant at the present. The Israeli preponderance of military might, which enabled them to deter or contain any Arab military action, does not allow them to obtain an Arab acceptance or recognition. This result could be a crystallization of the present cease-fire lines and thus the end of the concept of Israel as a state that is at once Jewish and democratic. "The whole thing seems to me to be an almost classic example of military hubris giving way to political nemesis."<sup>3</sup>



Map 3: Separation of Map Forces

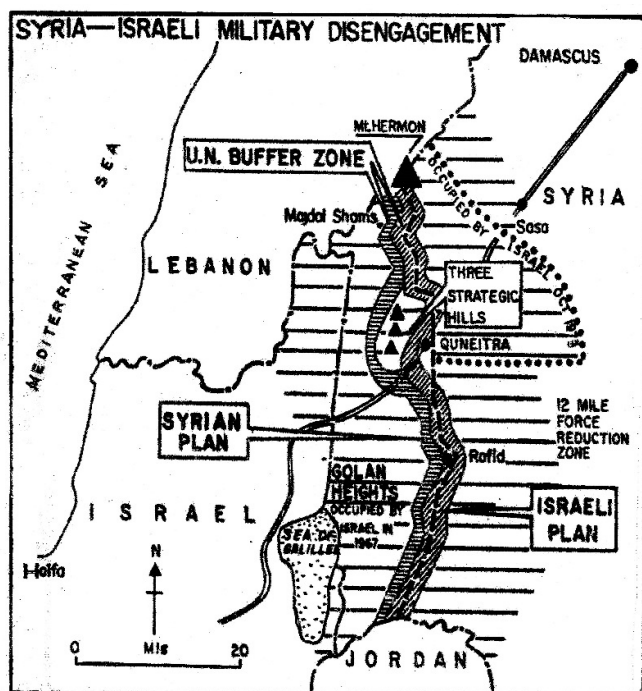
Original by Nabeel Jurdi, Ph.D. Reproduced by Michael Bozeman, Ph.D.

<sup>1</sup> The Guardian January 21, 1974, p. 2.

<sup>2</sup> Israeli Digest January 18, 1974, Vol XVII, No.2, p. 1.

<sup>3</sup> Neville Brown. Tape recorded interview with this writer, November 22-23, 1973.





**Map 4: Syria – Israeli Military Disengagement**

Original by Nabeel Jurdi, Ph.D. Reproduced by Michael Bozeman, Ph.D.

## 7. Conclusion

The Israeli military and strategy from the past until the present has always been to take the military initiative, to be better trained, better prepared, better equipped and better led than the enemy. Israel has aimed to pick off her enemies one by one, preferably on his own soil. Israel never seems to have had a long-term plan for peace. Her military techniques and strategy are linked to the country's survival, and are interrelated and cannot be worked separately. Twice since the 1973 war Israel entered into plans for peace with the Palestinians, neither of which were adhered to by either side. Israel is at peace with Egypt and Jordan. However a state of war still exists with Syria. Even if her military strategy changes, Israel will continue to need early accurate information on enemy capabilities and intentions. Israel, as well as the Arab states will continue to devote considerable effort to defense budgets to maintain and develop their armed forces.<sup>1</sup>

Israel's basic doctrines will be the same as they were in the past: speed, concentration, intelligence, accurate information, training and morale. Should another war break out the IDF is expected to wage it successfully, whenever and wherever it takes place. Israel also will devote considerable time on self-reliance, on the quality of weaponry and its continuous production, and on the maintenance of air superiority. These will, without a doubt, continue to be emphasized in the future. One important outcome of the October War is that many other Israeli basic assumptions and doctrines underlying its pre-war policies towards the Arab states proved to be invalid and need re-evaluating. The Yom Kippur War was, indeed, a test, an experiment of Israel's theories, which are partly military and partly political and psychological. The Zahal's deterrent image must be rebuilt.

<sup>1</sup> Israeli's 1974-75 defense budget totals £1,500m which is double the total of last year's budget and 40 per cent of the total draft budget. The Financial Times March 15, 1974, Jordan's 1974 budget shows a 16.8 per cent increase in defense expenditures with a total of \$130m allocated for the armed forces. Jordan has built up its armed forces into two infantry divisions, one mechanized division and two armored divisions. Under the 1970-73 program (which was not completed because of the war) the Jordanian army will be transformed into two mechanized divisions and three armored divisions. The air force will add on two squadrons of Northrop F-5E fighters and one squadron of 'Huey' helicopter gunships. The estimated cost of this program is \$300m for the army and \$100m in aircraft costs along with an additional minimum of \$50m for aircraft spare parts and training programs. Sketch February 22, 1974 Vol. II, No.46, p. 9. Syria has earmarked nearly \$500m for defense expenditure in its budget for 1974. This year's defense appropriations were \$32m more than last year's figures. Total budget sized jumped from SL 4321m in 1973 to SL 6480m in 1974. Sketch February, 1974, Vol. II, No.45, p.22.

Egypt's 1974 budget has two main targets. The first is to continue giving priority to military expenditure and 18 per cent of the total budget, EL 760m, has been earmarked for this purpose. In addition, an "emergency budget" of EL 465m was allocated mainly for defense purposes. Military expenditures will continue to have priority, which puts a heavy burden on the Egyptian economy as a whole and especially on its development efforts. The Arab Economist (Beirut) Vol.VI, No.60, January 1974, pp. 16-18. See also The Arab Economist Vol. VI, No. 59, December 1973, pp. 64-65.



Israel's pre-war deterrent formula assumed that intelligence units would give Israel enough of a warning period to launch the first attack by air, followed by a massive armoured offensive. This formula was successful in 1967, but it backfired in 1973 losing its credibility, which caused the IDF to lose much of its power to deter. This may prove to be its biggest loss of the war. The Arabs understood that to maintain the status quo with a large quantity of troops massed behind their lines would force Israel to remain in a semi-mobilized state which would stretch Israel's limited economic and manpower resources almost beyond endurance. Their deterrent image was subsequently re-established so that the Arabs do not think Israel is weak, although the 2006 invasion of Lebanon indicated some problems with Israeli tactics. They must find some way of convincing the Arabs that the Middle East question cannot be solved through continued military and time-erosive tactics.

Not all the theories on which Israel's security was built collapsed during the Yom Kippur war. The theory of secure borders and strategic depth should again be emphasized in the hope of keeping any future wars away from populated areas. If the occupied territories in Sinai were returned Israel would again find the Arabs within "spitting distance" of her major cities. The advent and availability of Russian missile technology to Iraq proved a danger to Israel in the 1991 Gulf war. Continuing development of offensive missile and nuclear capabilities by Iran pose a grave danger to all Middle Eastern countries. In theory, the pre-emptive strike which had proved itself militarily correct in the June War is still correct, but it will need re-evaluating, especially politically. It can no longer be applied automatically whenever Israel feels an Arab offensive or Persian threat is eminent. Although, Israel has pre-emptively struck and destroyed both the Iraqi and Syrian nuclear facilities. To continue to apply such unilateral force may brand Israel as the perpetual aggressor that could be viewed with disdain by the world's (and especially American opinion under Obama) public opinion.

The theory of self-reliance must be stressed in all fields. This has been realized in the manpower field, but it has certainly not fallen short in the arms and weapons field, and in fact, in most spheres of warfare production. This can be seen in the massive amounts of equipment and sophisticated arms that had to be imported from the United States during the October War in order to cope with the advanced weaponry being used by the Arabs. Starting on October 14 and lasting for 33 days, 22,500 tons of arms were airlifted from the United States to Tel Aviv. Included in the cargoes were M-60 heavy tanks which are a 48 ton Patton mounted with 105mm guns, M-48 medium tanks, CH53 "Jolly Green Giant" helicopters, 175mm cannon and 155mm howitzers. Also airlifted were tail sections for A-4 attack bombers, fuel tanks, tents, aircraft engines, medical supplies and spare parts of all types.<sup>1</sup> The need for such massive supplies barely a week after the start of the war proved that Israel was still highly dependent on others. Self-reliance has since been a major goal of Israel and they have achieved this in armour, aircraft, missile defence, naval capability, and in development of a feared (but never acknowledged) nuclear deterrent.

Commenting on the invalidity of Israel's security doctrine after the 1973 war, Abba Eban stressed that it was apparent that Israel's pre-war policies had become obsolete. One of the reasons he gives for this is that Israel's assessment of the war results in 1967 had not been "an authentic or permanent reflection of the real military balance...If the gap is wide we should not believe that it is unlimited or infinite."<sup>2</sup> He also warned of the dangers of over-confidence and stressed a number of "illusions" which had sprouted on the fringes of Israel's political life:

- The illusion that the cease-fire could exist indefinitely in a political vacuum;
- The illusion that a million Arabs would be kept under Israeli control forever provided their economic and social welfare impressively advanced;
- The illusion that Zionism forbade a sharing of national sovereignty between two nations in Palestine.<sup>3</sup>

For the past forty-five years' military resolutions have been tried, but brought ill intentions, more disputes and created new wars,<sup>4</sup> but the only military option that has not been used by Israel is nuclear weapons. Moreover, if a fifth Arab/Israeli war occurs, it would not be hard to assume what shape it is likely to take-a fifth war will take the form of a quantitative escalation. The sophisticated weapons supplied to both parties by the Russians and the Americans before and after the Yom Kippur War, and since the collapse of the Soviet Union, has brought the nightmare of a nuclear confrontation much closer to reality. The Egyptians and Syrians are known to possess Soviet-made SCUD long-range missiles (185 miles); Iraq's similar weapons were destroyed by the U.S. in the 1991 Gulf War; yet Syria has repetitively demonstrated the ability to deliver chemical weapons on targets within the current Civil War. There is no evidence that the Arabs have nuclear warheads for these missiles, but they do have high-explosive warheads for them.<sup>5</sup> The Israelis are known to have the French-made

<sup>1</sup> The Los Angeles Times January 6, 1974, pp. 2 & 24.

<sup>2</sup> The Jerusalem Post January 15, 1974, p. 1.

<sup>3</sup> The Jerusalem Post January 15, 1974, p. 1.

<sup>4</sup> Through the four major Arab/Israeli wars military brilliance and talents were displayed, as well as defeats; military disengagements have been tried, cease-fires and armistice agreements were left. Some left their marks, but none yet have resulted in a settlement of the conflict.

<sup>5</sup> The International Herald Tribune January 11, 1974, p. 2.

MD 660 “Jericho” solid fuel surface-to-surface missile which is capable of carrying nuclear warheads.<sup>1</sup> It has a range of 300 miles, which would put it in firing distance of all Syria, Jordan, northern Saudi Arabia, western Iraq and into the Egyptian heartland. It can be fired from a mobile ramp and carries a 1200-pound warhead. Thanks to its high cost, there is no point in using the “Jericho” for anything other than nuclear warheads. The Israelis also have a French constructed 24-megawatt nuclear reactor at Dimona, which means they have the capacity for making nuclear weapons.

There is evidence that nuclear weapons have been manufactured in Israel, but never have they been acknowledged. Israel has the capability, the money, and the delivery means in the Phantom, Falcon, and Skyhawk aircraft.<sup>2</sup> Israel’s air force not only has these jets from the United States but also has now put its own supersonic jet into mass production and possesses warships equipped with ship-to-ship rockets.<sup>3</sup>

In the future, the United States may not continue its vast military support of Israel as was experienced during the Obama Presidency. SALT (Strategic Limitation Talks) significantly restricted some military support and interaction amongst the agreeing parties. Following the end of the Cold War the size of American military forces overseas declined and the capabilities of the United States to support its Middle Eastern policy with force was affected. As a result, the Israelis may conclude that America was trying to disassociate itself from the security of Israel and that American strategic power had been neutralized. Israel most certainly developed its nuclear capabilities further in order to exploit its potential as a bargaining instrument for a settlement. This, in turn, persuaded the Arabs to negotiate a compromise settlement.<sup>4</sup>

The Israeli strategy moved to a more defensive posture following the 1973 War. In other words, they relied less on counter-strikes for several reasons. Firstly, because of technical reasons already referred to and partly out of heightened respect for the Arabs. Furthermore, a counter-strike would be less acceptable to world opinion.

An additional technical option open to the Israelis was acquisition and deployment of anti-tank guided missiles and anti-aircraft missiles. Both these are extremely useful but expensive weapons. Another important defensive weapon is the mine. The Israelis had laid an estimated 700,000 mines on the Canal front after the end of the October War and mine warfare has become a major post-conflict problem across the world. Modern mines are very sophisticated. They can be swept, but sweeping them takes a long time. What can be done to remove a minefield is to bombard it out of existence, but this is always risky because one cannot be sure that by directing a barrage of shellfire against it one is destroying every mine. If one follows the history of the Western Desert Campaign in World War II, when the Germans made a very dramatic breakthrough to Tobruk, in the middle of 1942, at one very important stage they used Stuka dive-bombers to blast their way through one of the British minefields. Minefields are not absolutely impregnable, but they can represent an obstacle. The future use of mines poses the possibility of serious manpower losses, which the Israelis are unwilling to countenance. This could in turn reduce their confidence in their own ability to win a “war of attrition.”

On the Arab side, certain important new weapons-both military and otherwise- were developed. First, the energy crisis threatened serious consequences in the United States in the 1970s-1980s. The continuing consumption and production trends made the United States very dependent on Arab oil until the end of the Twentieth Century. In fact, the United States was no longer self-sufficient and was importing half of its requirements of which two-thirds came from the Middle East during the 1980s. Secondly, the Suez Canal became an important bargaining point again. The Egyptians claimed that if they are forced to they would close it once more. After the war the conventional wisdom in the United States was that the Russians had no chance of rivalling America in the technological field, and that their authoritarian style of government prevented them from reaching such a position. The development of Russian missile and space research capacities has since undermined this earlier confidence.

The Russians developed the use of missile boats and the technology gap with the U.S. closed in coastal naval warfare. Their concentration on this field was not primarily the result of their desire to help the Egyptians but derived from their overall need to challenge the United States supremacy at sea. By possessing a rapidly growing naval and airlift capability the Russians were able to project their power and influence in such areas as the Middle East where Western leadership had gone unchallenged.

The Russians are, with their involvement in the Syrian Civil War, demonstrating both military technology and commitment to allies in the region, something that was severely lacking between the last Arab-Israeli War

<sup>1</sup> The New York Times July 18, 1970, pp. 1 & 8.

<sup>2</sup> For a detailed study on this subject see The Financial Times March 22, 1974, p. 8 under ‘Israeli Nuclear Potential in New Laser Technique’; The Financial Times April 9, 1972, p. 5 “Crucial Roles for the Atom”; The New York Times August 9, 1972, p. 7. Also, see Fuad Jabber 1971 *Israel Nuclear Weapons* (London: IISS); J. Bowyer Bell 1972 “Israel’ Nuclear Option” *The Middle East Journal* (Autumn) (Middle East Institute, Washington, D.C.) Vol.4, pp.379-388.

<sup>3</sup> The New York Times August 9, 1972, p. 7.

<sup>4</sup> From an unpublished paper presented to the Fifth International Arms Control Symposium, Philadelphia, Pennsylvania, October 16, 1971 entitled “SALT and the Middle East” by Winfred Joshua, Assistant Director, Strategic Studies Center, Stanford Research Institute, pp. 23-24.

and the present. Additionally, the Russians appear to be backing Iranian nuclear options, which has alienated the rest of the Middle Eastern countries. The big issue, and again a worrying thing to the Israelis, is that the Russians are an expanding power while, until the beginnings of the War on Terror the Americans were reluctant to be directly involved in the region except to counter Iranian influence.

How can we sum up the military situation in the Middle East as it affects the chances of achieving a settlement? Israel's main mistake of not achieving or reaching a settlement occurred just after the 1967 June War. The Israelis should have sat down with no prior commitments either way and saw if they could not hammer out an accepted settlement to the Middle East dispute, so all could live in peace. For a period of six to eight weeks after the June 1967 War, they would have got away with this. Nasser was in deep trouble; the Syrians were crushed and the Jordanians mostly hurt and defeated. An attempt towards a peace should have been decided upon then. If that had happened, the batteries would have come down and the Russians and Americans would not have been required to rebuild and redevelop the armies in such a way as they did.

The money that both Arabs and Israelis spent in the last forty years is staggering. Unless a durable peace is signed, with recognition of the State of Israel's right to exist, sooner or later the inter-country conflict between neighbours will resume. Currently the situation is one where the enemy of my enemy is my friend, to a certain extent. Except for the Palestinians in the West Bank and Gaza, and the armed Palestinians in Lebanon and Syria, there is no direct conflict between the Arabs and Israelis. They often work together and share anti-terrorist intelligence. This situation will be sustained for the duration of the Sunni – Shia conflict within Islam, and the continuing quest of Iran for nuclear weapons. Time is not on Israel or the Arab's side

Future researchers should take these conflicts into consideration when evaluating Middle East politics, security, strategies, and intelligence efforts. Without reference to past efforts and events, comprehending the future and working to mitigate against potential negative outcomes is essential. Additionally, with the rise of radical Shia'ism in Iran following the 1978-79 Revolution significantly exposed the vulnerabilities of Sunni Arab nations focused on the Jewish state in their midst to the troubles posed by their long-time Persian antagonists.<sup>1</sup>

#### Appendix A

The effect of the losses on the countries involved, and the gains made by Israel as a result of the Six Day War

All the Countries of the Middle East were affected politically, economically or socially by the June 1967 War. Defense expenditure rose following the war as the countries were re-arming and re-equipping their armed forces, either with help from the Soviet Union or with financial aid from non-participating countries, such as Kuwait and the United Arab Emirates. Tourism and trade also declined. The swift Arab defeat also had a strong psychological effect on the people in general, adding to their political and social instability. Egypt, Jordan and Syria were the countries most affected. The following is a brief outline of the effect of these losses on the countries involved, and of the gains made by Israel as a result of the Six Day War.

#### EGYPT

For Egypt, the direct results of the June War were:

The closure of the Suez Canal, the sharp decline in tourism, the loss of oil wells in the Sinai Peninsula, and the continuous increase in defense expenditure. All are placing a great strain on economic conditions in Egypt and are retarding the economic and social development growth of the country. However, the repercussions of the war were not only economic, as can be seen from the following:

#### ECONOMIC LOSSES

- A. The loss of the Gaza Strip and the Sinai Peninsula, an area of some 23,762 square miles, represented a loss of 20 per cent of Egypt's territory. Apart from the land itself, she was also deprived of about six million tons of oil per annum (which was exploited by Israel).
- B. The Egyptian economy failed to grow at a rate that could enable it to cope with the growth of the population. Egypt had been trying to raise the standard of living for its inhabitants, fight Israel and find a peace settlement all at the same time. The Research Department of the World Bank has revealed that the national product per person in Egypt has been as follows (in U.S. Dollars):

**1950- 120.00**  
**1955- 117.00**  
**1960- 121.00**  
**1965- 138.00**  
**1967- 127.00**  
**1969- 129.00**

<sup>1</sup> Janet Afary. Iranian Revolution of 1978-79. Encyclopaedia Britannica. Available at: <https://www.britannica.com/event/Iranian-Revolution-of-1978-1979>

- C. El-Arish, a connecting link between the Nile Valley and the Gaza Strip, suffered a grave economic blow and immediately after the June War when about 8,000 people who were in the Egyptian Civil Service and on public projects left the city and returned to the Nile Valley.<sup>1</sup>
- D. Gaza became the main port for trade, transportation and communication between Israel and the Peninsula.<sup>2</sup>
- E. The loss of revenue from the Suez Canal (which was closed at the beginning of the conflict) and from tourism was estimated at about £12 million per month. In 1966 revenue from the Canal alone amounted to £80 million, an increase of almost £10 million over 1965. In February, 1974 the Egyptians estimated that their total financial loss since 1967 due to the closure of the Canal was £1,200 million. The figure was computed from £200 million in direct material loss, £100 million in indirect losses represented by idle capacity and about £900 million in lost Canal tolls.<sup>3</sup>
- F. Income from tourism had been increasing rapidly, rising from about E£15 million in 1962 to E£50 million in 1966.<sup>4</sup> The decline in tourism was due not to the loss of land, but to political instability. Despite the present Egyptian campaign to recapture hard currency by means of package tours, reductions on hotel fares and greatly improved services, this sector remains static. Tourism did increase somewhat when political disputes closed the borders between Lebanon and Syria because the Saudi Arabians, Kuwaitis, Iraqis and other Arabs who had formerly summered in Lebanon chose Cairo and Alexandria instead. However, these tourists returned to Lebanon once the dispute ended.

### **PSYCHOLOGICAL LOSS**

The image of the Arab Republic of Egypt as the center of leadership and Arab nationalism suffered during the war. This greatly affected the morale of both the fighting forces and the civilians.

### **JORDAN**

The instability in the Middle East region that resulted of the 1967 June War undoubtedly affected Jordanian economic planning greatly and paralyzed the Kingdom's growth. The Israeli occupation of the West Bank divided Jordan into two sections, depriving the Jordanians of their rich agricultural resources. Also, it halted economic planning schemes between the East and the West Banks and shelved developments such as the potassium project and Jerusalem airport. It is difficult to give figures for the Jordanian losses, but the areas hardest hit can be seen from the following:

### **ECONOMIC LOSSES**

- A. The advent of about 400,000 immigrants from Gaza and the West Bank to the East Bank added to the large number of Palestinian refugees already present in the area and put a great strain on the already inadequate shelter and food provisions. Fifty years on this is still a major issue for the Palestinians, Jordanians, and Israelis.
- B. The main transport and communication routes that led to Jordan changed due to the closure of the Suez Canal. This resulted in a loss of Jordanian exports (particularly phosphates) to European markets.
- C. There was a drastic decrease in job opportunities on the East Bank because the Government had to stop development and planning in this area.
- D. The continuous increase in defense expenditure was only been made possible at the expense of economic and social planning.
- E. The economic impact of the 1967 war on East Jerusalem was far greater than on the West Bank because of Israel's decision to annex East Jerusalem a few weeks after the war. Tourism, commerce and construction in East Jerusalem constituted Jordan's economic base, so the Jordanian economy was seriously hurt by its loss. Tourist income slumped from 11.3 million Jordanian Dinars in 1966 to 3.1 million in 1971, a loss of over 8 million Dinars.<sup>5</sup> This sharp decline was due not only to the occupation of the West Bank and annexation of East Jerusalem, but also to the continued tensions between Jordan and Israel and to the presence of the Jordanian Army and various guerilla groups.<sup>6</sup>
- F. With the loss of the West Bank 40 per cent of the country's national income was lost also. The war also

<sup>1</sup> The New York Times, August 21, 1967, p. 3.

<sup>2</sup> Israel Government, Ministry of Labor Labor and National Insurance (Jerusalem: Government Printer, June p. 175 (in Hebrew).

<sup>3</sup> The Financial Times February 15, 1974, p. 7.

<sup>4</sup> General Chamber of Commerce, Industry and Agriculture for the Arab Countries, Arab Economic Report (Beirut, August, 1968) p. 264.

<sup>5</sup> Jordanian Government, Ministry of National Planning Three Year Development Plan 1973-75 (Aman, 1973) pp.10-13 (in Arabic) (0.36 JD = \$1.00).

<sup>6</sup> Middle East Economic Digest February 28, 1969, p. 282.

affected all the economic sectors in the East Bank and the two banks from forming an economic unity.<sup>1</sup> The economic effect of the lost agriculture on the West Bank was staggering. For example, the West Bank accounted for 20 per cent of the country's wheat and barley production; 64 per cent of its grapes; 30 per cent of its peas and beans; 22 per cent of its tomatoes; 18 per cent of its bananas; 18 per cent of its lentils; 78 per cent of its potatoes; and 50 per cent of its onions.<sup>2</sup> According to a post-war report by the Jordanian Central Bank the loss of the West Bank also account for a 20-cent loss in Jordan's industrial output.<sup>3</sup>

### **MILITARY LOSS**

Military speaking, the situation in Jordan was very much to Israel's advantage. The capture of the West Bank of Jordan transformed Israel's military posture a marked degree, and the IDF now controls an area some 20 miles in depth. This removed any Jordanian artillery threat and insured Israel's usage of the main sources of the Jordan River. Israel also benefits from an increase in agricultural production from the area, which is Jordan's loss.

### **SYRIA**

Like the other Arab states directly involved, Syria has suffered tremendously from the impact of war, especially the June 1967 War. At that time, Syria lost a large part of her territory-the Golan Heights, which is now being utilized by Israel. This has resulted in an increase in the economic and political instability of the country, which has manifested itself in frequent military coups throughout the years and has thus affected Syrian society as a whole. The loss of the Golan Heights and Syrian's continued belligerent attitude toward Israel have affected the country in the following ways (some of which will be more closely discussed in the next section):

### **ECONOMIC LOSSES**

- A. The country no longer has control of the headwaters of the Jordan River.
- B. The continuing high defense expenditure and the decrease in exports caused the Syrian Kira to be devalued frequently. For example, between July 1971 and July 1972, its value declined from 3.8 to 4.65(SL) against the dollar.
- C. Both the imports and exports of Syria declined rapidly as a result of the war. In 1967 alone imports fell 9 per cent and exports dropped 11 per cent from the 1966 figures, while the trade deficit improved slightly.<sup>4</sup> These were mainly the result of the government's continuing defense expenditures.

### **MILITARY LOSS**

The strategic advantages of the Golan Heights were lost. For years, Syrian troops had been shelling Israeli settlements from positions high on the plateau, but this is no longer possible.

### **ISRAEL**

The losses incurred by the Arab states as a result of Israeli occupation of their territories produced great economic gains for Israel, as well as several problems. The issue of Israel's administration of the Arab territories has been discussed almost continuously both in the Knesset and at the United Nations and has become an important political issue.

The Israelis had hoped to use the occupied territories as a lever to force Arab recognition of the Israeli State, but such has not been the case. This has resulted in a psychological setback for Israel. It also resulted in a continuing upward swing in defense spending and a prime source of inflation. The continuing defense expenditure also drained foreign exchange and diverted resources from investments, at least for the first years following the 4<sup>th</sup> Arab-Israeli War. The most important result, however, has been progressive devaluation of the Israeli Lira. This has the following ensuing course:

<b>IL 3.5 = \$ 1.00</b>	<b>July 1971</b>
<b>IL4.25 = \$1.00</b>	<b>July 1972</b>
<b>IL 4.19 = \$1.00</b>	<b>July 1973<sup>5</sup></b>
<b>IL 6.00 = \$4.00</b>	<b>November 1974</b>

On the whole, however, the gains offset the losses. The following are a few of the military and economic gains in each of the territories. Bear in mind that the losses already mentioned with regard to Egypt, Syria and Jordan should be included as Israeli gains.

<sup>1</sup> For further statistical study see General Chamber of Commerce, Industry and Agriculture, op. cit., p. 53.

<sup>2</sup> United States Department of Agriculture The Agricultural Situation in Africa and West Asia, 1968 (Washington, D.C.1968) p.11.

<sup>3</sup> Central Bank of Jordan Fourth Annual Report (Aman, 1967) pp. 5-6.

<sup>4</sup> Arab Economic Report August 1968, p. 236.

<sup>5</sup> The Military Balance (London: IISS, 1973).



## **The West Bank, Judaea and Samaria (Jordan)**

### **ECONOMIC GAINS**

- A. According to the Israeli Central Bureau of Statistics, the total GNP of the West Bank came to IL450 Million in 1970, compared with IL376 million in 1968. Per capita consumption reached IL800 million, an increase of 25 per cent over 1968. Investment in building, equipment and transportation, the bulk of which came from local capital, reached IL44 million in 1969, double the rate of the previous year.<sup>1</sup>
- B. Agriculturally, there has been a great increase in production in the West Bank area, with consequent benefit to the Israeli economy. For example, the yield from the West Bank wheat fields has increased from 100 to 600 kilos annually in the five-year period from 1967 to 1972, while the same increase took many more years to be achieved in Israel.<sup>2</sup> The Israelis introduced new methods of production and farming methods in order to produce a high yield off-season, when products fetched a high price in Europe. One such innovation has been the cultivation of vegetables and garden fruits in plastic hot houses, a practice previously unknown in the West Bank. There has also been a switch from low-income crops to highly priced products that are suitable for the area; including Virginia-type tobacco, cotton, sesame seeds, sugar beets and peanuts.<sup>3</sup>
- C. Seventeen Jewish settlements were established in Judaea and Samaria and eleven, containing 350 civilians, in the sparsely populated Jordan Valley border region following the war. In the area near Hebron 800 settlers re-established two of the former Jewish communities of Kiriath Arba and a group of Kibbutzim called Etzion Bloc.<sup>4</sup>
- D. It is arguable that Israel has benefited from cheap Arab labor in its development and construction plans in the occupied territories of the West Bank and Gaza Strip. The occupation of these lands has also offered Israel a new market for its production.

### **SINAI (EGYPT)**

- A. Of utmost importance is the economic value of the Abu-Rudeis oil fields in the Sinai Peninsula.
- B. The Israelis exploited tourist opportunities in the Sinai establishing tourist centers at Sharm Al Sheikh and along the Eastern Mediterranean in order to attract summer and winter tourists to the beautiful beaches. With ten million tourists in mind, Israel made the best possible use of the occupied territories. There were plans to establish at Sharm Al-Sheikh a second international airport.<sup>5</sup>
- C. Occupation of the Sinai Peninsula has been beneficial to Israel's international airline, El Al, for it shortened air connections with East and South Africa. Previously El Al's route to Johannesburg, via Nairobi, had detoured through Turkey and Iran, a total trip of sixteen hours. The post-war occupation allowed a direct route over the Sinai to the same destination, reducing the travel time then to 11.5 hours.<sup>6</sup>

### **STRATEGIC GAINS**

- D. Israel's greatest gain in Sinai was strategic. She was practically able to control the Southern Mediterranean and dominate the Gulf of Suez, the Gulf of Aqaba, and the naval route of the Suez Canal in both northern and southern directions.
- E. Three Israeli settlements, with 600 civilian residents, were founded in Sinai.

### **GAZA (EGYPT)**

#### **STRATEGIC GAINS**

- A. This is a populated area containing approximately 379,000 Arabs. Seven Israeli settlements were built in the area, five of which are *Nahal bases* (*Nahal* is a corps of the Israeli Defense Force which combine military service with agricultural pioneering).
- B. The military neutralization and utilization of the Gaza Strip as an area of concentration for Egyptian offensives constituted a big threat for Israeli security. In Egyptian hands, Gaza provided for the Egyptian forces an easy path across the Suez Canal and the Sinai Desert, rendering Israel's main centers very vulnerable to bombardment. Continued Israeli occupation of the area removed that threat.

<sup>1</sup> The Jerusalem Post, June 25, 1970.

<sup>2</sup> The Jerusalem Post, August 16, 1972.

<sup>3</sup> The Jerusalem Post, November 6, 1972.

<sup>4</sup> Israel Information Center, Information Briefing Israeli Settlements in the Administered Areas (Jerusalem, April 1973).

<sup>5</sup> The Times, July 30, 1973, p. 12.

<sup>6</sup> MAariv, June 29, 1967, p. 16.

## **GOLAN HEIGHTS (SYRIA)**

### **ECONOMIC GAINS**

- A. Israel's most important gain in the Golan Heights has been the control of the headwaters of the River Jordan on which her development depends.
- B. As a direct result of Israel's work of clearing the widening parts of the River Jordan above the Sea of Galilee, the southern end of the Huleh Valley is no longer flooded each winter. In wet years, more than 5,000 acres of land would be flooded and rendered useless. Now fruits and vegetables can be grown during the winter on this formerly flooded land. Reclamation of a further 12,500 acres of the Huleh Valley swamps has also added greatly to its agricultural output. Wheat, corn, cotton, asparagus and alfalfa are grown there now; and a large number of cattle are reared.<sup>1</sup>

### **STRATEGIC GAINS**

- C. There were 1,000 civilians living in 15 settlements established since the June 1967 War in the Golan Heights and Israel built a new town designed for a population of 20,000. The projected town was eleven miles inside the 1967 cease-fire lines in the southern part of the Golan Heights. Light industry, schools and social services were established to attract settlers.<sup>2</sup>

Israeli control of the Golan Heights has offered the Jewish state benefits of economic, military and geo-political importance. Most important, however, the capture of the area added to Israel's security by providing a buffer zone between Syria and Israel.

### **Author Biographies**

**Professor Nabeel A. Jurdi, Ph.D.** He received his B.SC in political science and economics from the University of California in 1970, and his MA in international relations from the University of Southern California in 1972. He earned his Ph.D. in government from Claremont Graduate University California, USA, in 1977. He has taught in the USA, England and the GCC. His latest post was Vice President for Academic Affairs-Provost from June 2007-2017. His main interests include International Relations, Communication, Diplomacy and Security Studies.

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<sup>1</sup> The New York Times, October 7, 1967, pp. 6-7.

<sup>2</sup> The Times (London) February 12, 1974, p. 8.