# **Battle Analysis**

# The Saga of OZ 77 in the Arab-Israeli War of 1973: A Small Armor Unit's Fight in a Large-Scale Combat Operation

#### by retired LTC Lee F. Kichen

The Arab-Israeli War of 1973,<sup>1</sup> otherwise known as the Yom Kippur War, began Oct. 6 with surprise attacks by Egypt and Syria on the Sinai Peninsula and the Golan Heights, respectively. Israel's survival hinged on the outcome of its fight with Syria. The ensuing four-day fight was the largest tank battle since World War II.

It was not a fight between divisions or brigades separated by long ranges; for the Israeli Defense Forces (IDF), it was a series of short-range engagements fought by small units and, at times, individual tanks. IDF commanders operated largely on their situational awareness rather than strict adherence to their superiors' plans. With Israel facing an immediate and perilous threat, the IDF's culture allowed for the maximum degree of freedom of action and command initiative."<sup>2</sup>

The OZ (the Hebrew acronym for courage) 77<sup>th</sup> Armored Battalion, commanded by LTC (later BG) Avigdor Kahalani, would conduct a classic area defense culminating with the Battle of the Valley of Tears. Despite overwhelming odds, the fight Oct. 9 turned the tide of the Golan Heights Campaign in Israel's favor.



Figure 1. The battlespace, Valley of Tears, Israel. (Courtesy Wikimedia Commons)

## Strategic and operational situation

The Arabs' strategic goal was to regain territory lost during the Six-Day War of 1967. Had Syria regained the Golan Heights and reached the Jordan River and the Sea of Galilee, it would have posed, within 24 hours, an immediate threat to settlements in northern Israel.<sup>3</sup>

Facing a two-front war, Israel's main effort would be a defense on the Golan Heights and an economy-of-force operation on the Sinai Peninsula as the supporting effort. The 120 miles between the Suez Canal along the western Sinai and Israel's southern border provided the strategic depth it lacked on the Golan Heights and allowed enough time to deploy its strategic reserves, mount a successful defense on the Golan and then counterattack into Syria.

### **Battlespace**

The total area of the Golan Heights is about 1,800 square kilometers, with Israel controlling some 1,200 square kilometers. It is bordered by Mount Hermon on the north and by the Yamouk River on the south. It is 70 kilometers from the north to the south, and its width varies from 12 to 26 kilometers.<sup>4</sup>

Israel built a well-constructed network of bunkers along the Purple Line (the 1967 ceasefire line) that provided overhead cover protection from both direct and indirect fire. These bunkers were strongpoints with concertina wire, tank traps and firing points for infantry and armor. Forward of the bunkers were minefields along the routes from Syria. The 17 bunkers were formidable; however, Israel had too few soldiers to adequately defend the entire length of the bunker line.<sup>5</sup>



Figure 2. Israel-Syria area (Golan Heights Campaign), 1973. (Map courtesy Department of History, U.S. Military Academy)

The IDF constructed a line of three-tiered ramparts – e.g. tank-gunnery platforms along the low ridges of the western valley. The ramparts provided superb interlocking fields of fire, cover and concealment, and observation. The bottom tier at ground level completely obscured ground to Syrian forward observers. On the middle tier, tanks were hull down behind earthen berms. On the top tier, Centurion tanks with their main guns at maximum depression could engage targets on the low ground at close range. The forward slope of the rampart was steep enough to block a direct assault.<sup>6</sup>

An anti-tank ditch just behind the Purple Line would be the first major obstacle encountered by the Syrians. The ditch was 3.5 to four meters wide, 2.5 meters deep and 1.2 meters high on the Israeli side. Forward of the trench were wide minefields.<sup>7</sup>

The terrain on the northern Golan generally favored the defender and limited high-speed armor operations. Volcanic rock restricted well-defined avenues of approach. The northeastern-most part of the sector, with slopes greater than 45 degrees, was impassable by combat vehicles. The remaining northern sector was key terrain, blocking access to Mount Hermon with its critical electronic-warfare sites and the B'not Yaakov Bridge across the Jordan River. The terrain also guarded the concentration of Israeli settlements to the west.

The terrain in the south, mostly covered by grasslands, would prove favorable for the attacker. It was in this sector that Syria destroyed the IDF's 188<sup>th</sup> Armored "Barak" Brigade.

#### Prelude to war

Israel's rapid and decisive victory in the Six-Day War produced an unattainable standard of excellence it failed to replicate in 1973.<sup>8</sup> Conventional wisdom held that it would be foolhardy for a coalition of Arab forces to challenge Israel in another major war. However, Egypt and Syria, after the Six-Day War, focused on rebuilding and retraining their forces. Syria employed Palestinian guerrillas to attack Israel. To avoid a large-scale Israeli retaliation, these attacks were sporadic and limited in scope.

Egypt began a "war of attrition" along the Suez Canal, designed to force Israel to return a portion of the Sinai. U.S. diplomacy resulted in a ceasefire between Israel and Egypt in August 1970.<sup>9</sup> With tensions intensifying, the Soviet Union increased its support to Syria, sending 30 SA-4 anti-aircraft battalions manned by Soviet technicians, five squadrons of MiG-21 fighters with Soviet pilots, and 1,200 T-55 and T-62 tanks.<sup>10</sup>

Syria, in October 1972, substituted its forces for the Palestinians and initiated small-scale combat operations known as "battle days," targeting Israeli fixed defenses on the Golan and yielding rich information on IDF dispositions. The deputy commander of the IDF Reserve 240<sup>th</sup> Armor Division, at a senior officers' conference in January 1973 – assessing the significance of the "battle days" tactics – declared, "If they begin to move, it will be difficult to stop them. They will likely cause many casualties … because of the absence of strategic depth. [T]herefore they will likely be able to reach the B'not Yaakov Bridge within hours."<sup>11</sup>

# **Tactical situation**

The Arabs were ready for war by the end of September; the IDF detected higher-than-usual Syrian activity such as canceling leaves, activating reservists and impounding civilian vehicles. MG Eli Zeira, the IDF intelligence chief, insisted that Syria would not initiate major combat operations alone and that Egypt, preoccupied with internal issues, would not engage in military adventurism. Despite this estimate, IDF Chief of Staff LTG David Elazar ordered OZ 77 from the Sinai to the Golan Heights, where it would become the reserve and counterattack element for 188<sup>th</sup> Armored Brigade, the only IDF unit permanently stationed on the Golan.<sup>12</sup>

Kahalani and his commanders, unfamiliar with the Golan's terrain, conducted an extensive reconnaissance until the arrival of the main body.<sup>13</sup> This reconnaissance allowed him to identify the few avenues of approach available to the Syrians and assess the IDF's overall defensive plan. Over the next few days, Syria moved ground forces to battle positions east of the Golan and SU-7 aircraft occupied forward bases, which challenged the IDF's intelligence services' assessment of a low probability of war.<sup>14</sup>

By Oct. 3, the intelligence was incontrovertible that hostilities were imminent when the Syrians massed along the Purple Line and families of Soviet military advisers departed Damascus. Kahalani on the following day briefed his company commanders on the situation and quizzed them on their understanding of the mission and their roles.

Only Kahalani and two noncommissioned officers were combat veterans in the battalion; most of the platoon commanders and two company commanders had recently joined the battalion.

Kahalani's message to his soldiers was simple: if their leaders became casualties, OZ 77 soldiers would continue the fight to save their homes and country.<sup>15</sup> On Oct. 5, Yom Kippur Eve, Elazar issued Alert Gimmel recalling from leave the regular forces and mobilizing reservists.<sup>16</sup> Many soldiers reported late to their units because the 24 hours between sundown Oct. 5 and sundown Oct. 6 are the holiest of the year for Jews.

Raphael Eitan, 36<sup>th</sup> Division commander, early in the morning of Oct. 6, ordered COL Avigor Ben-Gal's 7<sup>th</sup> Armored Brigade to move north.<sup>17</sup> Eitan returned OZ 77 with five companies and a platoon to 7<sup>th</sup> Armored Brigade as its reserve.<sup>18</sup> Kahalani designated a company (-) of seven tanks as his reserve. Also organic to 7<sup>th</sup> Brigade were 82<sup>nd</sup> Armored Battalion and 75<sup>th</sup> Armored Infantry Battalion (+) with a tank company from OZ 77.<sup>19</sup> The Armor School Battalion would later reinforce the brigade. Before it moved to defensive positions in the northern sector, 7<sup>th</sup> Brigade was in an assembly area behind 188<sup>th</sup> Armored Brigade.<sup>20</sup>

Syria deployed a mix of 950 T-55 and T-62 tanks, 600 artillery pieces and 70,000 troops. How many tanks Syria deployed is problematic. Kahalani in a 1979 interview said Syria had 1,700 tanks.<sup>21</sup> Following Soviet tactics, the first echelon consisted of three infantry divisions: 7<sup>th</sup>, 9<sup>th</sup> and 5<sup>th</sup>, with 1<sup>st</sup> and 3<sup>rd</sup> Armored Divisions in the second echelon.



Figure 3. Reconstructed Arab attack plan, with units and tank strength shown in the campaign theater as of noon Oct. 6, 1973. The Syrian-Egyptian offensive plan was based on 1) fully surprising Israel; 2) mustering absolute superiority in numbers; 3) dividing the IDF's resources by attacking the Golan Heights and Sinai Peninsula simultaneously; 4) reaching the Jordan River within 24 hours; and 5) capturing the Jordan River's slopes before the IDF reserve forces reached them. The breakdown of Syria's tanks is problematic, so tanks are not noted as assigned to a specific division; Kahalani estimated in a 1979 interview that Syria had 1,700 tanks; the point is that Israel was greatly outnumbered. (*Based on briefing provided to author by retired BG Gideon Avigor, IDF, and LTC Hayim Danon, IDF Reserve*)

The IDF was woefully overmatched by the Syrians. The IDF's Northern Command, responsible for the Golan Heights, would muster only 7,000 soldiers. The 7<sup>th</sup> Armored Brigade had 105 modified Centurion tanks, while 188<sup>th</sup> Armored Brigade had just 76. Northern Command deployed only 50 self-propelled howitzers and scattered infantrymen from 1<sup>st</sup> Infantry "Golani" Brigade along the outpost and bunker lines. The 7<sup>th</sup> Armored Brigade was responsible for the Kuenitra to B'not Yaakov Road, with 188<sup>th</sup> Armored Brigade covering the southern sector of the Golan.<sup>22</sup>

The quality of IDF tanks vs. Syrian tanks was a wash. The IDF's advantages included superior gunnery training, accuracy of the Centurion's L7 105MM main gun and the Centurion's survivability. However, the T-62 had a longer cruising range, faster road speed, was easier to maintain and possessed a night-fighting capability.<sup>23</sup>

The Syrian scheme of maneuver was classically Soviet, beginning with preparatory aircraft and indirect fires, followed by attacks on a broad front designed to further disperse IDF units deployed along the 70-kilometer front. After preparatory fires, 7<sup>th</sup> and 9<sup>th</sup> Infantry Divisions would penetrate north of Kuneitra, with 5<sup>th</sup> Infantry in the south at Rafid. One armor division would exploit the penetrations, with another armor division in reserve.<sup>24</sup>

The Israeli defensive plan was to conduct an area defense for the first 24-36 hours, attrit Syrian combat power and provide time to fully mobilize reservists and counterattack into Syria.

### Arab attack, defense and victory at Valley of Tears

Syria began its attack with 100 aircraft and 655 artillery pieces. The Syrian infantry divisions synchronized their movement with the aerial and artillery fires, while Syrian air defense denied the Israeli Air Force air superiority. Despite the intensity of Syria's fires, they were largely unobserved fires, causing only a few casualties and little damage to dug-in tanks and artillery.<sup>25</sup>

Ben-Gal detached two companies from OZ 77. He attached one to 75<sup>th</sup> Armored Infantry Battalion and placed the other under his command at the road junction at Wasset, a few kilometers west of Kuneitra.<sup>26</sup> Since this position was not contiguous with the main body and he had an inexperienced company commander, Kahalani sent his deputy to assist in this operation. Throughout the Syrian campaign, habitual unit relationships were severed, often while on the move, to form new units. Although this practice put unit cohesion and command-and-control at risk, the well-trained IDF units managed what would otherwise be unmanageable chaos.

Kahalani then moved the rest of OZ 77 toward Kuneitra and Booster Hill. To his two least experienced commanders, he gave specific guidance, locations for their vehicles, their orders and actions upon contact. He then positioned himself in a location where he could best observe his units. To the more experienced commanders, he gave them mission-type orders to move into their positions.<sup>27</sup>

The supporting artillery batteries, after 12 hours of fighting, lacked ammunition to cover the antitank ditch. As darkness fell, OZ 77 tanks – which had no night-vision capability – were unable to engage Syrian tanks at long ranges. All that was available to the Israelis at night were the tank commanders' handheld night-vision devices and a limited number of illumination rounds.<sup>28</sup> The minefields and antitank ditch slowed the advancing Syrian tanks, allowing Kahalani to engage them at close range – sometimes at less than 300 meters. Light from burning Syrian tanks somewhat improved OZ 77's ability to acquire more enemy tanks.

Kahalani positioned himself in the center of the formation and up front to provide maximum control of his units and to improve his situational awareness. However, Kahalani, facing unacceptable losses by fighting in the dark, withdrew from the ramparts in preparation for a daylight fight.



**Figure 4. T-55 and T-55 bridge in a tank ditch.** (From briefing provided to author by retired BG Gideon Avigor, IDF, and LTC Hayim Danon, IDF Reserve)

Oct. 7 dawned with more than 100 destroyed Syrian tanks on the valley floor; however, another 80 to 90 Syrian tanks were advancing toward Kahalani.<sup>29</sup> With daylight, the Israeli tanks reoccupied the ramps and temporarily regained the advantage by rendering the Syrian 78<sup>th</sup> Armored Brigade combat-ineffective. The cost of this victory was high: Kahalani lost one company commander, nine platoon leaders and tank commanders, and one soldier.<sup>30</sup> Before the end of the campaign, he would lose all but two company commanders. The 7<sup>th</sup> Armored Brigade was left with only 35 of its original 105 tanks.

During the "battle pause," OZ 77 recovered its damaged tanks and evacuated them to the rear, and obtained serviceable tanks and pick-up crews for the next engagement.

Kahalani marveled at the bravery of his OZ 77, yet it was he who inspired them by his calm radio transmissions and by moving from position to position where he was always visible to his soldiers.<sup>31</sup> Throughout the campaign, Kahalani and his company commanders fought from the front and, by their example, soldiers repeatedly rallied to fight on. "Sometimes the soldiers are young and afraid," he said in an interview after the battle. "But they will follow the leader who is with them. ... They need leaders who are between them and the enemy."<sup>32</sup>

On Monday, Oct. 8, Kahalani "... was busy impeding moderate-strength enemy offensives across the front. ... I was ordered to capture the valley below our positions," he said. The Syrians reacted by violent and accurate close-air-support artillery fire and, for the first time, Sagger antitank guided missiles. Kahalani requested and received permission to once more withdraw from the ramps overlooking the valley.

Before the battalion withdrew, the brigade commander ordered his reserve Tiger Company, commanded by CPT Meir Zamir, to Kahalani's southern flank as a counterattack force. Zamir, on his own initiative, delayed counterattacking and took up a hasty defense when he realized that Syrians had penetrated the Israeli defenses. Zamir's company at close range destroyed 30 tanks and two companies of armored infantry.<sup>33</sup>

OZ 77's next mission was to defend the northern outskirts of Kuneitra and prevent the brigade from being outflanked.<sup>34</sup> By the end of the day, 7<sup>th</sup> Armored Brigade held Hermoniet and Booster Hills, the ground on the north and south of the Valley of Tears. Nearly out of fuel and ammunition, Kahalani sent his tanks back to emergency resupply points.

The next day, OZ 77 fought what became the pivotal battle of the Syrian campaign. Syria now had 160 tanks facing 20 tanks from 7<sup>th</sup> Armored Brigade. Ben-Gal's control of the brigade was rapidly collapsing because of the intensity of the Syrian attack, the heavy losses among his senior subordinate commanders and his troops' sleep deprivation.<sup>35</sup>

"The commanders had no control over their subordinates. Our tanks, even if they held on, would fight as individuals," commented Ben-Gal.<sup>36</sup>

With the destruction of 188<sup>th</sup> Armored Brigade to his south, Ben-Gal assumed command of the remnants of 71<sup>st</sup> Armored Infantry Battalion and 74<sup>th</sup> Armored Battalion. Kahalani at one time or another would command elements of those two battalions and the Armor School Battalion.<sup>37</sup> Kahalani positioned the remaining tanks of his battalion and those from 75<sup>th</sup> and 82<sup>nd</sup> Armored Battalions in a hasty U-shaped defense.<sup>38</sup>

Kahalani, down to seven tanks, faced elements from Syria's fresh 3<sup>rd</sup> Armored Division. LTC Yossi Ben-Hanan, a former battalion commander in 188<sup>th</sup> Armored Brigade, voluntarily returned from his honeymoon and gathered 13 repaired Centurions and pick-up crews. Moving to Booster Hill, he attacked the flank of the advancing 81<sup>st</sup> Brigade, soundly defeating it and causing its demoralized soldiers to abandon their tanks and flee to the rear.<sup>39</sup>

Ben-Gal ordered Kahalani to retake the ramp overlooking the Valley of Tears. As he moved toward the ramp, he destroyed at close range three enemy tanks; another vehicle destroyed the fourth tank.<sup>40</sup> Chaos reigned with three battalion headquarters operating on three separate frequencies, while individual tank crews waged private wars firing at whatever they saw. The brigade communications officer may have saved the day getting the surviving tanks on Kahalani's command frequency.

The next engagement would be OZ 77's culminating point. Kahalani had to block the Syrians from taking the Kuneitra-Mas'ad road.

"I knew that if they (Syrians) took the hill, they were headed to Galilee," Kahalani recalled. "I understood the situation; it was quite [desperate]. ... I had my seven tanks and found four or five more."

Kahalani crested the hill alone. At that point, "I saw 150-160 tanks racing," he said. "I decided to attack. I gave the order, [but] no one would move. I gave the order (again), and no one moved. I told my men that 'we are Jews and we are better than them, are you cowards?' When I started moving, I saw some other tanks moving. God let me reach the hill before that mass of tanks gets [sic] there, because otherwise they slaughter us."<sup>41</sup>

Fearing that he would be out of ammunition, Kahalani ordered his crews to fire only at moving combat vehicles. Kahalani seized the opportunity to counterattack the advancing 70<sup>th</sup> Republican Guards Tank Brigade through the seam between its two battalions, which forced them to withdraw.<sup>42</sup> At the end of the fight, Ben-Gal looked down at the Valley of Tears and saw some 260 tanks and hundreds of armored-personnel vehicles abandoned.

In the distance Kahalani saw the dust trails of withdrawing Syrians.<sup>43</sup> He radioed Ben-Gal: "We are in control, artillery has stopped."

Ben-Gal to Kahalani: "You are a national hero, you saved Israel."44

The victory at the Valley of Tears allowed Northern Command to reconstitute and attack deep into Syria. When 7<sup>th</sup> Armored Brigade came within artillery range of Damascus, the ceasefire of Oct. 22 ended the campaign.



Figure 5. An improved Israeli Centurion tank at the Israeli Armored Corps Museum. This tank was considered in many respects superior to the Soviet T-54/55 the Syrians deployed in the Golan Heights Campaign. (Courtesy Wikimedia)

### **Battle analysis**

Israel, although numerically inferior to the Syrians and surprised by a "short notice" attack, successfully defended the Golan with its superior gunnery skills, movement techniques, flexible command structure and mentally agile commanders and soldiers. Elazar's early decision to deploy OZ 77, and shortly thereafter the rest of 7<sup>th</sup> Brigade, provided the additional combat power needed for a successful area defense that denied Syria access to the eastwest roads leading into northern and central Israel.

Kahalani considered his detailed reconnaissance and terrain analysis a key combat multiplier. Effectively using natural and manmade obstacles built after the Six-Day War, Kahalani gave the Syrians the illusion of Israel having more forces.<sup>45</sup>

Ben-Gal, Kahalani and the other battalion commanders adroitly used their reserves to conduct limited and local counterattacks to regain key terrain. According to Kahalani, "You must always maintain (a reserve). ... It gives you flexibility. ... You must be prepared to change from the defense to the offense (and) regain the initiative." An agile reserve enhances the defender's ability to cover a wide frontage."<sup>46</sup> Despite overwhelming odds, Israel's superb gunnery and movement techniques negated Syria's quantitative advantage in tanks.

Israeli armor units were extremely vulnerable to Syrian infantry operating at night with antitank guided missiles (ATGM). Inexplicably, 7<sup>th</sup> Armored Brigade never used the Golani Infantry Brigade or 75<sup>th</sup> Armored Infantry Battalion to suppress the ATGM teams. Although the effectiveness of the Sagger and the RPG-7 rose to mythical proportions immediately after the war, a post-war analysis found that tanks were the more effective antitank weapon. Ninety percent of Arab tanks and 70 percent of Israeli tanks were destroyed by tank fire.<sup>47</sup> Had the Syrians effectively massed their antitank fires, the outcome may have been different.

Although many tank commanders, including Kahalani, didn't know their crews, their training soon compensated for their initial lack of familiarity with each other. At the beginning of the war, there was only enough ammunition stocks in the northern sector to support 188<sup>th</sup> Armored Brigade. Ammunition shortages throughout the campaign attenuated the combat power of IDF armor formations. Consequently, IDF tanks carried only a

third of its basic load. Tanks pulled from storage were not boresighted and had to be calibrated at the beginning of combat operations.<sup>48</sup>

There was a huge imbalance between the tactical performances of the IDF and the Syrian army. Although force ratios overwhelmingly favored the Syrians, this quantitative advantage was irrelevant because of their tactical ineptness. Syrian forces repeatedly conducted frontal attacks and rarely maneuvered. Their meticulously planned offensive and centralized control precluded improvisation by its commanders. When they did maneuver, their movements were slow, tentative and predictable. Conversely, the IDF commanders, operating within a more permissive command-and-control environment, were able to quickly move their elements to critical points on the battlefield. By outflanking the Syrians and attacking their formations on their approach routes, the ensuing traffic congestion set-up a lucrative target environment for IDF armor.

Kahalani's leadership and the motivation of his soldiers were decisive. Israel's soldiers weren't fighting for some abstract principle – since the War of Independence in 1948, they have fought for Israel's survival. When imploring his reluctant tankers to follow him in the last battle in the Valley of Tears, Kahalani invoked their sense of nationhood. To this end, Kahalani ensured that each soldier understood he or she shared in the responsibility of defending the country.

The IDF did not adopt mission command until 2006. However, Kahalani and his subordinates throughout the defensive phase of the Golan campaign demonstrated the power of a mission-command type of philosophy. OZ 77 exemplified the importance of unit cohesion and mutual trust. Kahalani's trust in his soldiers and they in him was unbroken. His persistent display of disciplined initiative consistently provided OZ 77 and 7<sup>th</sup> Armored Brigade opportunities to exploit Syrian weaknesses. When the battle seemed lost, Kahalani used mission orders to rally his soldiers. Although prudent risk-taking is a principle of mission command, with Israel's survival at stake, Kahalani had no other choice than to risk it all at the Valley of Tears.

Retired LTC Lee Kichen served in command and staff positions in armor, armored-cavalry and mechanized-infantry units in the United States and overseas. He also served on the Army Staff and Training and Doctrine Command staff. LTC Kichen's military schooling includes Air War College (non-resident), Command and General Staff College, Armor Advanced Officer Course and Armor Officer Basic Course. He holds a bachelor's of arts degree in history from the University of Massachusetts-Amherst, a master's of social-sciences degree in sociology and political science from Pacific Lutheran University and a master's of arts degree in counseling psychology from Chapman College. His awards and honors include the Legion of Merit (one oak-leaf cluster) and Meritorious Service Medal (two oak-leaf clusters).

#### Notes

<sup>1</sup> Known in Israel as the Yom Kippur War and by the Arab nations as the Ramadan War. Although Egypt and Syria were the major belligerents, Iraq, Morocco and Jordan played limited roles near the end of the war.

<sup>2</sup> Uzi Ben-Solomon and Eitan Shamir, "Mission Command Between Theory and Practice: The Case of the IDF," *Defense and Security Analysis*, No 2, June 2011.

<sup>3</sup> Chaim Herzog, *The War of Atonement: The Inside Story of the Yom Kippur War*, Yorkshire, UK: Front Line Books (imprint of Pen and Sword Books, Ltd.), 2018.

<sup>4</sup> Reserve MG Giora Eiland, *Defensible Borders on the Golan Heights*, Jerusalem: Jerusalem Center for Public Affairs, 2009. The author viewed this terrain in May 2018 from Bunker 107, which overlooks the Valley of Tears, location of OZ 77's final fight.

<sup>5</sup> Kenneth M. Pollack, *The Arabs at War: Military Effectiveness, 1948-1991*, Lincoln: University of Nebraska Press, 2004.
<sup>6</sup> Jerry Asher with Eric Hammel, *Duel for the Golan: The 100-Hour Battle that Saved Israel*, Pacifica, CA: Pacifica Military Press; originally published by William Morrow and Company Inc.

<sup>7</sup> Email from retired BG Gideon Avidor, IDF, to the author, subject: "Ramps and IDF armor battalion operations," April 12, 2019.

<sup>8</sup> Avraham Adan, *On the Banks of the Suez*, Novato, CA: Presidio Press, 1980, cited in George W. Gawrych, *The Arab-Israeli: The Albatross of Decisive Victory*, Leavenworth Papers No. 21, Fort Leavenworth, KS: Combat Studies Institute.

<sup>9</sup> Central Intelligence Agency (CIA), *The 1973 Arab-Israel War: Overview and Analysis of the Conflict*, September 1975. <sup>10</sup> CIA. Pollack, citing many sources, indicated Syria had as many as 1,650 Soviet tanks on hand.

<sup>11</sup> Jerry Asher with Eric Hammel, *Duel for the Golan: The 100-Hour Battle that Saved Israel*, Pacifica, CA: Pacifica Military Press, originally published by William Morrow and Company Inc.

<sup>12</sup> Avigdor Kahalani, *The Heights of Courage: A Tank Leader's War on the Golan*, Santa Barbara, CA: Greenwood Press, 1973.
Battalion personnel were airlifted and bused to Sinai while an advance party drew combat vehicles from prepositioned stocks.
<sup>13</sup> Avigdor Kahalani, *A Warrior's Way*, Bnei-Brak, Israel: Steimatzky, 1999.

<sup>14</sup> Gawrych. Many believed these movements were training exercises.

<sup>15</sup> Kahalani, *Heights*.

<sup>16</sup> Asher and Hammel.

<sup>17</sup> MG Yitzhak Hofi commanded Northern Command, which had responsibility for the Golan Heights. The 36<sup>th</sup> Division was wartime or provisional headquarters commanding 7<sup>th</sup> Armored Brigade, 188<sup>th</sup> Armored Brigade and 74<sup>th</sup> Infantry Brigade. IDF task-organization and boundaries from division to company changed often and on the fly throughout the battle. See Asher and Hammel.

<sup>18</sup> Avigdor Kahalani interview by Geoffrey G. Prosch, *Military Review*, Vol LIX, No. 10, October 1979. "I do have the perception, as a commander, that you must have a reserve. This gives you flexibility."

<sup>19</sup> Avigor Kahalani, *A Warrior's Way*; Samuel Katz, *Israel's 7<sup>th</sup> Armored Brigade: Fire and Steel*, New York: Pocket Books, 1995.
<sup>20</sup> Asher and Hammel.

<sup>21</sup> Kahalani interview.

<sup>22</sup> CIA.

<sup>23</sup> Pollack.

<sup>24</sup> Pollack; Herzog.

<sup>25</sup> Asher and Hammel; Katz.

<sup>26</sup> Kahalani, **A Warrior's Way**.

<sup>27</sup> David Lemelin, *Command and Control Methodology: A Sliding Scale of Centralization*, master of military art and science thesis, Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1996.

<sup>28</sup> Although Israeli tanks were equipped with xenon searchlights, they were used sparingly to preclude Syrian tanks from adjusting their fire off the searchlight.

<sup>29</sup> Kahalani, **A Warrior's Way**.

<sup>30</sup> Katz.

<sup>31</sup> Kahalani, *Heights of Courage*, and Kahalani interview.

<sup>32</sup> Kahalani interview.

<sup>33</sup> Herzog.

<sup>34</sup> Kahalani, **A Warrior's Way**.

<sup>35</sup> Abraham Rabinovich, *The Yom Kippur War: The Epic Encounter that Transformed the Middle East*, New York: Schocken Books, 2004; Hertzog.

<sup>36</sup> Avigor Ben-Gal quoted in Dani Asher, ed., *Inside the Northern Command: The Yom Kippur War on the Syrian Border*, American edition, Lexington, KY: University Press of Kentucky, 2004.

<sup>37</sup> Kahalani assumed command of 71<sup>st</sup> Mechanized Infantry Battalion after both its commander and deputy commander were killed; in Asher.

<sup>38</sup> Katz.

<sup>39</sup> Kahalani, **A Warrior's Way**; Katz; Asher.

<sup>40</sup> Rabinovich.

<sup>41</sup>Kahalani interview, *The Story of Avigdor Kahalani*, Friends of Israeli Disabled Veterans.

<sup>42</sup> Pollack.

<sup>43</sup> Hertzog.

<sup>44</sup> Kahalani, **A Warrior's Way**.

<sup>45</sup> Kahalani interview.

<sup>46</sup> Kahalani interview.

<sup>47</sup> CIA.

<sup>48</sup> Undated briefing provided to the author by BG Avigor, IDF.

### **Acronym Quick-Scan**

ATGM – antitank guided missile CIA – Central Intelligence Agency IDF – Israeli Defense Forces

(*Editor's* note: The United States recognized Israeli sovereignty over the Golan Heights in March 2019 – the first country to recognize the Golan as Israeli territory – while the rest of the international community still considers it Syrian territory occupied by Israel.)