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YOM KIPPUR 1973:
AN OPERATIONAL ANALYSIS OF THE SINAI CAMPAIGN

by

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A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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This paper reviews the Israeli and Egyptian operations in the Sinai during the Yom Kippur war of 1973, and analyzes the campaign at the lower operational/higher tactical level of war, utilizing the US Army's five basic tenets of Army operations. The paper then highlights significant lessons learned from this campaign in the context of those tenets. The paper concludes by showing the relevance of the five basic tenets for the operational commander of today.

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Introduction

For the past five years much of the United States military has viewed Operation Desert Storm as the operational model on which to pattern its future. In that operation, Saddam Hussein's miscalculation of U.S. intentions toward Kuwait led him to halt his forces at the borders of Kuwait, thus handing the operational initiative to the U.S. led Coalition. The coalition then used this six month operational hiatus to maximum effect, building a ground force which was numerically comparable but technologically vastly superior to the Iraqi forces in Kuwait. Further, the pitiful Iraqi Air Force was dwarfed in both quantity and quality by the aviation assets available to the Coalition, which provided the Coalition with complete and unchallenged air supremacy. Once the logistical problems of this operation were solved, the success of Desert Storm was, in retrospect, almost a foregone conclusion.

Had Saddam not granted the Coalition a six month window in which to respond to his invasion, but instead continued south into Saudi Arabia, the outcome could have been significantly different, and would certainly have been vastly more difficult. The ability of the U.S. to achieve the

total dominance of the air upon which the entire operation rested would have been problematic at best, if the U.S. had been forced to rely on carrier-based aircraft and Air Force aircraft requiring multiple tankings to reach the area of operations. Certainly, the ability of the Coalition to generate some 2000 sorties per day over Iraq would not have been possible.

High technology air defense, aircraft, ballistic missile and ground combat weaponry is spreading throughout the globe. Simultaneously, the U.S. has withdrawn much of its forward deployed Army and Air Force forces and increasingly relies on power projection forces. The ability to guarantee the conditions in which Desert Storm was fought would seem to be increasingly remote. U.S. ground forces committed to conventional operations in the PACOM and CENTCOM regions will almost undoubtedly face well armed and determined adversaries over whom they will probably not enjoy either numerical or significantly superior technological capabilities. The utility of the Desert Storm model for the operational commander will be slight in these circumstances.

In contrast to the overwhelmingly favorable conditions enjoyed by the Coalition stands the Israeli position in the Yom Kippur War of 1973. An analysis of that war offers an example of an operation in which

technological parity, a significant numerical disadvantage and a totally successful strategic and operational deception were overcome by a superior grasp of the operational art. The intent of this paper is to analyze the historical example of the Israeli operations in the Southern Command theater (Suez) using the Tenets of Army Operations as found in FM 100-5 to draw applicable lessons for the conduct of warfare at the lower operational and high tactical level of war.

Chapter 2

Overview of the Sinai Campaign: 6 OCT 1973-24 OCT 1973

Background: Terrain and Forces

As a result of the 1967 "6 Day War", Israel had captured and occupied the entire Sinai Peninsula. Bounded in the north-west by the Suez Canal for a distance of 110 miles, the terrain in the immediate area of the canal is level and generally negotiable by armored vehicles; however, numerous swampy areas dot the terrain to a distance of approximately 10 Km from the canal which significantly channelizes the avenues of approach. Approximately 10-12 Km from the canal rises a series of low but tactically significant ridge lines. Approximately 30 KM further to the east are a series of nearly impassable north-south ridges and sand dunes which are bisected by the Mitla and Gidi passes. [1]

Israeli Forces

Defending the Sinai was the responsibility of the Israeli Southern Command under the command of Major General (MG) Gonen, who had taken command on 15 July 1973. The Southern Command included two reserve

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[1]Adan, Avraham. On the Banks of the Suez. (San Francisco: Presidio Press, 1980) p 19

divisions under MG's Adan and Sharon which had approximately 500 tanks between them, but which were not available until mobilization had occurred. Southern Command's one active division was commanded by MG Mandler. This division was comprised of three brigades totalling approximately 280 tanks, which were deployed with two armored brigades held in tactical reserve approximately 50 miles to the east of the canal and one brigade forward along the canal.[2] The defenses which Mandler's forces occupied included the Bar-Lev Line, a controversial series of fortifications along the canal's edge, which was manned by a reserve infantry battalion and a small number of tanks.[3] This line was the focus of much disagreement among Israeli commanders in the period leading up to the Yom Kippur war, with much doctrinal debate over Israeli plans for the defense of the canal and the line's operational and tactical purposes. The line ultimately became a compromise, serving as a partial defense of the water line, and partially as an early warning system along the canal. As a compromise, the line was capable of performing neither mission

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2 Van Creveld, Martin, Military Lessons of the Yom Kippur War: Historical Perspectives (Washington D.C.: The Center For Strategic and International Studies, 1975) p13

3 Herzog, Chaim, The Arab- Israeli Wars, (New York: Vintage Books, 1982) p 243

satisfactorily.[4] By its existence however, it caused the Israeli tactics for the defense of the Sinai to become much less mobile and more of a positional defense.

Egyptian Forces

The Egyptians began the war with three field armies of which the Second and Third Armies would be deployed for the operation. Under the command of LT General (LTG) Saad El Shazli, the Egyptian Army forces which were employed in the crossing included 5 infantry divisions, 2 mechanized and 2 armored divisions and 9 separate brigades. Altogether, the Egyptian Army had approximately 1500 tanks committed to the operation.[5] In addition, having experienced the ability of the Israeli Air Force to provide overwhelming close air support and battlefield air interdiction, the Egyptians assembled over 200 batteries of SA-2, SA-3 and SA-6 surface to air missiles to provide an integrated air defense umbrella over the theater. This ADA umbrella was intended to deny the Israeli Air Force (IAF) the air supremacy which had been a critical element of the Israeli victory in the 1967 war, and which the Egyptians

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[4] Herzog, Chaim, The Arab-Israeli Wars, p246

[5] Aker, Frank, October 1973 (Hamden, CT: Archon Books) p161

had identified as the single greatest threat to a surprise crossing of the canal.[6]

Overview of the Campaign

The strategic goals which Egyptian President Sadat hoped to achieve by initiating the attack across the canal were apparently limited to successfully crossing the canal and retaining a foothold in the Suez in order to break the political and military stalemate existing between Egypt and Israel.[7]

In order to accomplish this the Egyptians planned a three-phased operation. In phase one a simultaneous crossing of the canal along a broad front would be executed by the 5 infantry divisions assigned to the 2nd and 3rd Armies in order to secure divisional-sized bridgeheads. Phase two included consolidation of the bridgeheads into a continuous bridgehead line, the transfer of the mechanized and armored divisions to the east bank of the canal and a temporary transition to the defensive in order to defeat the expected IDF counterattack on the bridgeheads preparatory to the transition to the third phase. Phase three would see a

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6 El Badri, Hassan, The Ramadan War,1973 (Dun Loring, VA.: T.N. Dupuy Associates, 1978) p19

7 El Badri, Hassan, p17

continued attack by the mechanized and armored divisions to reach operational objectives in the vicinity of the Gidi and Mitla passes.[8]

The Egyptian crossing of the canal at 1400 on 6 October 1973 had been preceded by one of the most successful strategic/operational deception operations in history. Making virtually no attempt to hide the massive deployment of its forces directly across the canal, the Egyptians were able to successfully convince the Israeli military intelligence that its deployments were part of an ongoing series of exercises. It was not until 0600, 6 October, that the head of Israeli Military Intelligence was convinced that war would break out that day.[9] The success of this deception was critical to the success of the Egyptian crossing operation, for it denied the Israelis a pretext for conducting preemptive aerial strikes against the Egyptian forces assembling for the canal crossing.

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8 Adan, p63. Egyptian General El Badri claims that the Egyptian operational objective was, from the beginning of planning, limited to a depth of 10-15 KM in order to remain within the ADA umbrella. However, MG Adan, President Herzog and BG Aker all make convincing cases showing the Egyptian operational objectives as the passes. In light of the Egyptian attacks on 14 OCT 73 to continue the attack toward the passes, it seems probable that they were indeed the objectives and that Badri's objectives have been adjusted out of political necessity.

9 Herzog, Chaim, The War of Atonement, (Boston: Little Brown, 1975) p53

Additionally, the Israeli defense plan relied on mobilization of the reserve forces, which constituted 2/3 of the ground forces of the Southern Command. IDF planners had assumed that they would have at least 48 hours of advance notice of an invasion. The loss of that advance warning meant that Southern Command did not have the capability to mass combat power to deal with the Egyptians when they were at their most vulnerable.

Crossing Operations

Following their plan for a broad front crossing, the Egyptians quickly pushed across the canal and were able to establish divisional-sized bridgeheads on the east bank of the canal. In a 24-hour period, the Egyptians pushed approximately 100,000 soldiers and 1000 tanks across to the east bank.[10] In response, the Israeli tactical commander, MG Mandler committed his available forces in a series of localized counterattacks to relieve the bypassed fortifications and conduct a holding operation while awaiting the arrival of MG Adan and MG Sharon's mobilized Divisions. By the morning of 8 October, almost 2/3 of MG Mandler's tanks had been put out of action without having threatened the

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10 El Shazli, Lt General Saad, The Crossing of the Suez, (San Francisco: American Mideast Research, 1980) p234

rapidly strengthening Egyptian bridgeheads.

Phase 2 - Egyptian Operational Hold

Between 8 October and 14 October, the Egyptian 2nd and 3rd Armies consolidated and defended their positions along the east bank of the Suez, and continued to push armored forces across the Suez into the bridgehead. In response, the Israeli Southern Commander, still relying on the IDF doctrine of continuous offensive action, directed that MG Adan and MG Sharon's Divisions conduct counterattacks to gain a foothold back on the canal in order to facilitate an Israeli crossing to the west bank. However, these counterattacks were poorly coordinated and failed to achieve their objectives. As a result the IDF refrained from conducting further counterattacks and prepared to defeat the follow on Egyptian attacks. This decision was a controversial one among the Israeli commanders, with MG Sharon arguing vigorously to seize the initiative from the Egyptians with a two division attack to recross the canal and attack into the operational depth of the Egyptian forces. LTG Bar Lev, who had relieved MG Gonen as Southern Commander overruled Sharon, and the IDF settled into a holding action.

Turning Point- Egyptian phase 3

On 14 October, the Egyptians transitioned into the third phase of the

operational plan, conducting a multidivisional armored attack to seize the Mitla and Giddi passes. In this massive armor battle, the Egyptians lost 270 tanks to the Israeli tank forces[11], and more importantly, lost both the strategic and operational initiative. On 15 October, the Southern Command launched its counterattack to secure a foothold on the west side of the canal. In a daring tactical move laden with risk, MG Sharon's Division secured a bridgehead on the west bank on 16 October. Two days later the Southern Command exploited the Bridgehead with a two Division force which raced into the operational areas of the 2nd and 3rd Egyptian armies. By 22 October, the Israelis had cut off the 3rd Army and were threatening the rear of the 2d Army. Further, the drive into the rear areas of the Egyptians had enabled the IDF to eliminate much of the ADA umbrella upon which Egyptian command of the air had been based, enabling the Israeli Air Force (IAF) to establish air superiority over the theater. On 24 October, a United Nations cease fire was proclaimed which ended the war.

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11 Aker, p100

Chapter 3

Tenets of Army Operations

"The Army's success on and off the battlefield depends on its ability to operate in accordance with five basic tenets: initiative, agility, depth, synchronization, and versatility.... The US Army believes that its five tenets are essential to victory. In and of themselves they do not guarantee victory, but their absence makes it difficult and costly to achieve."[12]

The Yom Kippur war is an excellent example of the perils of ignoring what FM 100-5 has termed the Tenets of Army Operations. The Egyptians were successful initially, not so much because of the overwhelming size of the force it committed to the Sinai operation, but because its operational plans took into account these five immutable facts of operations. Conversely, when the Israelis regained control of the initiative, they were able to impose their will on the enemy, and emerged substantially successful from the campaign.

Initiative and Agility :

"Initiative is...the ability to force the enemy to conform to the

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[12] U.S. Army, Field Manual 100-5, Operations (Washington: Department of the Army, June 1993) p2-6

commander's operational purposes and tempos while retaining freedom of action....The goal is to create a fluid situation where the enemy loses the coherence of the defense....Agility is the ability of friendly forces to react faster than the enemy and is a prerequisite for seizing and holding the initiative."[13]

The initial success of the Egyptian operation was primarily a result of its successful deception operation. The virtually total surprise achieved by the Egyptians at both the Strategic and Operational levels assured them of the initiative. Further, their operational plan to effect a crossing along the length of the canal denied the IDF the ability to concentrate on any one major Egyptian threat. Through the 8th of October, the Egyptians retained the initiative, at both the tactical and operational level. However, with their adoption of the operational pause in phase 2 of their operation, the initiative quickly changed over to the Israelis, culminating with the disastrous Egyptian attack toward the passes on the 14th. By giving the IDF almost 5 uninterrupted days to gather its assets, the Egyptians allowed the Israelis to fight the defense on prepared ground. Further, by 14 October, the Israelis had recovered and were on the offensive in the Golan, freeing the IAF to deal with the Egyptian tanks as

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[13] FM 100-5, p2-6

they emerged from the ADA umbrella.

By contrast, the Southern Command quickly took the opportunity handed them by the Egyptians, and seized the initiative with their rapid drive across the canal, and into the operational rear of the Egyptians. This ability to rapidly shift from the defense to an offensive posture demonstrated a remarkable agility on the part of the IDF operational commander, LTG Bar Lev, as well as the tactical commanders involved. Far less agile was the Egyptian chain of command, particularly the Minister of War and the President, in dealing with the IDF penetration to the west bank of the canal. In a gross misreading of the battlefield, for almost four days the high command of the Egyptian Army failed to realize the significance of the IDF penetration, and so failed to release either the strategic reserve or to transfer armored units from the east to the west bank in order to deal with the Israeli threat.[14] The result was the encirclement of the 3rd Army and the Israeli threat to Cairo.

Depth and Synchronization:

"*Depth is the extension of operations in time, space, resources and purpose....To think in depth is to forecast and to anticipate so that the enemy can be attacked simultaneously throughout the depth of the*

[14] El Shazli, p267

battlefield....Synchronization is arranging activities in time and space to mass at the decisive point".[15]

The tenet of depth is closely related to that of initiative, in that the ability to fight the enemy throughout the depth of the battlefield can force the enemy to fight on chosen terms, thus yielding the initiative. At both the tactical and operational level, the IDF was seriously hindered in its ability to fight the deep battle by its doctrine and force structure. As a result of its success in the 6 Day War, the IDF had adopted a heavy reliance on the Air Force as a sort of flying artillery, and had seriously neglected its own artillery. While this was a successful doctrine in the 1967 War, it had some significant weaknesses which the Egyptians were able to successfully exploit. The extensive ADA umbrella over the theater largely precluded the IAF from being utilized to attack the Egyptians at the operational depth. Additionally, the lack of artillery forced the IAF to fly the far more dangerous and less effective close air support missions demanded by the engaged ground forces.[16] It was not until 21 October and the destruction of the ADA network over the Egyptian rear that the IAF

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15 FM 100-5, p2-7

16 Herzog, Chaim, The War of Atonement, p257

was able to engage the enemy throughout his operational depth. Israeli commanders did, however, understand the need to engage the enemy in a deep battle, and MG Sharon proposed as early as 8 October to conduct a divisional sized crossing of the canal in order to engage the Egyptians in depth early in the campaign. The ultimate Israeli success was largely a result of the recognition of the vulnerability of the Egyptian operational rear because of the lack of an operational armored reserve on the west bank of the canal. Conversely, the lack of mental agility at the highest operational and strategic level of the Egyptian command hindered their ability to see their vulnerability on the west bank or to effectively deal with that threat, while they were simultaneously dealing with the ongoing fight on the east bank. Further, virtually no effort was made by the Egyptian Air Force to interfere with the Israeli lines of communication in the first days of the campaign. The Egyptian operational commanders, in short, appeared incapable of applying the tenet of depth to their planning and execution.

Versatility:

"*Versatility is...the ability of units to meet diverse mission requirements, and the ability of commanders and units to shift focus, tailor forces and move from one role or mission to another rapidly and*

efficiently." [17]

Versatility as a tenet is seen mostly at the tactical level in this campaign. The tremendous versatility of the Egyptian infantry proved to be one of the great surprises of the Yom Kippur War. Armed with shoulder fired antitank missiles, the Egyptian infantry was used in a totally new mode in this campaign, which forced significant tactical changes in the way that the IDF conducted its attacks. Unfortunately for the IDF, the Egyptian use of massed infantry on the armored battlefield almost exactly mirrored the Israeli lack of infantry with which to deal with this threat. This inability to respond to an unforeseen tactical threat played a major role in the defeat of the Israeli counterattacks on 8 October, and was in large part responsible for the heavy losses which the IDF suffered at the "Battle of the Chinese Farm" on 17-18 October. One of the strategic goals of the Egyptians was to inflict heavy casualties on the IDF and undermine the Israeli public's perception of IDF invincibility. The lack of tactical versatility on the part of the IDF significantly raised Israeli casualty rates in this campaign, and thus contributed toward a significant strategic success for the Egyptians

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[17] FM 100-5, p2-9

Lessons Learned/ Conclusion

A superior grasp of the Operational Art was the key to the stunning recovery and operational success of the Israelis. Particularly important was the ability of the Israeli leadership at the theater and senior tactical level to read the battlefield and seize the initiative that the Egyptians handed the IDF when they paused on the east bank of the Suez. This failure to immediately continue the attack toward their operational objectives, preserving their momentum and keeping the IDF off balance was the product of the Egyptian senior leadership's failure to understand and employ the operational tenets. That failure allowed the IDF to overcome the Egyptian tactical and operational surprise, and superiority in armor and artillery as well as the loss of the IAFs traditional air superiority. However, the Israeli force structure was significantly deficient in several key areas, which seriously limited the IDF's versatility. As a result, its ability to deal with unforeseen threats and to fight the battle throughout the operational depth of the battlefield was greatly hampered. The result was a campaign that was primarily fought as a close battle, which served to lengthen the campaign and raise the casualty rates significantly. Thus, despite the eventual tactical and

operational success of the IDF, the Egyptians were able to achieve two of the strategic goals for which President Sadat was aiming.

An analysis of the Suez campaign validates FM 100-5's contention that achieving the five basic tenets is critical to success in land combat for the operational and tactical commander. Operational commanders, despite the record of Desert Storm, will not be assured of the ready availability of overwhelming force in all of the battlefield operating systems in order to schieve the operational objectives. In order to seize the initiative early on, U.S. Commanders will have to synchronize the superior intelligence and C4 assets which they will bring to any battlefield with the joint fire power and mobility assets available to defeat the enemy across the operational depth of the battlefield. In a power projection world, the threat will frequently differ from the expected. To ensure the operational and tactical versatility necessary to cope with threats from across the spectrum, the force structure must remain balanced against all possible threats. As with the IDF in 1973, the lack of versatility in the force can have serious consequences for the operational commander's ability to achieve the other tenets of operations. That failure, as FM 100-5 concludes will ensure that victory is, at best, difficult to achieve.

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