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Egypt's Air War in Yemen

by

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Abstract

This paper reviews Egypt's experiences during the Yemen War (1962-70). During this conflict, the Egyptian Air Force contended with an operating environment similar to the one found in Yemen in 2010, including its rough physical terrain, sensitive social and cultural considerations, and a myriad of political complexities. Examining how the Egyptians used airpower, distinguishing between what they did well and what they did poorly, and the effects airpower produced provide useful lessons for the US Air Force for counterinsurgency operations in general, and potential operations in Yemen, in particular.

Yemen is once again in the news as a de facto al-Qa'ida safe haven.¹ Consequently, the US is assisting the government of Yemen with counterterrorism operations by providing advisors to help plan missions, develop tactics, and provide weapons.² The Yemenis limit this assistance and do not allow US personnel to take part in actual operations due to internal sensitivity about foreign intervention. While this arrangement coincides nicely with foreign internal defense guidelines, if the recent increases in US financial aid and behind-the-scenes training, intelligence and logistic support to Yemeni forces are insufficient in preventing future terror attacks, it may prove politically difficult for the US to avoid a more direct military role. This larger role would almost certainly center on airpower.

Before the US becomes increasingly involved in Yemen, it would be wise to learn from Egypt's experience during the Yemen War (1962-70). Although that war occurred almost half a century ago, the Egyptian Air Force (EAF) had to contend with an operating environment similar to the one currently found in Yemen, including its rough physical terrain, sensitive social and cultural considerations, and a myriad of political complexities. Examining how the Egyptians used airpower, distinguishing between what they did well and what they did poorly, and the effects airpower produced may help the US Air Force avoid similar mistakes if called upon to take a more direct role.

In 1962, northern Yemen was an extremely poor, undeveloped country ruled by a dictatorial religious monarch, Imam Ahmad. Like his father before him, Imam Ahmad intentionally kept Yemen insulated from the corrupting influences of modernity and nationalism (and most of the corresponding technological advances) by severely limiting the number of Yemenis that could leave and the number of outsiders that could enter the country.³ Geography facilitated this isolation, with a sandy, bare coastal desert running along the Red Sea in the west,

backed by jagged mountain ranges rising to well over 10,000 feet in the center. On the eastern side of the mountains, the vast desert sands of the Rub al-Khali created a formidable natural defense barrier. Extreme climate conditions contributed to Yemen's harshness, with highs that could reach 130°F in the coastal areas, while lows often dipped down to 18°F in the mountains.⁴ Despite the rugged terrain and Imam Ahmad's tight grip, political ideas began to seep in. The more exposed Yemenis became to modern constructs like nationalism and socialism, the more dissatisfaction spread under the Imam's harsh and repressive tactics. In September 1962, Imam Ahmad died of natural causes and his son, Crown Prince Muhammad al-Badr, proclaimed himself Imam. A week later, an Egyptian-backed military coup, eventually led by Colonel Abdullah al-Sallal, deposed the Imam and declared Yemen a republic. A long, protracted civil war ensued, pitting Royalists (supporters of the Imam) against the new Republicans.

Egypt responded immediately to Republican requests for military support to 'defend the revolution'.⁵ Within a week, there were over 3,000 Egyptian soldiers around Yemen's cities, along with armored vehicles and aircraft. Egyptian President Gamal abd al-Nasser believed a swift, savage campaign, employing a combination of Special Forces and airpower, was all that was needed to squelch the opposition.⁶ What began as a small-scale effort expected to last only a few months, however, quickly turned into a full-blown counterinsurgency that entangled the Egyptian military for over five years.⁷

Egypt's support for the new Yemeni government was based on Nasser's desire to be a regional heavyweight and leader of the pan-Arab world—a position challenged by Yemen's northern neighbor, Saudi Arabia. The revolution in Yemen was a perfect opportunity for Nasser to flex his military muscle, support Arab nationalism, and perhaps even foment revolutionary fervor in the Saudi population.⁸ Egypt's broader regional ambitions are crucial for understanding

why so many countries became involved in the internal political disputes of a backwater kingdom with few natural resources. In addition to the Egyptians on the Republican side, Nasser brought along his benefactor, the Soviet Union, which had little interest in Yemen other than supporting its strategically important client-state Egypt.⁹ The Soviets provided hundreds of millions of dollars in weapons, training, airfield construction, and even aircrews serving under Egyptian command, all of which were vital to sustained air operations.¹⁰

No foreigners—other than mercenaries—actively fought with the Royalists, but Saudi Arabia provided sanctuary and large amounts of financial and military aid to the Imam’s tribal forces that essentially served as its proxy in a war with Egypt.¹¹ Saudi Arabia did send jets and anti-aircraft guns to bases in Najran, near the Yemeni border, but they did not conduct offensive operations. Jordan, another anti-Nasser Arab monarchy, also sent aid and about 60 officers to help advise and train Royalist volunteers. The US had little use for the deposed autocratic Imamate and eventually recognized the new Republican regime, but it also needed to protect its ally, Saudi Arabia, and their massive oil reserves. It engaged in a few “shows of force” and Operation HARD SURFACE, intended to deter Nasser from conducting cross border operations, but US involvement was primarily limited to diplomatic initiatives and quiet assurances of protection to the Saudis.¹²

Although most of the Yemeni Army supported the Republican cause, it remained small and poorly trained throughout the war and Egyptian forces did much of the fighting. The Yemenis did not have an air force or any significant air experience, forcing them to rely entirely on the EAF.¹³ The Royalists did not have an air force either. The Saudi Prince Faisal vetoed the creation of a Royalist air force piloted by mercenaries since they would have had to operate out of Saudi Arabian territory, which would have brought Saudi Arabia openly into the conflict.¹⁴

Therefore, the EAF had unrivaled air supremacy throughout the war. On the ground, the Royalists depended primarily on tribesmen to fight, paid for with Saudi money. The Republicans had tribal support, too, especially from sheikhs still chaffing from Imam Ahmad's despotic rule, but they also had to pay for it. In fact, both sides heavily recruited and bribed the tribes—a situation tribal leaders took full advantage of. Some tribes seemed to switch sides whenever the financial opportunity presented itself, leading to Egyptian confusion and frustration over Yemen's social and political intricacies. Loyalty was not always tied to who paid the most, however. The Egyptians' dominating foreign presence and brutality incensed many of the tribesmen and they began turning away from the Republicans as the war progressed.

The EAF forward deployed aircraft capable of operating out of the short, crude airfields near Sana, Ta'iz and Hudaydah, including five squadrons of Mig-15 and Mig-17 jet fighters, two squadrons of Il-28 twin-engine light bombers, and one squadron of Il-14 twin-engine transports.¹⁵ They also had Yak-11 piston-engine fighters, which were often used for reconnaissance, and Mi-4 transport helicopters in theater. Finally, the EAF relied heavily upon four-engine An-12 cargo planes and Tupolev-16 twin-jet bombers, which had to operate out of Egypt for the first year of the war until the Soviets completed necessary runway extensions and improvements to Rahaba airfield near Sana'a. Once completed, this gave the EAF a huge advantage by enabling much quicker reaction times for its heavy bombers.¹⁶

Over the course of the war, Egyptian air operations fell into five primary categories: airlift, close air support, surveillance, interdiction, and bombing. While the EAF's overall effectiveness—or lack thereof—depended in part on pilot skill, Yemen's peculiar operating environment played a large role in how they employed airpower and the challenges they faced.

Airlift was the first mission that had to be executed, and the EAF performed remarkably well. They were able to rapidly project power in a country almost 2500 km away and sustain combat operations for five years. Airlift was the only way to get Egyptian troops into Yemen fast enough to secure the fledgling Republican regime, considering it took at least four days for ships to arrive by sea. The first Egyptian forces and material that arrived in country were transported by An-12s flying a newly established, nightly air bridge between Egypt and Yemen. At the time of the coup, however, Egypt did not have the capability to conduct a long distance airlift. Their Il-14s had small cargo bays and could not make the long trip without multiple refueling stops, which the Sudan refused to provide.¹⁷ This led to Egypt's immediate request for Soviet assistance. Within 48 hours, the Soviets agreed to supply the Egyptians with An-12s and a pilot training program while also lending Soviet crews, disguised as civilians, to fly the air bridge under Egyptian command and at Egypt's expense.¹⁸ The first An-12s landed on a makeshift runway in Yemen, since the existing airfields were too short. Republican soldiers and schoolchildren cleared a flat field of boulders in a matter of hours, and then lit it with car headlights parked at intervals along its three km length.¹⁹ The EAF scheduled five to seven of the grueling 11-hour sorties each night for the first few months of the war, highlighting the urgent need for manpower and supplies. By March 1963, flights were reduced to two sorties a day as the air bridge was converted into a routine supply line used for transporting perishables to Yemen and evacuating wounded to Egypt.²⁰ Although Egyptian pilots did not take over the air link until 1965, the EAF still deserves credit for recognizing the need for robust airlift, rapidly acquiring the capability, and orchestrating the massive logistics.

Within Yemen, the Egyptians relied on airlift to deliver paratroopers to reinforce remote garrisons and engage Royalist forces. The EAF's performance in this task was not as successful,

due in large part to their dearth of knowledge about Yemen. Their most immediate and obvious deficiency was a lack of topographic maps. The Chief of the Egyptian military intelligence, General Hadidi, even joked that when the war began, “the only thing Egypt knew for certain about North Yemen was that it bordered on Saudi Arabia.”²¹ This forced them to get terrain information from locals, the accuracy of which was always questionable since they never knew where true loyalties lay. A tragic example at Sirwah underscores the importance of advanced intelligence preparation in an operating environment like Yemen. In 1962, Royalists tried to occupy the small town of Sirwah, which was held by an Egyptian garrison. The Egyptians sent in paratroopers to relieve pressure on the soldiers, but all four drops of 60 paratroopers each were dropped wide of the target due to the lack of geographic knowledge, resulting in 195 of the paratroopers killed by hostile tribesmen.²² A more positive example of intra-theater airlift took place in Sada in 1963. The Egyptians needed to control the town in order to interdict Royalist supply lines from Saudi Arabia, but they could not reach it by land without going through Royalist territory. In a daring but successful operation, the EAF dropped in a paratrooper battalion near Sada to prepare a dirt runway, enabling another Egyptian aircraft to bring in an infantry brigade and take the town.²³

Perhaps the EAF’s most important contribution was its ability to resupply isolated garrisons. Throughout the war, the Republicans never truly controlled more than the triangle of land between Sana’a, Ta’iz and Hudaydah, but the Egyptians maintained numerous small garrisons outside this area that could not be reached without driving through Royalist territory. Additionally, the Royalists were often able to block, mine or ambush LOCs considered to be under Republican control, making any resupply by armored column dangerous and expensive. For both convenience and safety, therefore, the EAF effectively conducted countless aerial

resupply missions using Mi-4 helicopters and airdrops to sustain troops around the country in all types of terrain.²⁴ Lastly, the utility of airlift in Yemen was unmistakable during the Siege of Sana'a, which lasted from December 1968 until February 1969. Although Egypt had withdrawn its forces by this time, due in part to the disastrous Six Day War with Israel and partly to exhaustion and disillusionment with the Yemen war, Republican and Soviet airmen were able to keep the city supplied by air throughout the Royalists' 78-day siege.²⁵

The EAF also provided some close air support (CAS) to Egyptian and Republican ground forces, but it was not their central focus. Royalist tribesmen seldom openly engaged the Republicans, preferring hit-and-run guerrilla tactics, so CAS missions typically entailed protecting armored columns moving around the country or assisting remote garrisons under attack. The EAF was quite enthusiastic in bringing firepower to bear in support of ground troops, showering rockets, bombs and napalm when called in, but their strikes were typically painfully slow to develop and so inaccurate that they did little damage to Royalist forces.²⁶ At best, CAS missions forced the Royalists to keep their distance.²⁷

Equally disappointing was the EAF's surveillance accomplishments, although this was due more to Yemen's terrain, weather and Royalist tactics than pilot skill. As Major-General Carl Von Horn, the Swedish chief of the UN Mission in Yemen, wondered while flying over the country, "which was worse, the desert and broken rocky country, or the savage, jagged peaks...the least inviting terrain for observer teams I had ever encountered." He also noted that air patrols would be hampered by the cloud formations that built up around the mountains every afternoon during the summer.²⁸ Moreover, from mid-December until early-February, winter rains caused the valleys to mist up for most of the day, restricting visibility and military activity on both sides.²⁹ Finally, the Royalists intentionally thwarted aerial surveillance efforts by

moving supplies on camel, by devious routes through the mountains, and at night to avoid detection by EAF aircraft.³⁰

The Egyptians put significant effort towards their air interdiction campaign with poor results. As mentioned above, it was difficult to spot Royalist supplies in transit. The EAF was creative in trying to circumvent Royalist tactics by attempting to interdict supply trains at night by bombing with flares. They also used helicopters to sow mines along known supply routes.³¹ The sheer volume of provisions coming in from Saudi Arabia made it difficult for interdiction efforts to be decisive, however. Furthermore, as stalemates occurred in the mountains, the effects of successful interdiction operations were often diminished due to secret, unofficial arrangements between Royalists and Republican garrison commanders, both of whom needed supplies. In exchange for promises not to attack Egyptian supply columns in the Sana'a-Marib corridor, for example, Royalist camel trains in al-Jawf were allowed to move past Republican garrisons at night.³² The Egyptians knew the Royalists' existence and military capability were dependent on the supplies they received from Saudi Arabia, not to mention the training bases and sanctuary located across the border, so faced with an ineffective interdiction campaign in Yemen they were immediately tempted to bomb Saudi targets.³³

Aerial bombardment is the last, and most controversial, EAF mission. Egypt began the occasional bombing of targets in Saudi Arabia about one month into the war. Most bombing missions targeted Najran and Jizan, which were training and staging points for Royalist forces. Although the EAF did cause a few Saudi casualties, overall very little damage occurred, as it seemed the Egyptian pilots tended to drop their bombs at random in the open countryside.³⁴ Nasser repeatedly denied bombing Saudi territory, and on the occasions when he was unable to

do so due to overwhelming evidence, the Egyptians blamed navigational errors for violating Saudi sovereignty.³⁵ Amazingly, these incursions did not lead to an escalation in the war.

In Yemen, the EAF's bombing campaign ramped up early and maintained an active operational tempo throughout the war, permitting only a few months respite during Nasser's 'Long Breath' strategy in 1966.³⁶ Egyptian airmen undoubtedly sought military targets to bomb, but they were hard to find. Royalist forces were dispersed and possessed almost no surface installations or heavy weapons; they stored their supplies in caves and moved them mostly at night. In fact, the Royalists located their headquarters and remarkable supply bases inside labyrinths of caves. Some of these caves had more than six levels, were lit by central power plants, and even had air conditioning and furniture. The caves and mountainous terrain provided the Royalists with decent living conditions and excellent protection from the bombers that came on a regular basis, but rarely did any harm.³⁷ The bombing campaign was not completely ineffective against the Royalist forces, however. One of their commanders, Prince Abdullah Hussein, maintained that his greatest problem was his inability to fight off the EAF. "We suffer from the airplanes," he said. "We don't have any anti-aircraft guns, only rifles and some cannon..."³⁸ The Royalists did shoot at aircraft with their machine guns and rifles whenever they came close enough, and they likely downed about a dozen planes during the war (although they claimed many more).³⁹

With few satisfying military targets, the EAF resorted to systematically destroying Yemeni villages and small towns in an effort to deter and punish support for the Royalists. They bombed the countryside on the smallest pretext, while conducting daily bombing sorties in the mountains. They attacked small villages that had no apparent strategic significance with the sole aim of inspiring fear.⁴⁰ By 1965, most dwellings in the open and in defenseless valleys were

deserted as people evacuated villages to live in caves located in the lower mountainsides. The civilian population suffered tremendously from the bombing campaigns in Royalist areas, as airstrikes intentionally killed cattle, despoiled agricultural land, and targeted wells, leading to food and water shortages. The air raids also inflicted numerous civilian casualties with hundreds more dying for lack of medical care.⁴¹

The longer the war dragged on with little to no discernable progress, the more frustrated the Egyptians became and the more they bombed. Airplanes began dropping small booby-trapped objects that exploded when picked up, causing many casualties and much fear. Some of the booby traps included cigarettes that exploded when lit.⁴² The Egyptians also reportedly resorted to much harsher measures, such as the use of chemical weapons, although they deny these allegations.⁴³ The first report of a chemical attack took place in June 1963; around the time the Egyptians realized just how long and difficult it would be to subdue the Yemenis.⁴⁴ The EAF allegedly dropped 'home-made' gas bombs, possibly filled with mustard gas, in the village of Kawma that killed seven and injured 25.⁴⁵ The Egyptians appeared to back away from chemical weapons use for the next couple of years, but began using them again at the end of 1966. The largest and best-documented chemical weapons attacks occurred in January 1967, against the village of Kitaf and its surrounding caves that housed one of the Royalist headquarters. The bombs, which were more sophisticated than those used in 1963 and thought to contain phosgene (an asphyxiating agent), killed more than 100 people.⁴⁶ Additional chemical attacks occurred in May, with the last reported use occurring in July 1967, just before the Egyptians pulled out of Yemen. Egypt's alleged resort to chemical weapons may reflect how desperate they were for a military victory. In the end, despite conducting up to 40 potential chemical attacks, the

Egyptians did not achieve any decisive military results.⁴⁷ Instead, the indiscriminate violence of their bombing campaigns only served to harden and increase Yemeni determination to resist.

There were up to 70,000 Egyptian troops and over 200 combat aircraft deployed in Yemen during the war, and while the Republicans would have surely lost without them, the Egyptian military could not defeat the Royalists in what became known as ‘Egypt’s Vietnam’.⁴⁸ Field Marshall Abdul Hakim Amer tried to explain the Egyptian’s disappointing performance in his ‘suicide’ note after their withdrawal in 1967:

“We did not bother to study the local, Arab and international implications of intervention or the political or military questions involved. After years of experience we realized that the Yemen war is a war between tribes and that we entered it without knowing the nature of the land, their traditions and ideas.”⁴⁹

The Egyptians did recognize the guerrilla nature of the war, and some of their strategies reflected this reality. For example, they actively worked to cut off the Royalist’s supply lines and safe havens in neighboring Saudi Arabia, they tried to build the Republican’s state capacity, and they established civic action programs for the populace. Many of their non-kinetic initiatives backfired, however, in part because as Field Marshall Amer pointed out, they lacked a basic cultural understanding of Yemeni society.⁵⁰ Not only did they fail to understand Yemen’s tribal dynamics, they also assumed Republican support was universal among certain sectarian groups like the Shafi’is, and were surprised when loyalties shifted.⁵¹ Another contributing factor to Egypt’s failure was the way they approached the counterinsurgency tactics they did employ. In regards to building state capacity, because the Republicans lacked any political or administrative experience, the Egyptians felt compelled to assume full administration of the country. Often, they just duplicated bureaucratic Egyptian institutions that were unsuited for Yemen and barely functioned. Even the administrative reforms that were effective did not help Egypt’s position, since its control came to be viewed by many as a foreign occupation.⁵²

Furthermore, while it is difficult to criticize Egypt's robust civic action program, which built schools, hospitals and aided farmers in a country that lacked in everything and had lagged so far behind the rest of the world, the expensive programs may have actually increased resistance towards the Republicans. At the time, many Yemenis preferred their traditional way of life and saw no need for many of the so-called foreign improvements offered up. For some, the civic actions programs were just another way for the condescending Egyptians to impose their modern ways on Yemeni society.⁵³ Finally, no hearts and minds campaign could erase the brutality of Egyptian military operations, particularly the air war. They let their frustrations drive their actions, which were guaranteed to backfire. In short, Nasser failed to defeat the Royalists because even though Egypt knew it was fighting a counterinsurgency, it relied primarily upon conventional military tactics.

¹ The latest incident was the foiled 2009 Christmas Day plan to bring down a commercial airliner using a bomb hidden in the underwear of Nigerian Umar Farouk Abdulmutallab, an associate of Yemen-based radicals

² This is not the first time President Ali Abdullah Salih has cooperated with US counterterrorism efforts. The close coordination resulting in the targeted missile strike on senior al-Qa'ida leader Abu Ali al-Harithi in November 2002 is a notable example. However, he paid a steep political price for this collaboration with the US, resulting in his reluctance for, and downplaying of, further cooperation and military assistance.

³ Burrowes, 16.

⁴ Witty, 409.

⁵ There are numerous conflicting claims over when Egyptian forces first arrived in Yemen, with some claiming it took two days after the coup was announced (Dresch, Terrill and Ferris), others one day (O'Ballance), and still others claim Egyptian forces began arriving within hours. (Flintham, Badeeb). Many argue convincingly that Egypt knew and supported the coup in advance due to their rapid response time, although Egypt denies any forehand knowledge.

⁶ Aboul-Enein.

⁷ Witty, 435.

⁸ Pollack, 48.

⁹ Ferris, 8.

¹⁰ Ibid, 32.

¹¹ Support for Yemen and the Shi'a Imamate, the traditional enemy of the Wahabis, was not unanimous in Saudi Arabia. In the weeks following the coup, four Saudi aircraft and their pilots flew to Egypt and defected. A few days later, the chief of the Jordanian air force also defected, followed by two more pilots the next day. The Jordanian air force chief claimed one of his squadrons had been ordered to Taif, Saudi Arabia, to conduct offensive operations against the Republicans. The Jordanian government insisted the deployment was strictly a defensive precaution to reinforce Saudi defenses. (O'Ballance, 87-88, Schmidt, 52.)

¹² The US staged several ‘shows of force’ with F-100s, bombers and transports performing aerial stunts over Riyadh and Jeddah, which were supposed to reassure the Saudis and warn Nasser not to expand the war across the border. They also engaged in Operation HARD SURFACE from 1963-64, in which they sent eight USAF jets to Saudi Arabia to provide the ‘appearance’ of American protection in exchange for stopping Saudi aid to the Royalists. The USAF squadron was stationed in Jeddah with very limited rules of engagement, but Saudi aid continued. (Schmidt, 168, 193-200.)

¹³ The Italians gave Imam Yahya half a dozen airplanes in 1926. He authorized a ferry service for high-ranking officials until a royal prince tried to fly one of the planes, crashed it, and was killed. The Imam immediately grounded all the aircraft and left them outside to rot. Two decades later, in 1946, the Imam allowed a few planes to be brought over from Egypt and Sweden, and later bought three Dakotas. He hired foreign pilots and by 1950 an irregular air service developed between Yemen’s larger cities and neighboring countries. In 1957, Yemen received 30 Su-100’s along with other weapons from the Soviet Union, but Imam Ahmed suddenly seemed to realize how dangerous this equipment could be in disgruntled hands and forbade them to be touched. The same thing happened with 20 Yak aircraft received from Czechoslovakia. Most remained on the airfields to rust, with some never leaving their crates. In the late 1950s, Crown Prince Muhammad al-Badr tried to build Yemen’s air capabilities by convincing the Soviets to enlarge and improve the Sana’a airfield and inviting the Egyptians to open an air force training center in Yemen (which the Imam soon closed), but no real capability developed. As a result, when the war began in 1962, there was no Yemeni air force or even Yemeni commercial pilots on either side of the conflict. (O’Ballance, 36-56; Schmidt, 41-42.)

¹⁴ O’Ballance, 109.

¹⁵ Flintham, 163.

¹⁶ O’Ballance, 106-108; Schmidt, 167.

¹⁷ Ferris, 15.

¹⁸ The Egyptian’s ability to coordinate the acquisition of the An-12s and Soviet crews fast enough to deploy forces into Yemen within days of the coup gives strong credence to speculation that they anticipated the coup and began these preparations in advance. (Ferris, 16.)

¹⁹ Ferris, 30.

²⁰ Ibid, 31.

²¹ Witty, 409.

²² O’Ballance, 93; Schmidt, 235.

²³ Witty, 414.

²⁴ O’Ballance, 125-6.

²⁵ Schmidt, 193.

²⁶ Pollack, 53-54.

²⁷ O’Ballance, 92.

²⁸ Schmidt, 196.

²⁹ O’Ballance, 94.

³⁰ Ibid, 109.

³¹ Schmidt, 158.

³² O’Ballance, 111.

³³ Schmidt, 167.

³⁴ Ibid, 55.

³⁵ O’Ballance, 119.

³⁶ Nasser’s Long Breath strategy, which began in May 1966, entailed withdrawing his troops from outlying parts of Yemen, reducing troop strength to about 20,000, and concentrating those remaining forces within the Sana’a-Ta’iz-Hudaydah triangle. The strategy also involved curbing the bombing campaign except for instances requiring CAS. (O’Ballance, 156-57.) Falling back to a smaller, more defensible area was supposed to help the Egyptians cut their losses and costs while achieving their ends more effectively. The strategy also provided cover for Nasser to switch

his focus from north Yemen to the south where the British were preparing to pull out of Aden. (Schmidt, 278.) Nasser reversed the Long Breath strategy and began reinforcing troops by the fall of 1966, including a resumption of regular bombing raids. (O'Ballance, 168.)

³⁷ Schmidt, 215; O'Ballance, 83.

³⁸ Schmidt, 135.

³⁹ O'Ballance, 126.

⁴⁰ Schmidt, 168-179.

⁴¹ O'Ballance, 111-117, 137.

⁴² O'Ballance, 126; Schmidt, 169.

⁴³ UN Inspection teams were never able to verify any of the reports of chemical weapon use due to the remote locations of the attacks, although western journalists provided first hand accounts. See Terrill's article for an interesting review.

⁴⁴ Terrill, 110-111.

⁴⁵ Schmidt, 257-259.

⁴⁶ O'Ballance, 174.

⁴⁷ Terrill, 114-5.

⁴⁸ Pollack, 49.

⁴⁹ Quoted in O'Ballance, 89.

⁵⁰ One would imagine cultural understanding should not be a problem between Egyptians and Yemenis since they are both Arab, but this case aptly highlights the significant cultural differences within the broader Arab world. This is an important lesson for Americans who might presume to understand "Arab culture" based on recent operations and experiences in Iraq. In fact, Afghan culture is a better, although not identical, model. (Burrowes)

⁵¹ Witty, 409.

⁵² Ibid, 419.

⁵³ Corum & Johnson, 385.

Bibliography

- Aboul-Enein, Youssef. "The Egyptian-Yemen War (1962-67): Egyptian Perspectives on Guerrilla Warfare," *Infantry Magazine*, Jan-Feb 2004.
- Badeeb, Saeed. The Saudi-Egyptian Conflict over North Yemen, 1962-1970. Westview Press, 1986.
- Burrowes, Robert D. The Yemen Arab Republic: The Politics of Development, 1962-1986. Westview Press, 1987.
- Corum, James and Wray Johnson. Airpower in Small Wars: Fighting Insurgents and Terrorists. University Press of Kansas, 2003.
- Dawisha, A.I. "Intervention in the Yemen: An Analysis of Egyptian Perceptions and Policies," *Middle East Journal*, Winter 1975 (v. 29, no. 1), pp. 47-63.
- Dresch, Paul. A History of Modern Yemen. New York: Cambridge University Press, 2000.
- Ferris, Jesse. "Soviet Support for Egypt's Intervention in Yemen, 1962-1963," *Journal of Cold War Studies* (Vol 10, No 4, Fall 2008), pp. 5-36.
- Flintham, Victor. Air Wars and Aircraft: A Detailed Record of Air Combat, 1945 to the Present. Great Britain: Facts on File, 1990.
- Nordeen, Lon and David Nicole. Phoenix Over the Nile. Washington DC: Smithsonian, 1996.
- O'Ballance, Edgar. The War in the Yemen. Hamden, Connecticut: Archon Books, 1971.
- Pollack, Kenneth. Arabs at War: Military Effectiveness, 1948-1991. University of Nebraska Press, 2002.
- Schmidt, Dana. Yemen: The Unknown War. London: The Bodley Head, 1968.
- Terrill, W. Andrew. "The Chemical Warfare Legacy of the Yemen War," *Comparative Strategy* (Vol 10, Issue 2, Apr 1991): 109-119.
- Witty, David M. "A Regular Army in Counterinsurgency Operations: Egypt in North Yemen, 1962-1967," *Journal of Military History* (April 2001); 401-440.