Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?

In 1967 the Israeli Air Force (IAF) was heralded as the saviour of the nation, playing the leading role in the Six Day War. Yet, just six year later, Israeli confidence in air power was shattered. The IAF was rendered ineffectual in the 1973 October War by Egyptian and Syrian Surface-to-Air Missiles (SAMs). This failing was so severe that many Israelis held the IAF as responsible for the near destruction of the state. This piece will look at this change from triumph to impotence and how the IAF managed to remain Israel's central military instrument before the 1982 Lebanon War began. It is not an attempt to provide a legal or moral critique of the IAF's actions, but rather it will analyse the reasons that Israel decided to persevere with air power. In this eight year period, the IAF was able to re-establish its credentials due to a series of technological improvements to its aircraft, its successful role in two critical Israeli military missions and the psychological boost to its reputation in Israel that stemmed from these missions.

This essay will begin with a brief discussion on the history of Israeli air power, looking at its first role during the 1948 War to the failures that emerged during the 1973 October War. Many of the changes that occurred in our chosen timeframe can only be properly understood with historical context. The next three sections will be technological changes that the IAF implemented, the successful missions that the IAF were part of, and then the changing perceptions of the IAF's ability to protect the purpose of the Israeli state. Taken together, these three areas explain how the IAF remained a key military instrument. Finally, the conclusion will contemplate the applicability of these lessons to other, small countries and surmise the main arguments made in the body of this piece.

A History of Israeli Air Power (1948-1973)

In 1948 Israel was surrounded by governments incensed at its creation. The relative difference in man-power led to a military doctrine that encompassed at its heart one simple idea: 'speed is crucial, since Israel lacked the resources – primarily manpower – to conduct prolonged wars' (Bar-Joseph 2004, 138). Israelis believed that the best way to ensure such speed was through investing in its air force. Nevertheless, the missions of the IAF were limited in the 1948 and 1956 conflicts. According to its own documentation of history, during the 1948 War, the IAF consisted of four Czechoslovakian Messerschmitt planes and 95% of its pilots were foreign volunteers. In this conflict the IAF intercepted enemy aircraft, supported ground forces, and went on attack sorties to Cairo, Damascus and Amman. With the cessation of hostilities, most of the volunteers left the country, and the IAF began to base its force on native Israelis (IAF 2012b). During the Suez Crisis of 1956, the IAF played a greater supporting role, dropping paratroopers over the Sinai, destroying communication lines and carrying out rescue missions (IAF 2012a).

Eleven years later, the true impact of this investment in air power was seen. The limited missions of the past were replaced by a devastating show of force. In Operation Moked (Focus) the IAF launched a pre-emptive attack to destroy rival Arab air forces. It was only through intricate coordination with the Israeli intelligence services that this effort was possible. Supposedly, the Israelis 'knew the name of every Egyptian pilot as well as that of his girlfriends. More important, they knew where the find every single Egyptian Air Force squadron' (Van Creveld 2011, 289). Robin Higham is quick to praise this mission, citing it as the 'perfect example of the proper use of air power: simple, direct and limited to military objectives' (Higham 1972, 14). Itai Brun agreed, and went on to conclude that as a result of the Six Day War, 'faith in the force's [IAF's] ability to carry out its missions grew significantly among the political and

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?

Written by Alastair Livingston

military leadership as well as the wider public' (Brun 2011, 147). The success of 1967 meant that control of the air became *sine qua non* for all their future campaigns (Stephens 1997, 190).

The decline in the relative strength of Israeli air power was not an October surprise, to borrow American political jargon. Warning signs of this decline came well beforehand. During the small-scale conflict that occurred between Israel and Egypt in 1969-1970, the IAF began to sustain losses. The Egyptian ability to deployed Soviet-built SAM-3 weapons and MiG-2 interceptors blunted the IAF's effectiveness (Bar-Siman-Tov 1984, 560). Just two years after their greatest success, Israel's relative advantage in air power was diminishing.

Having learned lessons from the 1967 war, Arab planners were aware that there were two pre-requisites for a successful strike against Israel: surprise and the ability to nullify Israel's air power (Safran 1977, 135). In 1973, an attack was launched on the eve of Yom Kippur, the holiest day in the Jewish calendar. This mission surprised the senior military establishment and policy makers in Israel, with most believing that the probability of imminent war was low (Bar-Joseph & Kruglanski 2003, 75). Arab countries had learned from Russian military doctrine the importance of anti-aircraft guns and missiles in countering air threats (Weizmann 1976, 205). Thus, the advancing forces were covered by mobile SAM-6 missiles, shoulder-fired SAM-7 missiles and radar-guide antiaircraft guns (Safran 1977, 136). The Israelis were shocked, as their air force, their 'deterrent force par excellence' (Handel 1977, 490), was reduced to nothing more than a target for Arab ground-to-air missiles. During the war, the air force lost 102 jet fighters and seven helicopters. Fifty-three aircrew members were killed and forty-four were captured' (Brun 2011, 155-156). The IAF had made plans for a surprise attack, but its basic premise was that it would always have air superiority. Joshi surmises the scenario well, 'the same Israeli Air Force, which had practically demolished the entire Egyptian Air Force in the first few hours of the 1967 war, was neutralised' (Joshi 2000, 2104).

It is important to point out that the IAF was not obliterated by the SAMs, but these weapons meant that it served a far more limited role in the war. Having failed to launch a pre-emptive strike and unable to give Israel control of the air, the IAF was seen to have failed in its mission objective. The failing was not solely due to improper planning on the part of the IAF. Israel's military doctrine 'was founded on the supposition that Israeli intelligence could give 24 to 48 hours advance notice of any forthcoming strike' (Handel 1977, 491). Yet, this attack came as a surprise. That failure of notice meant that the possibility of a successful pre-emptive attack, as had been carried out in 1967, was not a possibility. Nevertheless, even if the failings were not entirely those of the IAF, its superiority was contingent on good intelligence. If Israel could not guarantee the veracity of its intelligence, the IAF's role would need to be reassessed.

The October War was not lost, but it plausibly could have been. That realisation left a deep scar on the Israeli psyche. As Bar-Joseph explains, 'the Yom Kippur War, more than any other event in Israeli history, shook the Israeli belief in military power as a security panacea' (Bar-Joseph 2004, 150). On a similar note, Liebman contends that the war generated new questions about the 'viability of the Jewish state', and led Israelis to contemplate, for the first time, that there might be 'safer places in the world for the Jew than in Israel' (Liebman 1993, 415). The IAF's shortcomings were blamed for Israelis questioning if the state was 'fit for purpose'. These failings were further amplified given the reputation the IAF built for itself six years previously. The next section will look at how Israeli air power recovered from this mammoth fall.

Technological Enhancements

Israel has benefitted both from exogenous and endogenous improvements in its military technology. One area where these enhancements have been particularly noteworthy is air power. Through US support and a thriving domestic technological industry, Israel was able to greatly enhance the capabilities of its air force.

The October War, as earlier explained, led to dramatic collapse in confidence in the IAF, but some of the seeds for the IAF's rehabilitation lay in that very war. One route for technological improvement lay in Israel's nuclear program. By 1973, Israel is thought to have assembled at least two nuclear devices (Cohen 1998, 273-276), and whilst Israel's possession of these weapons did not deter an attack, they did open up new bargaining opportunities. America had initially refused to airlift supplies to Israel, but, very suddenly, reversed this policy. Francois Perrin, explains that this reversal came about because the Israeli government told Washington, 'if you don't want to help us in a critical

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?
Written by Alastair Livingston

situation […] we will use our nuclear bombs' (cited in Cobban 1988, 425). Likewise, Mark Gaffney states that the Israeli Ambassador to the U.S, Simha Dinitz, threatened "very serious conclusions" if there was not an immediate airlift of supplies (Gaffney 1989, 147) The entirety of Seymor Hersh's *The Samson Option* is also dedicated to advancing this thesis (Hersh 1993). Whilst never corroborated by Kissinger, such an argument would correlate with his autobiography (Kissinger 1982, 491-493). It was only after a secret meeting with Dinitz, that America provided CH-53 helicopters, A-4E components, as well as 36 F-4Es to Israel (Pietrucha 2010, 58). These planes entered service immediately, and would give the IAF a distinct technological advantage over its rivals in the future. The air force had been intimately linked to the nuclear program, but that link was no longer just as a delivery system. Nuclear weapons could help Israel procure American air technology.

Trade in American aircraft continued throughout the decade. The Sinai II Agreements allowed Israel to purchase F-16s (Ball 1979, 241). These were not due to be delivered until late in 1981, but the overthrow of the Shah's regime in 1979 meant that Israel received the order scheduled to be given to Iran in 1980 (Brun 2011, 158; IDF 2012). The shift in delivery date was to prove crucial, as the F-16 would be the main attack plane in Osirak. Without the Iranian Revolution, Israel would not have had the right planes to successfully carry out this raid. Thus, in this period, regional factors were also critical in Israel's continuing ability to purchase American military technology.

Before this period, Israel had already attempted to produce aircraft domestically. In the 1950s Israeli Aircraft Industries (IAI) developed the Levi aircraft, and it was continuing to innovate with Kfir jet, which entered service in 1975. The Kfir was essentially a refitted Lavi, as the costs of manufacturing an entirely new aircraft were prohibitive (Steinberg 1987, 335-336). For a short while it was the leading combat aircraft in the IAF, and by the end of the 1970s there were so many Kfir jets that Israel was able to replace the aging Mirage and Nesher aircraft (Brun 2011, 150-158). Israel also embarked on a concerted effort to bring refurbishment and servicing 'in house'. As Steinberg explains, ageing fleets of A-4 and F-4 aircraft were 'kept operational and combat-ready largely through technological improvements designed in Israel' (Steinberg 1986, 299) These capabilities were not just limited to older planes, IAI was producing at least $20 million worth of F-15 components by the end of 1980 (Howard 1983, 21). Given that the average life-span of advanced air weapons is less than ten years, such capabilities were critical for Israel to maintain its air advantage beyond this period (Steinberg 1986, 296). With the help of IAI, Israel also added advanced radar-jamming to their planes, although the true extent of these capabilities has never been revealed (Van Creveld 2011, 315). That capability helped the IAF successfully carry out future missions with an element of surprise. As will be elaborated later, this capability was critical in Entebbe and Osirak.

Israel was forced to look inwards for such innovation, after France placed an embargo on munitions to Israel. The Americans had been willing partners, but the decline in French relations greatly increased the Israeli desire for self-sufficiency. The enhanced capabilities of IAI were a catalyst for a process that would have implications beyond this period. By the end of 1981, the nationalized IAI was Israel's largest industrial enterprise and employed 22,500 workers (Howard 1983, 17). Advanced air forces were typically reserved for the richest and most populous countries. IAI's success showed that even a country of 5 million people could make great strides in this field.

Israel embarked on a strategy of upgrading its air force after the October War. Some of these upgrades occurred as a result of nuclear bargaining, giving the IAF the best aircraft in the Middle-East. The IAF also benefited from regional factors, with the Iranian Revolution allowing Israel to receive F-16s a year earlier than had been originally scheduled. These technological improvements were not solely exogenous. IAI provided much of the software, refurbishment and servicing for the fleet. Its presence saved Israel precious resources and allowed it to be less reliant on others for innovation. That process accelerated in the 1970s, and is at the heart of Israel's air doctrine to this day.

Mission Success

In this period, the IAF was part of two critical missions in Entebbe and Osirak. These missions were very different from the envisaged role of the IAF, but they would demonstrate the new role that air power could have for Israeli policy makers outside of direct warfare. The next section will look at the scale of the obstacles that were overcome in these two missions.

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?

Written by Alastair Livingston

On June 27, 1976 an Air France plane with 248 passengers was hijacked on its journey from Tel Aviv to Paris, and diverted to Entebbe, Uganda (Dunstan 2011, 20). The subsequent rescue mission is lauded as one of IAF's greatest successes. Discussions on Entebbe have almost exclusively focussed on whether the violation of Ugandan sovereignty contravened international law. Our concentration will be different, looking at the role that the IAF played in this mission.

The hijackers were two Germans and two Palestinians, who claimed to be members of the Che Guevara Cell of the Popular Front for the Liberation of Palestine (Pardo-Maurer 1986, 17). They forced to the aircraft to be flown to Benghazi for refuelling and after six hours the plane resumed flight (Sheehan 1976, 146). Previously, hijacked planes had been flown to Lod Airport in Tel Aviv, but this plane flew to Uganda, far beyond the reach of the Israeli military. This was a country that Israel previously had friendly relations with, but following the collapse of a trade deal, President Idi Amin had promulgated a stream of anti-Jewish and anti-Israeli statements (Krift 1977, 47). By offering assistance to the hijackers, his rhetoric had been translated into hostilities. The hijackers threatened to kill all the hostages unless 52 'freedom fighters' were released from prisons in Israel, France, West Germany and Kenya (Knisbacher 1977, 69).

A week later, the hijackers had released all the non-Jewish passengers, leaving just the crew and the Jewish passengers in Entebbe. The release relieved the Israelis of the moral burden for non-Israeli lives and provided an opportunity to gain information about the hijackers and their location (Maoz 1981, 689). After studying this material, the Israeli government decided to launch Operation Thunderbolt. The IAF was at the centre of this plan. Three C-130 military transport would carry an assault party to raid the airport and free the hostages (Salter 1977, 337). The scale of the challenges for the pilots of these planes was enormous. Firstly, they would fly to a target over 2,500 miles away. Across most of that route they would need to evade Russian-built antiaircraft networks (Fondacaro 1989, 29). Secondly, the aircraft also needed to avoid Ugandan radar detection as they landed, which they could do by employing newly built radar-jamming technology (Van Creveld 2011, 315). Thirdly, the pilots needed to be prepared to land and take-off in the dark, a feat never previously accomplished by a C-130. Fourthly, for the C-130s to successfully leave Uganda, the several MiG planes owned by the Ugandan Air Force would need to be destroyed (Knisbacher 1977, 73). If the IAF failed to overcome just one of these challenges it would be responsible for one of the most humiliating and saddening episodes in Israel's history. However, the plan was executed to perfection. Three hostages and an Israeli Commando were killed, but with 111 people saved, the nation celebrated it as a victory.

Hours before, the hijackers looked close to achieving their objectives, a fact which made the Israeli success appear all the more impressive. It is true that this was not solely an IAF mission, but given the distance from Uganda to Israel, it had meant that air power was essential to the entire operation. As Cooper states, 'the Israelis demonstrated that nowhere, with but a little cooperation from friendly quarters, was beyond the reach of the organized armed might of the nation state' (Cooper 1978, 94). Similarly Brun describes this as a milestone moment as 'the Israeli Air Force regain[ed] the trust of the political and military leadership and of the Israeli society' (Brun 2011, 158). The mission took just 53 minutes (Flora 1998, 8), but it would be critical in the rehabilitation of the IAF.

Iraq had long been an adversary of Israel. It had attempted to build a nuclear reactor as far back as 1956 (Braut-Hegghammer 2011, 105). As these efforts intensified, the Israeli military decided it needed to destroy the Osirak nuclear plant. Like Entebbe, literature on the mission in Osirak has tended to focus on legalistic arguments regarding the violation of sovereignty, but less works have focussed on the role of Israeli air power.

The 70-megewatt research reactor at Osirak had long worried the Israeli government (Ḥamzah & Stein 2000, 61). Many covert attempts had been made to prevent Osirak from becoming fully operational. Allegedly, Israel had placed a false laser patent to mislead Arab nuclear research, had triggered explosions at a Toulouse production plant that supplied the reactor cores for Osirak, had bombed an Italian company that sold Iraq spent uranium rods, and had murdered various engineers linked to the plant (Alexander & Levine 1977, 46-47; Ford 2005, 15). Although the Israeli government denies these accusations, the weight of academic literature substantiating them suggests that there is at least some validity in these claims. Nevertheless, these non-conventional attempts had not halted Iraqi progress. Even with IAEA safeguards, the Israelis believed that Osirak could be quickly converted for creating nuclear weapons (Kirschenbaum 2010, 52-53).

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?
Written by Alastair Livingston

The Israeli government was aware that Hussein would be emboldened to build a new reactor if they destroyed Osirak. Their objective though, 'was not to diminish Saddam's intent to pursue nuclear weapons, but to diminish his capability to build such a weapon in the near future' (Tamsett 2004, 72). If Osirak was destroyed, Iraq would need to purchase any new supplies from France. In 1981, the French had elected a new, more Israel-friendly President The Israeli government believed that in the event of Osirak being destroyed, President Mitterand would insist that the Iraqis bought 'Caramel' as the new reactor fuel. This fuel would be a great inhibitor to weapons production, as it is enriched at substantially lower levels (Reiter 2005, 359). These factors drove the Israelis to pursue the destruction of Osirak, and particularly the influenced the timing of the mission. Air power was decided as the mission means, as an operation that relied solely on air power would have the lowest risk to human lives and the smallest damage to Israel in terms of world opinion (Perlmutter et al. 1982, 45).

The IAF chose the F-15 and F-16 plane for these missions, due to their precision weapons system, speed and because they could fly the sortie without refuelling. Ford is correct to note that when the IAF purchased these planes from the Americans, they gained 'the right tools to accomplish the mission' (Ford 2005, 31). On June 7, 1981 eight aircraft took off from a base near the southern port city of Eilat. In order to avoid radar detection, they maintained strict radio silence, used electronic warfare to jam foreign radar and at times flew as low as 30 feet off the ground in order to avoid detection. As they approached the target they climbed to 1,500 feet, only to dive again to achieve maximum accuracy (Van Creveld 2011, 315). All 16 bombs dropped were direct hits. It took the Israeli planes just two minutes to destroy the core of the reactor (Vandenbroucke 1984). As the aircraft left Iraq, they were followed by ineffective rounds anti-aircraft fire (Van Creveld 2011, 315).

With no IAF planes lost, and despite the political repercussions, the raid was considered to be a great success (Raas & Long 2007, 8). The extent of international anger can been seen to reflect the magnitude and surprise at the IAF's achievement. As Ramberg points out 'until then, few observers had imagined that a nation might try to stop the spread of nuclear weapons by bombing an adversary's reactors' (Ramberg 1982, 653). As Brun concludes, the strike, 'showcased the precise and long-range capabilities of Israeli air-power' to the world (Brun 2011, 159). The IAF had successfully demonstrated its abilities on the world stage.

Entebbe and Osirak were evidence that the IAF was essential to the needs of the Israeli military establishments. These missions were very different from the October War, but the IAF overcome significant challenges to successfully complete them. Yet whilst the operational successes were significant, being part of these missions helped the IAF heel from a much deeper scar.

The Psychological Impact For Israelis

The impact that air power can have on hearts and minds of a population has been known for many years. In order to properly elucidate the psychological impact of air warfare, it is useful to understand how this idea has been previously theorised. The likes of Douhet believed that by bombing population centres, panic would erupt and the citizens would demand an end to a war (Meilinger 2000, 472). Similarly Trenchard believed that the greatest benefit of air power was its ability to destroy the enemy's willpower (Ferris 2002, 26). These thoughts manifested themselves in the bombing campaigns of WWII. Each side attempted to break the enemy's morale by bombing the other's civilian population. However, Entebbe and Osirak were not aimed at destroying or even targeting civilians, so would not fit these arguments.

An alternative argument is inferred in Stephen Budiansky's account of the Blitz. He claims that Churchill greeted every East-Ender with the same message: we will 'give it 'em back'. The retaliatory bombing campaigns were an emotional act of revenge; 'it was a strategic calculation aimed at giving the folks at home something to buck them up' (Budiansky 2004, 244). Unfortunately, Budiansky's argument relates to the persistent retaliatory nature of the Blitz attacks, and thus is not applicable to the more ad-hoc missions in Entebbe and Osirak. The idea though, that air power could be used to rouse the citizenry at home, could have a great deal of applicability to our analysis.

This idea can be presented in conjunction with George Quester's thesis on the psychological impact of air power. His 'Expectancy Theory' states that in order for the brain to takes in information quicker, it creates a model of what is

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?
Written by Alastair Livingston

expected and then compares this input data to the differences that arise (Quester 1990, 208). Using this model he drew conclusions about the Blitz. In terms of our topic of interest, after the Holocaust, Israel was seen as a safe haven for Jews, a place where they would be free from harm. Entebbe and Osirak were an affront to that expectation. They are not grandiose like a war, but had an equal impact on the Israeli psyche as they broke with this expectation.

The October War had meant that the Israeli public lost faith the IAF, but not the concept of air power itself. The airlifts during the October War are described by air aficionados and Israelis alike as having saved Israel (Boyne 1998, 54). Nonetheless, the IAF's failings were perceived to have left the state vulnerable to complete destruction. Thus, it should not be forgotten that Israelis still believed that air power could captivate, amaze and uplift them.

Entebbe was not the first time that Israeli citizens had been targeted abroad. In fact, Entebbe was a culmination of such threats. The most damaging of these was in Munich at the 1972 Olympics when eleven Israeli athletes were murdered (Cooper 1978, 91). Threatening Israelis using aeroplanes had almost become commonplace. Later in 1972, three gunmen killed 26 people and injured 28 others in Lod Airport (Sloan 2006, 50). Finally again in the same year, Sabena Flight 571 was hijacked. Here, all the hijackers were killed and all but one civilian was spared (Katz 2005, 1917). Thus, it is important to note that Entebbe was not an isolated incident; it was part of a growing realisation that even outside of war time, the Israeli government was unable to protect ordinary citizens, wherever they were in the world.

Entebbe was made momentous due to its symbolism. The German hijackers had separated Jews (not just Israelis) and non-Jews in the airport, an act that was 'reminiscent of the Nazi selection process' (Gordon 1977, 127). Green agrees, noting that incident bore a 'close resemblance to the Nazi practice of separating those who were to live and those who were to die' (Green 1976, 218). This gas-chamber imagery deeply hurt all Israelis (Maoz 1981, 688). The pain was not just for over 100 fellow citizens in immediate peril, it was a growing realisation that the very purpose of Israel, to protect Jews, was not being successfully enacted. The government was powerless to prevent events with Holocaust comparisons being inflicted upon its citizens. Thus, Entebbe was about more than the rescue of non-combatants, it was about the very purpose of Israel. The IAF had a chance to defend the doctrine that it failed to protect in 1973. By being part of that rescue, the IAF managed to partially atone for its perceived failings in the October War.

The revered nature of this mission is still prevalent today. Yonatan Netanyahu, the one killed commando, is considered one of Israel's greatest heroes. His brother's rise to national political fame was in no small part connected to his family connection. Prime Minister Benjamin Netanyahu is living proof of the significance that Entebbe has to the Israeli people.

Osirak was just as much a crisis of Israel's purpose. Saddam Hussein had described his country's efforts to buy a nuclear reactor as 'the first Arab attempt at nuclear arming' (Braut-Hegghammer 2011) As recently as three years before Operation Opera, senior Iraqi officials were quoted as saying 'Iraq does not accept the existence of a Zionist state in Palestine; the only solution is war' (Naḳdimon 1987, 97). Whether or not this fear was justified, the Israelis genuinely did believe that Hussein was intent on obliterating Israel. (Beres & Tsiddon-Chatto 1995, 439). Israel's population is concentrated in two urban areas, and is thus particularly vulnerable to nuclear attack (Ramberg 1982, 660). It is important to understand Osirak in this context. The Israel emotion was simple; a visceral fear of an atomic genocide. Frequent wars with Arab neighbours, whose rhetoric promised extermination, did nothing to allay these fears (Aronson 1978, 83; Brecher 1975, 333-335). The new Prime Minister, Menachem Begin concluded that Israel could not wait to destroy the reactor, seeing it as 'my [his] chance to save the Jewish people' (cited in Grant 2002, 75). Likewise, Perlmutter contends that Begin saw this threat as similar to that of the Holocaust, and Hussein was for Begin, 'the new Hitler' (Perlmutter 1987, 361). Such feelings were not isolated to Begin, with Defense Minister Sharon believing the decision to raid Osirak, 'was a question of survival' (cited in Feldman 1982, 122). Thus, when the IAF successfully destroyed Osirak, it was not just about maintaining Israel's relative military advantages. The government and the citizens saw it as something much more. The IAF were successfully protecting the state from the spectre of extermination. Once again, the IAF were able to defend the underlying purpose of the state. Osirak was far more than operational success; it was seen as a reinforcement of the idea that the Israeli state can defend Jewish people.

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?

Written by Alastair Livingston

This period shows that limited, tactical missions can form a vital part of psychological warfare. Moreover, it is a more humanised form of psychological warfare, far removed from the total war advocated by Douhet and Trenchard. Instead, Entebbe and Osirak demonstrate that even missions that involve limited casualties can lead to uplifted morale of the citizenry. In both of these instances, Quester's Expectation Theory would have led Israeli's to initially have been harmed even more. The run-up to both incidents led to questions about the very effectiveness of the Jewish state, an expectation that all Israelis had. The IAF was therefore able to effectively answer the questions that the citizenry were finding difficult to ask themselves. By understanding this point, we can better explain why there is not a direct link between number of lives the IAF saved and the restoration of confidence in this military instrument. Particularly with reference to Entebbe, it is bizarre that a mission that barely saved over 100 people can successfully help the rehabilitation of a military organ so damaged by a war. Only by understanding the deeper psychology can we grasp this point. The effect of these two incidents was profound, and since the IAF at the centre of their solutions, it was accredited with much of the good feeling that arose afterwards. Entebbe and Osirak did not just prove the IAF to be relevant to Israeli military goals, the IAF proved itself to once again be relevant to maintaining the purpose of the state.

Conclusion

The IAF was able to successfully rehabilitate itself, and show Israelis, their friends and their enemies that it could project power on the world stage. However, a cautionary note should be drawn for those who wish to apply the lessons of this revival to other countries. 1973-1981 contains a number of unique historical circumstances. Firstly, the fact that Israel was founded after a genocide had a great deal of influence on the IAF. The missions where the IAF were able to prove themselves gained greater significance as a consequence of the nature of Israel's founding. There are new nations that have been founded as a result of disaster, but it would be difficult to draw these comparisons easily. Secondly, these missions were critically enabled by American technology and domestic innovation, capabilities that may not be options available to other small countries. Crucially, Israel's ability to innovate its air force domestically is not easily replicable. Thirdly, to gain these benefits, the Israeli government had to have close and reliable links between the intelligence services and the IAF. A link that was made far easier due to the fact that the IAF is the only branch of the Israeli military which contains aerial abilities.

Nevertheless, there is one, more general area, where this analysis could be applied; that air power can be used to uplift your own citizens, rather than simply to depress the morale of an enemy. As was seen in the Israeli decision to utilise the IAF in Osirak, air power prompts less critiques from the international community then other military instruments. The combination of kinetic abilities, less international condemnation and domestic benefits could be a vital lesson for small countries around the world. Outside of war, air power still offers a valuable route for decision makers.

When the IAF failed to protect Israel in the October War, it led to a complete draining of confidence in this military instrument. Such a fall was made all the more greater due to its unprecedented successes in the Six Day War. The IAF embarked on a program of technological upgrades. These enhancements were a result of exogenous and endogenous factors. The upgrades allowed the IAF to be part of two relatively small but absolutely vital missions. In particular, without radar-jamming, F-15s and F-16s, all of which were acquired during this period, the missions in Entebbe and Osiraq would not have been feasible. These successes allowed the IAF to reposition itself as a weapon for tactical missions critical to the safety of the Israeli population. The consequence of these successes was that the IAF able to answer the accusation that it could not help Israel in its founding purpose, to protect Jews. Thus, the IAF was able to recover due to technological enhancements, proving itself to be operationally useful outside of war, and by restoring its image as the guardian of the core purpose of the Jewish state.

Bibliography

Alexander, Y., & Levine, H. M. (1977). Prepare for the Next Entebbe. *Chitty's Law Journal, 25*(7), 240

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?
Written by Alastair Livingston

Aronson, S. (1978). *Conflict & Bargaining in the Middle East: An Israeli Perspective* . Baltimore: Johns Hopkins University Press.

Ball, G. W. (1979). The Coming Crisis in Israeli-American Relations. *Foreign Affairs, 58*(2), 231-256

Bar-Joseph, U. (2004). The Paradox of Israeli Power. *Survival, 46*(4), 137-155

Bar-Joseph, U., & Kruglanski, A. W. (2003). Intelligence Failure and Need for Cognitive Closure: On the Psychology of the Yom Kippur Surprise. *Political Psychology, 24*(1), 75-99

Bar-Siman-Tov, Y. (1984). The Myth of Strategic Bombing: Israeli Deep-Penetration Air Raids in the War of Attrition, 1969-70. *Journal of Contemporary History, 19*(3), 549-570

Beres, L. R., & Tsiddon-Chatto, Y. (1995). In Support of Anticipatory Self-Defence Israel, Osiraq and International Law. *Temple International & Comparative Law Journal, 9*(1), 437-440

Boyne, W. J. (1998). Nickel Grass. *Air Force Magazine, December 1998*, 54-59

Braut-Hegghammer, M. (2011). Revisiting Osirak: Preventive Attacks and Nuclear Proliferation Risks.*International Security, 36*(1), 101-132

Brecher, M. (1975). *Decisions in Israel's Foreign Policy*. New York: New Havn.

Brun, I. (2011). Israeli Air Power. In J. A. Olsen (Ed.), *Global Air Power* (pp. 137-172). Washington: Potomac Books.

Budiansky, S. (2004). *Air Power: The Men, Machines, and Ideas That Revolutionized War, from Kitty Hawk to Gulf War Ii*. New York, N.Y.: Viking.

Cobban, H. (1988). Israel's Nuclear Game: The Us Stake. *World Policy Journal, 5*(3), 415-433

Cohen, A. (1998). *Israel and the Bomb*. New York: Columbia University Press.

Cooper, H. H. A. (1978). Hostage Rescue Operations: Denouement at Algeria and Mogadishu Compared.*Chitty's Law Journal, 26*(3), 91-94

Dunstan, S. (2011). *Entebbe: The Most Daring Raid of Israel's Special Forces* . New York: The Rosen Publishing Group.

Feldman, S. (1982). The Bombing of Osiraq-Revisited. *International Security, 7*(2), 114-142

Ferris, J. (2002). Achieving Air Ascendancy: Challenges and Response in British Strategic Air Defense, 1915-40. In S. Cox & P. Gray (Eds.), *Air Power History: Turning Points from Kitty Hawk to Kosovo* (pp. 21-50). London: Frank Cass.

Flora, E. (1998). *Op Art to the Rescue: Fundamentals for a Hostage Crisis* . Retrieved 10 December, 2012, Available at http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA351735

Fondacaro, S. A. (1989). *Airline Battle and Sof: A Poroposal for an Interim Doctrine for Joint Special Operations* . Retrieved 24 November, 2012, Available at http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA215563

Ford, P. S. (2005). Israel's Attack on Osiraq: A Model for Future Preventive Strikes? .*INSS Occassional Paper, 59*(1), 1-66

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?
Written by Alastair Livingston

Gaffney, M. (1989). *Dimona, the Third Temple:The Story Behind the Vanunu Revelation* . Brattleboro VT: Amana Books.

Gordon, D. J. (1977). Use of Force for the Protection of Nationals Abroad: The Entebbe Incident.*Case Western Reserve Journal of International Law, 9*(1), 117-134

Grant, R. (2002). Osirak and Beyond. *Air Force Magazine, 85*(8), 74-79

Green, L. C. (1976). Humanitarian Intervention-1976 Version. *Chitty's Law Journal, 24*(7), 217-225

Ḥamzah, K. r., & Stein, J. (2000).*Saddam's Bombmaker : The Terrifying inside Story of the Iraqi Nuclear and Biological Weapons Agenda*. New York: Touchstone.

Handel, M. I. (1977). The Yom Kippur War and the Inevitability of Surprise. *International Studies Quarterly, 21*(3), 461-502

Hersh, S. M. (1993). *The Samson Option : Israel's Nuclear Arsenal and American Foreign Policy* . New York: Vintage Books.

Higham, R. D. S. (1972). *Air Power: A Concise History*. London,: Macdonald and Co.

Howard, E. (1983). Israel: The Sorcerer's Apprentice. *MERIP Reports*(112), 16-30

IAF. (2012a). *The Israeli Air Force*. Retrieved 09 November, 2012, Available at http://www.iaf.org.il/4929-en/IAF.aspx

———. (2012b). *War of Independence*. Retrieved 09 November, 2012, Available at http://www.iaf.org.il/2557-30104-en/IAF.aspx

IDF. (2012). *F-16*. Retrieved 10 December, 2012, Available at http://www.idf.il/1550-en/Dover.aspx

Joshi, S. (2000). Israel's Nuclear Policy: A Cost-Benefit Analysis. *Strategic Analysis, 23*(12), 2089-2110

Katz, S. M. (2005). *Against All Odds : Counterterrorist Hostage Rescues*. Minneapolis: Lerner Publications.

Kirschenbaum, J. (2010). Operation Opera: An Ambiguous Success. *Journal of Strategic Security, 3*(4), 49-62

Kissinger, H. (1982). Years of Renewal. Bost: Little, Brown.

Knisbacher, M. (1977). Entebbe Operation: A Legal Analysis of Israel's Rescue Action, The.*The Journal of International Law and Economics, 12*(1), 57-84

Krift, T. R. (1977). Self-Defense and Self-Help: The Israeli Raid on Entebbe.*Brooklyn Journal of International Law, 4*(1), 43-62

Liebman, C. S. (1993). The Myth of Defeat: The Memory of the Yom Kippur War in Israeli Society*Middle Eastern Studies, 29*(3), 399-418

Maoz, Z. (1981). The Decision to Raid Entebbe: Decision Analysis Applied to Crisis Behavior.*The Journal of Conflict Resolution, 25*(4), 677-707

Meilinger, P. S. (2000). The Historiography of Airpower: Theory and Doctrine. *The Journal of Military History, 64*(2), 467-501

Israeli Air Power 1973-1982: How Did the Israeli Air Force Recover after the October War?
Written by Alastair Livingston

Naḳdimon, S. (1987). *First Strike : The Exclusive Story of How Israel Foiled Iraq's Attempt to Get the Bomb* . New York: Summit Books.

Pardo-Maurer, R. (1986). Intervention against Terrorism: Ten Years after Entebbe. *Cambridge Review of International Affairs, 1*(1), 16-22

Perlmutter, A. (1987). *The Life and Times of Menachem Begin*. Garden City, NY: Doubleday.

Perlmutter, A., Handel, M. I., & Bar-Joseph, U. (1982). *Two Minutes over Baghdad*. New York: Corgi.

Pietrucha, M. W. (2010). Seeing the Whole Elephant. Envisioning a Successful Light Attack Program for the Us Air Force. *Air and Space Power Journal, Fall 2010*, 44-58

Quester, G. H. (1990). The Psychological Effects of Bombing on Civilian Populations: Wars of the Past. In B. Glad (Ed.), *The Psychological Dimensions of War* (pp. 201-214). Newbury Park, CA: Sage Publications.

Raas, W., & Long, A. (2007). Osirak Redux?: Assessing Israeli Capabilities to Destroy Iranian Nuclear Facilities. *International Security, 31*(4), 7-33

Ramberg, B. (1982). Attacks on Nuclear Reactors: The Implications of Israel's Strike on Osiraq.*Political Science Quarterly, 97*(4), 653-669

Reiter, D. (2005). Preventive Attacks against Nuclear Programs and the "Success" at Osiraq.*The Nonproliferation Review, 12*(2), 355-371

Safran, N. (1977). Trial by Ordeal: The Yom Kippur War, October 1973. *International Security, 2*(2), 133-170

Salter, L. M. (1977). Commando Coup at Entebbe: Humanitarian Intervention or Barbaric Aggression.*International Lawyer, 11*(2), 331

Sheehan, J. A. (1976). Entebbe Raid: The Principle of Self-Help in International Law as Justification for State Use of Armed Force, The. *Fletcher Forum, 1*(1), 135-153

Sloan, S. (2006). *Terrorism : The Present Threat in Context*. Oxford: Berg.

Steinberg, G. M. (1986). Indigenous Arms Industries and Dependence: The Case of Israel*. *Defense Analysis, 2*(4), 291-305

———. (1987). Large-Scale National Projects as Political Symbols: The Case of Israel. *Comparative Politics, 19*(3), 331-346

Stephens, A. (1997). 'You'll Remember the Quality Long after You've Forgotten the Cost': Structing Air Power for the Small Air Force. In R. Hallion (Ed.), *Air Power Confronts an Unstable World* (pp. 179-202). London: Brassey's.

Tamsett, J. (2004). The Israeli Bombing of Osiraq Reconsidered: Successful Counterproliferation? *The Nonproliferation Review, 11*(3), 70-85

Van Creveld, M. (2011). *The Age of Airpower*. New York: PublicAffairs.

Vandenbroucke, L. S. (1984). *The Israeli Strike against Osiraq: The Dynamics of Fear and Proliferation in the Middle East*. Retrieved 29 November, 2012, Available at http://www.airpower.maxwell.af.mil/airchronicles/aureview/1984/sep-oct/vanden.html

Weizmann, E. (1976). *On Eagles' Wings*. Tel Aviv: Steimatsky.

—