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Non-Classified Realities Affecting Israel's Air Force – 2005-2010

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Foreword

The Middle East with its fair weather, its good visibility, its "see through" sparse vegetation, its topography that funnels motor land traffic through a limited number of axes and its seemingly endless deserts with scarce, dark green on dry mud colored oases, has been considered a classic air-war environment ever since aircraft were fit to operate there.

To assess the role of the Israeli Air Force in the near future, in the Arab-Israeli conflict that has been ongoing for decades in this environment, one has to relate to a number of major factors such as:

1. All Arab armed forces are standing forces, ready to act upon a relatively short warning. Israel's standing forces are but a fraction of its military, who are reservists and have to be mobilized and fitted out prior to their deployment.

2. The enormous disparity between the huge Arab potential and the abnormally poor Israeli assets (800:1 area ratio; 50:1 population; the largest oil richness in the world and its political "sex-appeal" versus nil; 22:1 UN votes and Third World and mercantile interests of Third and First worlds alike, etc.), which is a very heavy, inbuilt burden on Israel.

3. Add, as from the second decade of the 3rd millennium, Israel enemies' nuclear threat with mass destruction warheads mounted on ballistic missiles, knowing that two to three "normal yield" nuclear charges are capable of obliterating 80% of its population and wherewithal, given the minuscule size of the country.

Deterring or winning a war in these circumstances looks like "Mission Impossible" but the eternal Jewish "no choice factor" has intervened. Israel came to the conclusion that the most versatile, efficient and cost-effective strategic weapon to offset the heavy burden created by its antagonists' built-in readiness, crushing numerical superiority, arsenal, and geographical assets, is airpower. Airpower is practically the only means of gathering strategic and tactical, real time accurate intelligence, of delivering ordnance at the proper time with the demanded precision over the ranges required and capable of defending itself while performing its missions.

In the 21st century, the denomination "airpower" is misleading. A modern air force operates within and without that air mass enveloping the earth called "atmosphere", where air is dense enough to provide the oxygen for "air breathing" engines and buoyancy or dynamic mechanical forces (at adequate speeds) to generate lift or steering vectors. The altitude up to about 150,000 feet (45.9 km) is, arbitrarily, accepted as endospheric (within the atmosphere). Above it is space (exospheric), where communications, surveillance, navigation, electronic warfare and other satellites are operating and ballistic missiles transit or are intercepted.

In recent public addresses, Lt. Gen. Shaul Mofaz, the Chief of Israel Defense Forces General Staff, **confirmed that Israel Defense Forces' top priority is its Air Force, which, incidentally, suggests that the present "low intensity war"/terror situation, painful and upsetting as it may be, is not, repeat, not Israel's major defense preoccupation**.

Threat Outlines

The Theater of Operations

The US, the global super-power, has to adapt its Air Force and Navy operational requirements to handle emergencies all over the globe. The flexibility of the US Navy's aircraft carriers, the

US alliances (be they concluded by commonality of interests or by coercion like part of the anti bin Laden coalition), its bases that pepper the globe, its extra long range bombers, its satellite surveillance, its precision global navigational network, its superb command and control structure and its huge air refueling capability, place any target within the striking range of US aircraft and missiles (cruise or ballistic).

Israel's strategic "horizon" appears very limited indeed, but this is an "optical" aberration resulting from the country's size. The whole tiny country that hardly covers an area comparable with that of an aircraft carriers' task force deployed at sea, **is** a solitary aircraft carriers' task force, icebound (frozen) amidst a huge enemy archipelago, or a Malta during World War II, between 1940 and 1943. Recent history records Israeli air-war operations having gone as far west as Tunis, as far south as Entebbe (Uganda), as far east as Baghdad (Iraq) and as far north as Iraqi Kurdistan. All these ranges are comparable with those covered by US airpower, except for the ranges covered by the heavy bombers. Being "frozen amidst an enemy archipelago" means that Israel's "carriers", i.e. its air bases' locations, are well known and targeted. With the enemy "archipelago" at a close range, requiring 1-5 minutes for a strike fighter to penetrate or a day's to and fro walk for a bunch of *guerrilleros* (terrorists), Israel does not have any tactical depth.

Since peace in the Middle East can only be a peace of non-belligerence based upon deterrence (see further), like the US-USSR peace, no "stand down" is permitted. In the most probable reality of 2005-2010, which includes the reaching of nuclear status by Iran, and maybe, Iraq and considering the trend of the Islam driven geopolitical situation, Israeli airpower will surely have to reach the Red Sea southern "gate" at Bab-El-Mandeb, as well as Sudan and Iran, and, probably, in case of a worse scenario, the ex-Soviet Muslim republics as well as Pakistan and Algeria.

Where topography is concerned, Israel is not too fortunate either. Before the 1967 Six Day War, the Hermon Mountain, the high plateau of the Golan Heights and the mountain chain of Judea and Samaria limited the east sector of the Israeli ground-based early warning radars' range to a myopic few miles at low or medium altitude, since radar, like optical surveillance, requires a practically straight "line of sight". Present technology has produced airborne surveillance and Command, Control, Computers, Communications, Intelligence, (C^4I) whose tactical usefulness is nonplussed, yet whose 24 hours a day, 365 days a year watch would be problematic for much more than logistic reasons.

The Anatomy of Threat

The breaking up, by the British and French allies, of the Ottoman (Turkish) Empire at the end of World War I, resulted in the creation of a number of Middle Eastern Arab states, independent in principle, but "guided to independence" by the Mandatory Powers of Britain and France. These countries, including Egypt (under informal British rule), Syria, Lebanon, Iraq, Jordan, Sudan, Yemen and Libya, joined by Saudi Arabia and the Persian Gulf Arabian states and, between the late 1950s and early 1960s, by Tunisia, Algeria and Morocco, became, at one time or another, members of the British-promoted Arab League, established on March 22, 1945. The objects of the League, as stated in its covenant, were "...to strengthen the ties between the participant states, to co-ordinate their political program in such a way as to effect real collaboration between them, to preserve their independence and sovereignty and **to consider in general the affairs and interests of the Arab countries**".[1]

Britain initiated the formation of the Arab League so as to have a sole collocutor, a one-on-one situation when negotiating British interests in the new, post-war, independent Middle East.

Whether the timing of establishing the League, shortly before the German capitulation in World War II, was chosen by Britain to enlist Arab support in preempting Jewish raising demands in Palestine following the revealing of the horrors of the Holocaust, is hard to prove. (This writer believes he has encountered some evidence to this effect during a secret mission to Egypt, in April 1946.) However, the commonality of interests between Ernest Bevin's Britain, which used force to prevent the survivors of the Holocaust from finding a refuge in Palestine in spite of its Mandatory charge, and those of the Arab League, is evident. In the tradition of its relationship with the Grand Mufti of Jerusalem (Sheikh Amin El Husseini who later defected and joined Hitler), Britain did its best to whip up a Pan-Arab-Islamic frenzy against the revival of the Jewish national home idea, so as to gain thereby a major ally in its war against Jews and the world opinion that insisted, in the frightening post-World War II circumstances, on the implementation of the British Mandatory undertaking.

Britain lighted a match in a powder keg.

Pan-Arab opposition to Jewish resettlement in Palestine, fierce and violent since the 1880s, escalated to pogrom type terror after the League of Nations endorsed, in 1921/2, the Lord Balfour declaration in favor of the establishment of a Jewish national home in Palestine and appointed Britain as the Mandatory Power charged with the execution of it. By 1936, as Jewish refugees were arriving from Nazi Germany, Arab opposition assumed open revolt proportions, with local Arabs fighting, assisted by the neighboring Arab countries, both the Jews and the British Mandate. In 1939, with war approaching, Britain capitulated to Arab violence and issued a "White Paper" reneging on its Mandatory obligations and undertaking to reshape Palestine within 5 years and create an Arab entity whither the Jewish immigration was to be banned while the Jewish community in Palestine was to enjoy a "privileged minority" status. Upon the White Paper publication, Jews were banned from entering certain areas and the purchase of land was reserved for non-Jews in most of the tiny country. The racist British White Paper created high Pan-Arab expectations.

Jewish leadership under Ben-Gurion declared the "White Paper" to be invalid, illegal and inadmissible to the Jews, but, since World War II broke out, the Jews of Palestine decided to, "Fight with Britain against the Germans as if there were no White Paper and fight the White Paper as if there were no war". In fact, though, the Jews accepted a "cease-fire" for the duration of the world war. The Arabs did not. Anticipating a German victory, with Rommel reaching El Alamein in Egypt, Rashid Ali El Killany ousting the pro-British government in Iraq, and Germany assuming control of French-Vichy-held Syria and Lebanon, a group of Egyptian officers, Anwar Sadat among them, sought contact with the Germans, to enlist Rommel's help in ousting the British from Egypt. Britain imposed itself by force upon the Middle East Arabs, but tried to assuage its relationship with them through stringent imposition of the White Paper regulations. About 3,000 Jewish refugees fleeing the Nazis perished at sea between 1940 and 1942, trying to reach Palestine and turned away by the British blockade.

When the monstrous Holocaust reality became known, as the allies closed on the shattered Reich, the Jews became restive, both in Palestine and abroad, demanding the immediate establishment of a Jewish entity in Palestine.

Britain, enlisting the assistance of the Arab League, refused, the result being violent Jewish unrest and attempts to force the British naval blockade that prevented the immigration of the

survivors. Under duress, Britain decided to shed its charge and turn the Mandate back to the world community, represented after World War II by the newly established United Nations, which voted, on November 29, 1947, in favor of the establishment of both a Jewish **and** an Arab state in (again) partitioned Palestine. Both states were to become independent by May 15, 1948, when the British Mandate was due to expire.

Encouraged by British Field Marshall Montgomery's and US General Marshall's military assessments that the Jews did not stand a chance if challenged by the Palestinian Arabs supported, as they were, by all Palestine's neighbors, the Palestinian Arabs opened a series of (well coordinated in advance) "spontaneous", massive terror attacks on the morrow of the UN partition resolution. They harassed road transport and raided Jewish settlements starting on November 30, 1947, attempting, for the second time in a quarter of a century, to annul by force a world community's decision regarding the disposition of the defunct Ottoman (Turkish) Empire territories (League of Nations post-World War I and United Nations post-World War II).

The Arab League, Pan-Arabia's leadership, had, from its point of view, valid reasons to prevent the establishment of a Jewish state in Palestine:

1. A Jewish "infidel, Western state as defined by the UN, would drive a Western wedge between African and Asian Arabia, a strategic disadvantage.

2. Islamic dogma, which professes the conquest of "infidel" lands, rejects the surrender of Islamic land as sacrilegious. It therefore denies the right of transfer of Islamic land to any "infidel" government or to accept a political solution based on such a transfer. Any attempt by an Arab leadership to acquiesce in such a solution is bound to unseat it.

3. A Western, middle-class based, democratic regime in the heart of the Middle East, will endanger the existent totalitarian, quasi-feudal social order and promote secularism, an anathema to Islamic order and to the ruling elites. A clash of civilizations. The fate of the Palestinian Arabs, as such, had never been on the Pan-Arabian agenda before or during the 1947-1949 War of Independence.

Arabia lost the 1947-1949 war. The first round of fighting that took place while the British still had nominal control of Palestine, which was fought by local irregulars assisted materially, including in manpower, by the adjoining Arab states and enjoyed a measure of British "sympathy", resulted in the establishment of the State of Israel and massive loss of territory as well as flight of refugees. Frustration was added to the antagonism.

On May 15, 1948, the day the last of the British left Palestine and the State of Israel was officially proclaimed, all (Arab) neighboring countries, assisted by other Arab states like Iraq, invaded Israel aiming at obliterating it. The Pan-Arab Coalition failed and all its members except Iraq signed the Rhodes (Island) Armistice of 1949, which included a *quasi de-facto* recognition of Israel and was supposed to lay the foundation of peace. The Rhodes Armistice has never been honored by the Arab states. Arab geostrategic reasons, mounting anti-Western Islamic fundamentalism and/or its mirror image, Nasserist (later – Ba'athist) Islamic socialism, frustration, mutual incriminations, xenophobia at its worst, combined, turning the issue of Israel's disposal into the Pan-Arabian "battle cry", symbol of unity, focus of political activity and means of exaltation of the masses, diverting their restiveness from the true target – their leaders. The threat intensified.

The Soviet penetration in the Middle East, a Western "*Chasse Gardee*", by siding, in late 1955, with the emerging revolutionary regimes, brought about a "quantum jump" in the intensity of the Pan-Arab threat to Israel. Three factors combined to aggravate the threat:

1. Soviet confrontational ideology and practice. Communism was anti-Zionist and anti-capitalist (anti the West) by definition. It was also pragmatic, ready to downplay its atheism and come to terms with the reactionary totalitarian regimes that relied on Islam for legitimacy. The Soviet position bolstered its newly acquired client states' self-confidence, hence expectations.

2. Soviet modern armaments, supplied for free, in huge quantities, and thorough operational indoctrination, combined with the US arms embargo on Israel, to upset the balance of power and, with it, any Israeli hope of maintaining a valid deterrence that would prevent the eventual outbreak of renewed hostilities.

3. The US (John Foster Dulles' State Department) decision to hold on to Arabian assets competing with the Soviets, by pouring arms on medieval regimes like Saudi Arabia, by dissociating itself in the Middle East from its (former imperialist) NATO allies (1956 -Suez Affair) and by ignoring democratic Israel's security imperatives (arms' embargo), tipped the balance in Pan-Arabia's favor to the point that Egypt's Nasser, prodded by the Soviets, decided, by 1967, that the time had come to avenge the failure of 1948 and destroy Israel, throwing, as he declared, the Jews into the sea.

Following the US "negotiated" Israeli withdrawal, in 1957, from the Sinai Peninsula, which Israel took during the Sinai Campaign/Suez affair of October 1956, the US offered Israel its guaranties to secure the freedom of Israel-bound shipping the length of the Red Sea and the demilitarization of the Sinai desert so as to create a buffer zone between Egypt and Israel. A detachment of UN troops was stationed in the Sinai to supervise proper Egyptian adherence to the agreement.

During May 1967, Nasser, the *de facto* leader of revolutionary Arabia, confident of his overwhelming military superiority (justly so) and sensing that world reaction to the obliteration of Israel would be limited and lukewarm -- more than offset by Cold War/oil considerations -- decided to act. The Soviets "informed" him about an imaginary Israeli massing of troops about to strike at Syria. An Israeli invitation of the Soviets to survey *in situ* was refused and the fact that any movement could be observed from the then Syrian Golan Heights was disregarded. On May 21, 1967, upon concluding an Egyptian-Syrian-Jordanian coalition, Nasser re-imposed a naval blockade, denying access to ships bound for the Israeli Red Sea port of Eilat and, simultaneously, ordered his army to cross the Suez Canal into Sinai. The UN obliged and withdrew at Nasser's request, against its formal undertaking to Israel. The US reneged on its guaranties, requesting Israel to wait. Strangled militarily and economically, embargoed also by France (June 3, 1967), its major arms supplier, Israel had no choice but to preempt, which it did on June 5, 1967, winning dramatically what became known as "The Six Day War".

> **Note**: It was only then that the new, media and politicians' cherished terms of "Occupied Territories" and "Palestinians" (Kings Abdullah I and Hussein claimed, rightly, that "Jordan is Palestine") were added to Middle East terminology, to create the impression that a whole nation was under the Israeli boot.

John L. Esposito, Professor of Religion and International Affairs and Director of the Center For Muslim-Christian Understanding at Georgetown University, claims in his book, *The Islamic Threat…Myth or Reality?*,[2] that the Six Day War of June 1967 has been the watershed in Islam. The secular-Islamic brand of totalitarian socialism, itself an offshoot of Western civilization that replaced the "rotten" secular, Western orientated monarchies, creating high expectations, has proven to be just as unsuitable for Muslim societies as any other Western import. According to Esposito, the Six Day War was the major factor in the worldwide

upsurge of Islamic fundamentalism (return to Islam) and the subsequent increase in hatred and violent opposition to all that is Western or Zionist. They relate to Israel as a Western-Imperialist, Crusader (sic) bridgehead. All this creates even more aggressive motivation.

Hasnein Haikal, Nasser's journalist friend, claimed at the time that Arab-Israeli peace will be achievable only after Arabia wins a victory in the battlefield, be it as modest as it may be, to wash away the stigma of Arab military impotence. The arrogant interpretation of intelligence data by Eli Zeira, the Chief of Israeli Military Intelligence in 1973 and its endorsement by Moshe Dayan, then Minister of Defense, gave Egypt and Syria the opportunity. Faced with solid information about the offensive deployment of Egyptian and Syrian forces on Israel's borders, Dayan and Zeira decided that these were maneuvers and war was improbable, until it was too late. The Egyptian-Syrian coalition achieved a tactical surprise and a brilliant opening victory, the salvation of Israel being the "occupied territories" of the Golan Heights and the Sinai. It took Israel very heavy losses and a fortnight to recover, but the ceasefire, requested by the Arabs (and brokered by the US), was signed 101 kilometers from Cairo and 32 from Damascus. The "moral of the story" was not only that Haikal had his modest victory, but that Sadat, Egypt's new leader, understood that if the lucky, unique strike of October 1973 did not break Israel, the efforts required to do it were not attainable at the time and, maybe an accommodation, be it temporary, was the ad-hoc solution. Peace between Egypt and Israel was concluded with US help in 1978, when, in exchange for the tangible asset called Sinai, Israel received promises of "normalization" that never materialized, except a cooler than cold war non-belligerence.

The launching, by Iraq, of ballistic missiles against Israel during the (second) Gulf War of 1991, in which Israel was not a participant, was surely aimed by Saddam Hussein at bringing about an Israeli armed response which would have resulted in the breaking up of the US/NATO-Arab coalition, because no Arab political or military objective, as important as it might be, justifies an Arab participation in a coalition that includes Israel. Israel remained anathema for Arabia.

Ever since 1948, a violent media, *Der Stürmer*-like campaign of delegitimization and discreditation, with Egypt leading the pack, has been fought by Pan-Arabia against Israel, to "keep the kettle a'boiling." It does.

Since Arabia set out, back in 1948, to dispose of the Jewish presence in the Middle East, the animosity, hence the tension and thereby the intensity of Arabia's threat to Israel, only increased. Leaderships, frustrated because of repeated failures, peoples/nations having lost their sons to no avail, lost self-respect as well as confidence, in their leaders who had to "tighten discipline" to rule. Religion and/or xenophobic culture were substituted for the skin-deep adaptation of Western ways. The Levant woke up from Levantinism with a headache. The economic development of the Arabian Middle East lags badly behind the West. In spite of Ali Baba's treasures, accumulated by the oil baron-princes, Arabia, as a whole, does not succeed in increasing its national GNP to keep abreast of the increase in population, the result being, at best, stagnation. People are told that the heavy military expenditure is the result of the Zionist threat to Arabia instead of its being the cause of the Arabian threat to Zion. Geo-politically, the situation did not improve either. The collapse of the Soviet Union denied countries like Syria and Egypt their usual access to free logistic support. Maintaining the necessary logistical support required the reallocation of huge slices of the national budget if the military, the bastion of the regimes, was to be kept content. On the other hand, the restraint that the Soviets imposed upon their rogue client-states in order to prevent their buccaneering from degenerating into a super-power confrontation, was also removed. One wonders whether, were the Soviets still to control their clients, there would have been a Gulf

War in 1991, the mega-terror against the US in Africa and then in the US proper, the irresponsible (Russian led) nuclearization of Iran and the long range ballistic missiles' acquisition by medieval type Islamic fundamentalist governments.

To conclude, to the above mentioned reasons that motivated Pan-Arabia in 1948 to spite the twice formally expressed world decision on the destiny of former **Turkish** territories and fight a prolonged confrontation that was lost, the last half century's history added its own poison, which means that rather than healing with time, the Pan-Arab/Islamic enmity, hence threat to Israel, increased dramatically, requiring, of course, more efforts if it were to be checked.

The Evolution of Threat

This writer was invited, courtesy of the **ACPR**, to testify before the Joint (Senate and House) Economic Committee in Washington, DC, where he presented a paper he wrote about the feasibility of implementation, in the year 2000, of the 1969 (then Secretary of State) Rogers Israeli-Arab Peace Plan, that spelled out an Israeli return to the pre-June 1967 lines "with minor modifications". Following are a few developments between 1967 and 1997 which were presented in Congress:

- The Pan-Arab aggressive motivation has, as explained above, become more intense. The proclaimed Arab/Iranian "aim of war" remains, peace agreements notwithstanding, the total, final destruction of Israel.

- The Arab/Iranian Middle East is involved in 40% of the world's arms trade. Worse than 1967, Israel is threatened at present by the most intense firepower ever per kilometer of frontier, to which an enormous number and variety of weapons in possession of Palestinian Arabs should be added. Israel is also presently threatened by the highest number ever of ballistic missiles per square kilometer of its territory. The higher the weapon's lethality, the more acute the threat to Israel whose territory remains minuscule. As mentioned, two to three medium yield nuclear charges can eliminate about 80% of Israel's population and wherewithal.

- From 1967 to 1997, weapons technology went through a complete revolution following the introduction of highly sensitive sensors, reliable, micro-miniaturized digital computers, new materials, etc. The results are simply mind-boggling. Following are three examples of many:

  Intelligence/surveillance satellites. In 1967 their resolution, even in black and white only, in the order of 20 meters, was useless for tactical use. Today's satellites have multi-spectral (infra-red, i.e. heat, complete optical spectrum and millimetric wave-length radar) sensors to cover day-night-clouds, with a resolution of about 0.3 meters, that is more than adequate for any tactical use.

  Strike aircraft sights. A 1967 strike aircraft's sight allowed a properly trained pilot to dive-bomb ("dumb-iron bombs") with a C.E.P. of about 30 milli-Radians (C.E.P.-Circular Error Probability, i.e. the imaginary circle drawn by a cone projected from the sight around the target within which 50 % of the bombs struck). When dodging anti-aircraft fire or otherwise distracted, the C.E.P. could be 300 mR. Present day WDNS (Weapons Delivery & Navigation Systems) narrow the sighting cone to some 6.5 mRs for the same ammunition, under almost all conditions, requiring less pilot's competence. That, if one counts the essential, which is Ton x Miles x Target **Hits**, means that in dive-bombing with iron-bombs, a present day strike fighter is worth at

least 21 identical aircraft with 1967 sights. When present day TV or laser guided, longer range air to ground missiles hang on the same aircraft's bomb racks and targets are identified, no comparison is possible at all between 1967 and the present.

Battle Management. Coordinating the operations of high-speed, long range aircraft carrying long range, precision (precious) ordnance to targets in a fluid, rapidly changing, motorized battle situation that is waged in a war region, rather than frontline, means combining, in an Electronic/Computer warfare environment, accurate – pin pointing – real-time intelligence, with "prioritizing", designation, assignation, counter-measures, active defense, decoys, strikes, post strike-reconnaissance, search and rescue of downed crews and more. All the above rely on computers and "line of sight". Present upgrading of battle management is carried out by specially outfitted transport type aircraft like AWACS (Airborne Warning and Control System) or JSTAR (Joint Surveillance Target Attack Radar System), that operate at high altitudes, as far out of " harm's way" as possible. Most of these assets did not exist in 1967.

- Some lessons taught by wars between 1967 and 1997:

The Six Day War – 1967

  a. Like the Armistice Agreements of 1949, Cease Fire Agreements signed by Arab (totalitarian) governments are of a very temporary nature.

  b. US and UN guaranties are also of a temporary nature; hence they cannot be used as "building blocks" for any permanent peace settlement. (Henry Kissinger stated, when this matter was raised, "The prerogative of an independent government is that it has the right to change its mind.")

The Yom Kippur War – 1973

  a. Even a battle-wise government like Israel's is bound to commit mistakes. Israel's defense has to be solid enough to ascertain that a government's error does not affect the country's very existence.

  b. Were Israel to be surprised, Yom Kippur War-fashion, while its boundaries were those of pre-June 1967 (no "occupied territories"), it would have been wiped off the map.

The Gulf War – 1991

  a. Were Israel to attempt to mobilize its reserves while under ballistic missile attack (be it with conventional warheads), the mobilization would have been badly delayed due to the massive evacuation of the urban centers which are also the manpower reservoir.

  b. While damage caused by conventional ballistic missiles' warheads mounted on SCUD missiles is bearable and tactically irrelevant, mass–destruction warheads, especially nuclear, are a totally different dimension of war that the Israeli government will have to cater for with great care.

- Geopolitical developments – 1967-1997

Collapse of the Soviet Empire

a. Cessation of Cold War related political and military events.

b. No Soviet imposed restraint on its rogue client-states to prevent local confrontations from degenerating into great powers conflict. Results: Gulf War, Islamic fundamentalist activities directed from client-states, etc.

c. No Soviet-imposed restraints on accelerated ballistic missiles and mass destruction weapons, including Russian assisted Iranian (and Iraqi?) enhanced nuclear efforts.

d. Russian anxiety over potential loss to Iran, of influence over the seven ex-Soviet Muslim republics and more anxiety over the "Islamization" of the secessionist war of Chechnya.

e. Russian efforts to recover super-power status by involving itself again in Middle East affairs (no final decision as to how).

Iranian Nuclear, Biological & Chemical Weapons & Ballistic Missiles (up to 2005/2010)

a. With US pressure reduced since the Gulf War buildup; Iran launched, with Russian and Chinese support, an accelerated nuclearization program which it does not care to hide. International professional forums estimate that Iran is beyond the "point of no return" with the project, bound to be in possession of nuclear warheads in about 5 years.

b. In parallel with the nuclearization, Iran has embarked on a ballistic missile capacity enhancement program, accelerated as well, with North Korean and Russian support. It has already deployed the Shihad-3 ballistic missile with a range of 1300 km, which reaches Israel from Iran carrying even an old fashioned, cumbersome, nuclear warhead weighing 800 kg. The Shihad-4, based on the North-Korean No-Dong 4, is developed to reach 4,500 and, later 6,000 km, which covers the whole of Europe, China, the Indian subcontinent and some US territories. To the question, why does Iran need to cover such ranges with weapons that are offensive by definition, there are a number of answers, such as:

- The missiles are to deter the West from attempting a new version of the Gulf War (1991), if/when Iran is to become the hegemon over the Middle East oil.

- The missiles are to provide a strategic back up to an Iranian bid for the spread of Islam and/or collapse or downgrading of the West through "low intensity (World Trade Center-like) warfare", i.e. terror and guerrilla.

- To provide a strategic back-up for a bid for the formation, under Iranian rule, of a Pan-Islamic or, "at least", a Middle Eastern and North-African imperial entity.

Remarks: If it sounds exaggerated, think what the Iranians would look for 6,000 km away from home. Any present Iranian regime's strategic planning that involves Shihab missiles cannot but include, for strategic and tactical as well as emotional (extremely important in the Middle East) reasons, the attempt to erase Israel from the Middle East map.

Egypt signed, in 1978, a peace treaty with Israel. It included non-belligerency and normalization. Only the non-belligerency is honored, except for the material assistance to Arafat and a most vicious propaganda and diplomatic war, where Egypt leads the Arabian

pack in the campaign for Israel's delegitimization. No sign of normalization 24 years after signing the treaty.

Jordan signed a peace treaty with Israel, legitimizing existing commonality of interests.

Turkey and Israel established close, ties, including defense.

US: **Realizing that following the outcome of the Six Day War, Israel was a regional power to be reckoned with; that it is Western and democratic by definition and yet that the US would rather not be directly involved in its defense, the US lifted the arms embargo and established a special diplomatic and defense alliance with it.**

The 2000-2002 Addenda to the Threat

- To the lessons of the 1967-1997 wars, the 2000-2002 lessons of the "low intensity wars" or, rather, the international terror spider web, should be added:

  a. Fundamentalist or secular, Islam has a lot in common with communism. It is rigid, aggressive, a deeply rooted, supra-national ideology/religion, a culture that is regimented, and demands total adherence. It is a way of life. It claims to serve the "underdog", yet is totalitarian by definition and cognizant of an elite's ("Umma"/Imams=party) authority in social, legislative as well as, religious domains. It bases its wisdom, like Jews and Christians, on its Scriptures, the Qur'an, but in the same obsessive-submissive-axiomatic way that communism related to its Marxist-Leninist Scriptures.

  b. While Islamic fundamentalism, (Wahabi=Saudi-Sunni, or Iranian=Shiite) or its mirror image, Islamic Socialism, be it Nasserite or Ba'athist (Assad-Syria; Saddam Hussein-Iraq) or Islamic Populism of Khaddafi's brand, adopted a synergetic, supra-national, anti-"Infidel"(mainly Israel and the US) terror policy, the West remained aloof, trying to be persuasive and rein Israel in. In a recent interview with the Israeli paper *Yediot Aharonot*, Bernard Lewis, Professor Emeritus at Princeton, named by the US Press "The Patriarch of the Islamicists", comments on the war-waging cultural differences between Islam and the West. Following is a quote:

     Let me be precise: Muslim culture stands out in the generosity of its victors. The victor does not push the face of the vanquished in the dust, **but the result of the struggle has to be clear to both sides. A struggle that ends indecisively is an invitation for trouble**. The Ottomans provided us with many examples of this conduct: they crushed rebels with a strong hand and an outstretched arm, but did not humiliate the defeated, they showed generosity toward them and even helped them rehabilitate themselves. **If the one with the power does not exhaust his ability to bring about such a victory, his conduct is interpreted as cowardice**.

     (**Note**: The Arabs I fought on the road to Jerusalem in 1948 did not read Lewis, the intellectual writer.)

  c. The West did not act in concert, especially not where Israel was concerned. When, in 1968, an El Al Boeing 707 was hijacked to Algeria (the first jetliner hijacking), no Western country saw it as a danger to itself. Since Islam considers Israel as an integral part of the West, conclusions were drawn and the international hijacking-hunting season started, culminating in five Western airliners, none Israeli, being simultaneously blown up in Jordan. When, in 1972, the 11 Israeli athletes were

massacred at the Munich Olympics, France saw to it that the murderers got safely home, a "French national interest". In March 1973, the US ambassador was taken hostage by the Palestinian "Black September" faction at a diplomatic function at the Saudi Embassy in Sudan. The Palestinians demanded the release of Sirhan Sirhan (Robert Kennedy's murderer). The US did not oblige and the ambassador was killed.[3] "The West" is one entity, hence it was legitimate to strike it whenever and wherever one chose.

d. As Bernard Lewis puts it (see above paragraph a), "compromise" is synonymous with "cowardice" in Muslim warring culture. Yet compromise was all that the West sought. Where the interminable Arab-Israeli war is concerned, the British (with US assistance) prevented a clear-cut military decision in 1948. "Arbitrating", i.e. imposing cease-fires supposed to end the fighting in 1956, 1967, 1973 and 1982 and sponsoring the Oslo etc. agreements, the US prevented, in search of compromise, achievable clear-cut military decisions. By Arabian wisdom, accepting compromise, Israel is a coward, hence Arabia should carry on hammering until the final decision is reached one way or another.

e. By the same token, the US is also a "coward that deserves punishment". The Khartoum murder of the ambassador, the airliners' hijackings, the killings of US citizens in Lebanon, Eritrea and Sudan, the obvious unwillingness to pound the table too hard in the Achille Lauro and Pan Am 103 wholesale terrorist assassination cases and relating to the murder of Robert Kennedy as if it were a stand-alone matter, spelled hesitation. No wonder that under the liberal, ready to compromise Clinton, Islamic anti-American terror intensified:

- The underground parking lot of the World Trade Center in 1993,

- The killing of five US citizens in Saudi Arabia in 1995,

- The blasting of the Khobar Towers in Saudi Arabia in 1996 where 19 Americans were killed and 200 injured,

- The destruction of the two US African embassies in 1998, where 224 were killed and 5,000 injured,

- The sabotage of the USS Cole in Yemen in the year 2000 with 17 sailors killed and 39 injured. All these terror acts did nothing to convince Clinton that the US was under attack and emergency action should be taken, in real time.

f. Decidedly, the US has a problem that, obviously, inhibits its own and the Israeli freedom of action. It has to fight terror against a supra-national, ideological coalition of nationals who belong to the very Islamic nations which supply the US with oil. Therefore it has to "tread carefully" when fighting to pick the terrorists from amidst their sympathetic national societies and bring them to justice, which, again, is interpreted by both the terror coalition and its hosts (all but Jordan and, to a lesser extent, Egypt) as a weakness that invites more of the same. It seems that now, after **the** September 11, 2001 abject, senseless mass murder on the home patch, with a more resolute President, the US may find the answer to its problem, which, as it will be explained, is directly related to the Israel Air Force facing Islam/Arabia and Iran in 2005-2010.

Peace in the Middle East

Politicians are vague about the definition of peace (embassies, flags, unmolested promenades in Damascus, economic ties, etc.). Dictionaries are fairly detailed. In general, they make a distinction between "peace of harmony", like, for example, the US-Canada peace, and "peace of no war", like, for instance, the US-USSR peace. The US-Canadian peace is the stable **effect** whose **cause is harmony**, namely shared democracy, culture, *Weltanschaaung,* economy, aspirations, ethics, etc., as well as complete **two-way** freedom of movement across borders, of people, wares and ideas. Harmony spells stability. The US-USSR peace was an unstable situation caused by an almost total lack of common denominators, violent, serious conflicts of interests and communist expansionist-aggressive motivation. It was, decidedly, a war-prone situation **checked and balanced by deterrence**. Any analysis of the Israeli-Arabian/Iranian achievable peace, leads to the conclusion that, if achievable at all in the foreseeable future**, peace in the Middle East can only be of the US-USSR variety, which means that deterrence is the key to an unstable peace.** As the years between September 1993 and the present prove, the Oslo concept of a " New Middle East", i.e. Middle East harmony, is obviously a failure, due to a lack of analysis of the parameters involved. Proof: The same Israeli advocates of the "New Middle East" claim that "the indispensable guarantee for peace is a strong Israeli military." That means that bayonets should ensure harmony! Somebody was wrong somewhere, and it shows.

Ad hoc, first conclusion: No Israeli credible deterrence=no peace=war. Why Israeli and not mutual deterrence, like the US-USSR situation? Because of the huge asymmetry in physical assets and in aims (Israel would love to be left in peace).

Ad hoc, second conclusion: Any attempt to reach a settlement with one or a number of Pan-Arabia/Iran components, humanely and militarily desirable, politically imperative, can be valid only on the condition that it does not destabilize the Israeli deterrence of Pan-Arabia/Iran as a whole, which is the *conditio sine qua non* for a peace of no war in the Middle East. (Special attention must be paid to Syrian and "Palestinian" territorial settlements affected, as mentioned above, by the changed circumstances between 1967 and the present!)

Encounter Scenarios 2005/2010 (A Random Selection From an Unlimited Number)

> **Note**: The most important factor determining a scenario's probability is the outcome or discontinuation of the US "war against terror".

1. The present US led "war against terror" successfully carried out. Fundamentalists and their secular, anti-Western, mirror image terror regimes overturned, nuclear and other mass destruction arsenals disposed of, relaxation of Middle East tensions, yet Islam did not change "overnight" and Israel has to maintain deterrence, facing the neighboring countries and the "Palestinians".

2. The present US led "war against terror" pursued to a limit. Iraq battered and changed, Saudi Arabia, Iran and others carry on with ME conventional arms buildup and anti-Israeli delegitimization campaign. Iranian nuclear effort stalled, yet its ballistic missiles, biological and chemical weapons come of age. To preserve its incomplete achievements, the US concludes pact with Israel, providing massive ABM (Anti-Ballistic-Missiles) non-US manned support, like BPI (Boost Phase Intercept). ITI (In Trajectory Intercept), like US Aegis adapted destroyers patrolling the Persian Gulf, or in high readiness, US manned, stationed within relevant range. Israeli deterrence based

upon strike aircraft, ballistic missiles with **adequate** warheads and land or submarine launched cruise missiles. Unlike the US in the Gulf War, Israel does not possess "Stealth" aircraft like the F-117 to initiate the eventual air battle, therefore it has to rely very heavily on EW i.e. Electronic Warfare, including Computer Warfare.

3. The present US led "war against terror" fades out because of political (oil) complications with Pan-Arabia/Iran and the European Union. Iran and, possibly, Iraq, possess nuclear and other mass destruction weapons and the ballistic missiles to launch them on Israel. The West is intimidated if not plainly deterred, by long-range Iranian ballistic missiles. Cognizant of the "snowball effect" that may be achieved by Islamic fundamentalist and associated Islamic forces, were they allowed to destroy Israel, the US has helped Israel develop its UAV based BPI defense and leased Israel 5 (now surplus) nuclear powered, ballistic missile carrying submarines to enhance Israel's nuclear deterrence of Iraq/Iran from the safe concealment of the Indian Ocean where two are on station. One is in "round the Cape" transit, one in training and one in maintenance. Israel has, on a war-emergency basis, addressed its economy, streamlining its costly internal political mess and reached a per-capita GNP of about 30-35 thousand US dollars, which allows for a doubling of defense expenditure at present percentage of the budget. As Syria, Egypt, Libya, etc., are in possession of non-nuclear mass destruction weapons and the whole of Pan-Arabia stands to "benefit" from an anti-Israeli nuclear strike, Israel, (assuming it is) in possession of nuclear weapons and their delivery vehicles such as ballistic and cruise missiles or aircraft, declares **all** Pan-Arabia and Iran to be **one** legitimate nuclear target in case of a "second strike" imperative. The purpose is to have the non-nuclear components of Pan-Arabia/Iran help to deter Iran/Iraq from launching a "first strike", knowing that if they do, all Arabia will be subjected to nuclear attack. This policy is legitimate, since it may be safely presumed that, were Israel to be badly mauled by a nuclear strike, its deterrence level will have to rely on nuclear weapons to prevent an Arabian move to administer the *coup de grâce*.

   Note: On December 15, 2001, Ali Rhafsanjani, the former "moderate" Iranian President, was quoted in Jimhuri Alammi as saying that, "Dropping one nuclear bomb will totally annihilate Israel while in the Islamic world it will only cause damage."

4. **Armaggedon**. The present US led "war against terror" is stopped altogether in the Middle East after the Taliban government has been replaced. Iran's nuclear policy is not interfered with, nor Iraq's. The US reaches for a compromise whose early manifestation is the cooling of its material, moral and diplomatic support of Israel in its perennial low intensity war with Arafat or post-Arafat Palestinians. Pan-Arabia/Iran sense that, having won, *de facto,* the war against "the war against terror", having reached nuclear power status and given the fact that "penitent" US is withholding the delivery to Israel of arms that will enable it to maintain its qualitative edge as part of its coercion (of Israel) to accept the Arab terms, the time has come to destroy Israel as a first step to Islam recovering the initiative. International confusion reigns. These quotations from Daniel Pipes' article, "Who Is The Enemy?"[4] help understanding:

   > If politicians impart imprecise or contradictory goals to their military leaders, wrote Carl von Clausewitz in **On War** [1832], their efforts will almost certainly run up against major difficulties. Who, then, is the enemy? The message of September 11 was loud and clear, allowing for no ambiguity: the enemy is militant Islam. No wonder, then, that even before knowing who exactly was responsible, the government has been reluctant to say so.

In February 1995, at the peak of the horrific violence in Algeria that pitted armed and brutal Islamist groups against a repressive government, NATO Secretary General Willy Claes declared that, since the end of the cold war, "Islamic militancy has emerged as perhaps the single gravest threat to the NATO alliance and to Western security." Indeed, Claes said, "not only did militant Islam pose the same kind of a threat to the West as Communism before it, but the scale of the danger was greater, for militant Islam encompassed elements of terrorism, religious fanaticism, and the exploitation of social and economic injustice." Claes was absolutely correct. But his statements met with outrage from all over the Muslim world, and he was quickly forced to retract and to withdraw.

In the emerging circumstances, Pan-Arabia/Iran confronts Israel with an ultimatum regarding the Palestinian settlement that does not allow for any survivable defense or deterrence. War must then result.

The Air Force Operational Requirements to Match Above Scenarios 2-4

Since Iran and Iraq become active players in the Pan-Arabian /Iranian confrontation with Israel and the Air Force is the arm to handle this circumstance, the Air Force's long range potential has to become the rule, rather than the exception. A Combat Radius of about 1,100 N.M. (~2,000 km) should become operational routine (covering Iran's heartland, the Straits of Hormuz at the exit of the Persian Gulf and, of course, the Shihab 3 launching sites, including arbitrary "dog-legs"). This implies a complete revision of present intelligence strategic as well as tactical-real-time assets, force structure and composition, strategic concepts, tactical doctrine, training programs, logistic provisions, peer culture and, of course, the resulting budgets. With years 2005-2010 not so far away (projects much less elaborate demand 5-10 years to accomplish), one may only hope that the required upgrading is already well under way.

The operational requirements have to take into consideration the facts that many of the anticipated strikes will probably be the longest ever for combat aircraft, twice the Berlin bombing ranges of World War II and about 1.5 times the ranges covered by combat aircraft in the Gulf War (1,100 to 1,600 km),[5] and that practically the whole range is over enemy defended territory. Some requirements of particular interest are:

a. The number of reconnaissance satellites, capable of day and night surveillance with a 0.30 m resolution, has to be sufficient to provide a maximum of 20 minute intervals between the coverage of relevant intelligence targets (short life cycle).

b. The area should be permanently under electronic surveillance, ELINT (Electronic Intelligence [signal interpretation]), COMMINT (Communications Intelligence [message interception, decrypting]), etc.

c. Encrypted, real-time, multi-channel, jam-proof, two-way air to command radio-communication has to be ensured.

d. Given the duration of flights, the average number of missions per serviceable strike aircraft per each 24 hour period will be about two, which practically means a substantial increase of the combat aircraft TO&E (Table of Organization and Establishment [assets and manpower]). As a rule, the strike aircraft must carry high precision ammunition using TV, Laser, GPS, radar or radiation guidance, except where "dumb-iron" bombs' precision will suffice.

e. The strike aircraft EW (Electronic Warfare [in general]) defensive and offensive and IR (Infra-Red [heat-seeking]) defensive packages have to be adequate for the range and variety of systems encountered. If necessary, EW aircraft will escort strikes as required to jam to saturation or otherwise divert defenses.

f. Tanker aircraft, sufficient in numbers, equipped to operate in a hostile environment (EW, Flares, Towed Decoys, etc.), will "rendezvous" over enemy, undefended or sparsely defended areas, even if this stretches ranges by a certain amount.

g. Extensive use is to be made of long-range, recoverable and non-recoverable UAVs (Unmanned Aerial Vehicles) for BPI (Boost Phase Interception [interception of ballistic missiles at launch]), diversions, defense suppression, EW-active and passive, ELINT and strikes, especially in SAM (Surface to Air [guided] Missiles) radiation environment.

h. Air to air, fuel demanding combat should be, as a rule, avoided unless exceptional circumstances prevail. Use of long-range air-to-air missiles is advisable.

i. C^4I (Command, Control, Communications, Computers, Intelligence) platform aircraft like AWACS, JSTAR, etc., should be selected among types with the highest service ceiling in order to achieve a maximum "line of sight".

j. Aircrew Search and Rescue units have to be trained and outfitted for long-range operations, etc.

A Number of Constraints

1. **Time factor at war outbreak/integral part of deterrence**. Prior to the Six Day War, Deputy Prime Minister Yigal Allon made, on February 22, 1967, a defense-policy statement saying that, in these circumstances, were war to be imposed on Israel, the only way to win it or, **in some cases, survive**, would be to **preempt by surprise**. This policy, rendered obsolete by the introduction of ballistic-missiles (even with conventional warheads) and of high performance anti-aircraft missiles, has to be altered, even in the above mentioned Scenario 1, allowing for the capability to absorb and repel a ballistic missiles backed conventional surprise attack, redress the situation in 2-6 days, and then launch a counterattack while containing any guerrilla/terror Palestinian efforts at close quarters. The various Pentagon missions studying Israel's defense imperatives between 1968 and 1974 came to the conclusion that Israeli "secure and defensible borders" as per UN Resolution 242 will have to include the Golan Heights, the peaks and western slopes of Samaria and Judea and areas in the south that have meanwhile been handed back to Egypt following the signature of the peace treaty. The logic of this recommendation was to enable the deployment of Israeli ground forces in topographically superior, hence defensible positions. This would free the Air Force to take care of the enemy ground-to-ground and ground-to-air missiles that require 2-6 days, during which the ground forces, denied reserves and proper air support, will have to hold positions in a theater dominated by enemy airpower. That means restricted movement, allowing little or no assault and attack helicopter support, while having to check, simultaneously, any guerrilla/terror efforts in the rear. Where Scenarios 2, 3 and 4 are concerned, the topographical-space advantage imperative is decisive. A longer time delay may have to be added to the above-mentioned 2-6 days. Worse, were the metropolitan Tel Aviv area to be put out of commission by persistent chemical, biological or radiological agents or destroyed by nuclear warheads while the

northern and southern sectors survive in the wake of an Israeli "second strike", a non-contaminated, serviceable link between the two parts is imperative. The only alternative link is the Jordan Valley, which requires advance infrastructure upgrading of roads, power and communications lines, water and fuel, etc., pipelines, railways and, of course, alternative, modest airbases (even though ill-sited because of topography and tactical reasons). If Scenarios 2, 3 and 4 are considered probable, work on the Jordan Valley infrastructure is already overdue.

2. **Ballistic Missiles Intercept**. Given the minuscule size of the country and the high concentration of about 80% of its population and means within an area that may be wiped out by two-three medium yield nuclear charges, Israel is particularly vulnerable to mass destruction weapons. This being the case, it must, repeat, must build an anti-ballistic missiles multi-layered defense to complement a deterring "second strike capability". The second strike capability, is the assurance that Israel is capable of administering an unacceptable punishment to an enemy that has launched a mass destruction first strike. To render the second strike capability efficient both as a deterrent or a post-strike survivable asset, it has to be concealed to become immune to a preemptive strike. In a region of irresponsible, rogue dictatorships that worship fundamentalist-suicidal-dementia as "sainthood" (*Shahids*), were they to possess nuclear weapons, one may assume that a second strike capability will not maintain the same deterrent effect prevailing in a country, whether totalitarian or democratic, where a Cartesian logic prevails. This psycho-downgrading of the second strike capability's deterrence, added to the tiny country's vulnerability, generates the urgent requirement for a credible anti-missile defense (AMD), both to enhance deterrence (through BPI) and to intercept ballistic missiles launched at Israel. Ballistic missile interception is a new, far from mature, but valid technology. Conceptually, there are three stages from launch to impact where the missile interception should be attempted:

   a. "Boost Phase Intercept" (BPI) at the moment of launching. With the rockets ignited for launch, the missile emits an astronomic amount of heat, i.e. infrared energy on which sensors may home from hundreds of miles, assuming they have a line of sight. BPI is certainly the best way to intercept ballistic missile because it is not only the missile which is destroyed. The launcher may be too, as well as the warhead. Israel possesses most of the required BPI technologies, but, as far as common knowledge goes, it has not yet an operational BPI unit. Nor does the US or anybody else yet have one. This project should certainly enjoy a high priority.

   b. In Ballistic (Parabolic) Trajectory Interception (ITI). The US is close to reaching operational status with long range anti-ballistic missiles' missiles mounted on and launched from "Aegis" type destroyers that may be positioned in, say, the Persian Gulf and are capable of intercepting missiles launched westward from either Iran or (most of) Iraq. This system requires high power radars and computers and long-range missiles whose costs are, at present, beyond Israel's capabilities.

   c. Warhead re-entry, pre-impact intercept. This, an extension of the anti-aircraft artillery concept, consists of batteries of anti-ballistic missiles' (ABM) missiles located in or around the defended target area, alerted and initially guided by powerful, long range radars until the target is acquired by the ABM's own system and guided to the resulting impact or lethal near miss. The Israeli "Arrow" system, the only operational ABM system in the world at the present time, belongs to this category. The problems are that the "Arrow", the weapon of last resort, may be saturated by decoys, disintegrating old Scuds or, being more expensive than its

target, simply overwhelmed by quantities whose warheads' composition can be mixed.

When considering the attributes of each system, if Israel desires to defend its minuscule vital area with the highest probability of success, or to deter by proving that it can do it, it needs a multi-layered defense, with the priority set on BPI, where ABM counts most, if/when technology and finance combine to render it possible.

3. **Simultaneous area coverage**. Tactical conditions may require that the furthest targets be attacked first, by tactical surprise, in which case a suppressed defense path has to be cleared simultaneously all the way to pave the safe track for the attackers, if they are manned and meant to be retrieved. This implies an enormous number of auxiliary missions/launchings of aircraft, manned or unmanned (tankers, defense suppression, EW of all varieties, C⁴I, JSTAR, diversions, pre- and post-strike reconnaissance, search-and-rescue prepositioning, etc.), synchronized with surveillance satellite overpass and with the launching of ballistic missiles. A first conclusion is to examine carefully the feasibility and cost benefits in terms of **ton x miles x per target hit at distance**, considering **all** assets involved in that mission and, of course, the risks of human life losses. Offhand, it seems that only absolutely vital targets should be attacked at extra-long ranges. These would be ballistic missiles and launchers and strategic stationary targets that affect the conduct of war. Tactical targets, like troop convoys crossing the Euphrates River westward, etc., should be allowed to approach unmolested until within closer, efficient range, unless exceptional conditions emerge. When conditions are adequate, gradually to "roll the carpet" of defense suppression from west to east, over a more manageable period of time, it seems that the use of manned combat aircraft, with their tactical flexibility, precision of aim, adequate choice of weapons for a particular target as well as real-time post-strike reporting and random intelligence acquisition, should be preferred. When time or means for proper in-depth defense suppression are not there, the more unmanned vehicles which are used at longer ranges, the better. This leads to another conclusion, namely that UAVs (recoverable or not) and cruise and ballistic missiles that cover the appropriate ranges with the required precision, should be brought forefront, considered prime and not auxiliary battle systems, with all that this implies. The military (only) victory of the US and allies in the Gulf War of 1991 should not be misleading. The allies had almost 1,600 strike aircraft, 252 tankers, 173 tactical transport, 46 Command & Control and 106 intelligence and reconnaissance aircraft (exclusive of light aircraft) that flew a total of 117,081 missions over 2-3 weeks over ranges that average some 2/3 of the ones anticipated for Israel. Aircraft strikes and related EW and other missions numbered 75,735 out of the total, while cruise missile (Tomahawk) launches were only 262; 1,299 strike missions were F-117 "stealth" strike missions performed by aircraft that Israel will probably not possess within our time frame. No ballistic missiles were launched by the allies.[6] The F-117 and the Tomahawk blasted the defense gates open unopposed. In scenarios 2, 3 and 4, there are two gates (at least), one Iraqi **and** one Iranian to blast open, at much longer range, without the F-117. There will not be 3 weeks to win the air battle – Israel cannot withstand it. To complicate matters, Iranian-driven "low intensity war" waged by "Palestinians" and "Hizbullah", synchronized with the main thrusts, are to be considered realistic and expected.

International, openly published data, places the Israeli Air Force combat aircraft TO&E as similar to that of medium powers like Germany, Britain or France, namely approximately 600 planes. The number of tankers, tactical transport, C⁴I, etc., that Israel possesses is negligible

for anything nearing the task of fighting both Iraq and Iran. A time span of 3 weeks for a decisive air offensive is, as mentioned, absolutely unacceptable in Israeli conditions. The Israeli Air Force 2002 combat capabilities indicate that an Israeli deterrence of Iraq and Iran, which is the equivalent of the assurance of winning an eventual war, cannot be based on a Gulf War type overwhelming, decisive conventional air war, wasteful logistically, but almost totally preventing losses of life.

As a matter of fact, the total Allied air victory in the Gulf War battle, has demonstrated that General Douhet's theory of the 1930s, that air forces may win wars single-handed, is only partially true. Air forces can decidedly win battles even "single-handed" and winning battles is the prerequisite of winning wars, but**, once the battle is won, no conventional war is won unless land forces are there to impose the victor's will on site, in every nook and cranny. It is, therefore, highly improbable that an Israeli anti Iran and Iraq (and Pan-Arabia as a whole) deterrence or war-waging capability can be based on the Gulf War (or its kin in former Yugoslavia) or on any previous strategies, applicable when thwarting the threat of the immediately neighboring countries.**

A Dangerous Six Day War Hangover—Scenario No. 5

The people one should fear most are academics whose mind is made up, hence they refuse to be confused with facts. This seems to have been the case when the Oslo Agreement (1993 – remember?) had been negotiated, on a "best case" working assumption, neglecting the planner's perennial yet imperative nightmarish question of: "What will happen if I am wrong?"

The same fear comes to mind when reading the "*magnum opus*" of the Jaffee Center for Strategic Studies (Tel Aviv University), namely *The Middle East Military Balance 2000-2001* edited by Shai Feldman and Yiftah Shapir. The study concludes that, "to sum things up, stepping into the new millennium, the Middle East region seems to be more stable than ever." When questioning the validity of this statement, one finds out that all the study's four chapters have been written by a pure academician, Shai Feldman himself (he heads the Jaffee Center), with Shapir cooperating in figuring the balance out.

The scope of the above publication is way beyond the context of this paper, however, the task and capabilities attributed to the Israel Air Force are to our concern, since they are the forerunners of the period dealt with in this essay. Notwithstanding the general soothing, optimistic tone of the "Middle East Military Balance" (reminding one of the Rabin-Arafat handshake and Peres' *abrazzo* on the White House lawn in September 1993), and leaping over the geo-political reasoning where the Jaffee Center may have a case, let us assume that a Pan-Arabian/Iranian dictators' coalition does materialize, the way spastic occurrences do in the Middle East. (Poor April Gillespie never thought at the end of **July** 1990 that "our friend" Saddam would misbehave at the beginning of **August**.) Let us assume that with the "war against terror" shifted to the Philippines or Algeria, or in limbo, the coalition decides that time has come to settle the issue of Israel before the US is back in town, to clean the slate before agreeing to oblige and put an end to world terrorism. Low probability? Zeira and Dayan decided back in 1973 (Yom Kippur) that the probability was as low as to be neglected, which they did and the rest is history. Having learned our lesson, we know now that, when facing dictators, the deterrence level required to prevent the outbreak of war is not that required to counteract what may be believed to be the "most probable scenario", but, rather, that which is required to counteract any "possible scenario", i.e. the "worst case scenario". The optimum Pan-Arab way to ignite a war will be to achieve a total surprise, like in 1973, but, at present

the massing of troops, increase in communications traffic and other telltale steps will be correctly interpreted and Israel may preempt. The best option, probably the only way for Arabia/Iran to achieve surprise with a high probability, is to open with a heretofore undetected ballistic missiles' barrage, be they equipped with only conventional warheads (to avoid Israeli non-conventional reprisal or over-emphatic world reaction). Syria alone may sustain a 20-40 missiles-a-day barrage for 20-40 days. Add Iran's, Iraq's and maybe Egypt's ballistic missiles and compare expected results with the massive 1991 urban exodus, when, during the Gulf War, tiny Israel suffered only 39 impacts over 21 days, i.e. an average of less than 2 missiles per day. Mass exodus, road bottlenecks, panic, disorganization, disruption of communications, food, fuel and water problems can certainly be expected, at least at the beginning of the attack, with fathers, sons and sweethearts doing their best to see their beloved safely resettled before they join their reserve units, assuming the call-up message reaches them at all. There is no doubt that the mobilization of the reserves will be delayed or disrupted and that the large numbers of missile impacts will compensate, to a fair extent, for a very poor CEP, allowing the attacker to cause serious damage to airfields or armament storage dumps and to roads, electrical, water, fuel distribution and communication networks which are interwoven all over the country's mini-area.

Add to this disruption, Palestinian synchronized guerrilla/terror attacks.

Like in 1947, 1967, 1973, etc., no outside help is to be expected, certainly not during the first crucial days, during which, according to established patterns, empathy and deliberations will abound, as will strong requests not to retaliate.

The major tasks the possibly damaged Israel Air Force will be called to fulfill, while under missile threat, will be simultaneous: ballistic missile suppression, total destruction of the enemy's C^{4}I, SAM (surface to air) missiles and other anti-aircraft artillery defenses over missile launching areas (mostly mobile, assuming intelligence pin-pointed launchers) as well as those covering the skirmish lines and, not less important, air superiority over the buildup in the rear, including ballistic missiles interception. The writer is in full agreement with the Jaffee Center about the total qualitative superiority of the Israel Air Force over its antagonists, yet remains preoccupied by the volume of missions that will have to be carried out under duress, simultaneously. While the force-multiplying factor of the precision of modern ammunitions (see above) is obvious, huge handicaps have to be surmounted. One is the element of enemy surprise, as Israel experienced at the outbreak of the Yom Kippur War in October 1973. Another is the concealment and spread out deployment of the enemy ballistic missiles and their launchers. Keaney and Cohen[7] count in their Gulf War missions breakdown, 1,480 strike missions carried out against the SCUD missile launchers with ZERO results! Debriefings and new technologies have surely resulted in improvements over the last ten years, but the number of missiles and launchers has also increased and, if Iran joins the war, numerous launchers will be sited at twice the range, requiring in-flight refueling to get there and back, which cuts the number of missions roughly in half. Then there are the enemy air strikes to protect against, over the battle area and "inland". (If one believes that tiny Israel has an inland.) Between January 16 and February 28, 1991, the Gulf War allies carried out some 75,000 strike and strike associated sorties (see above) with 1,600 strike aircraft, which is about 1,750 missions per day, i.e. roughly 1.1 missions per aircraft per day. This is not bad for the ranges covered. Going to Iran means going twice as far as Iraq. Published reports claim that Israel flew an average 3 missions per day per aircraft, at relatively close ranges, during the Six Day and the Yom Kippur wars. Allowing for ranges, the allied arithmetic seems to be correct. How many IAF missions will be required to fight Syria, Iraq, Iran and possibly other Arab forces participating in the Pan-Arabian coalition? It is humbly suggested

that the figure will certainly be higher than when fighting Iraq alone and higher yet when one's time span is a few and not 43 days. Conscious and convinced that the Israeli Air Force is the best ever and that it is capable of doing the seemingly impossible ("We do the impossible every day. Wonders take a little longer."), this writer does not share the Jaffee Center's optimistic attitude.

It seems that some learned people are oblivious, again, of the fact that peace in the Middle East can, for the years to come, be only a peace "of no war" like the US-USSR peace, a credible deterrence being the only tool to maintain it. A credible deterrence is a lot of bean-counting, convincing the potential enemy that the punishment he may suffer is unacceptable and convincing Israel that, if put to the test, it will have the margin to win handsomely even if mistakes will be made and intelligence will err at times, which always happens, according to "Murphy's Law". *The Middle East Military Balance 2000-2001* appears to be dangerously, even recklessly over-optimistic, a hangover from the heady days of the Six Day War of 1967. Having been in charge of the Israeli Air Force Planning and Operational Requirements prior to that war, this writer wishes to make a confession: The unique victory of the Six Day War was only a hair-width away from the total collapse of the Jewish state. The principle of pinning down the Arab coalition's aircraft by damaging the runways had been established by May 1964, the war being expected to break out before 1968. The figures indicated that striking skillfully, we could pin most of the enemies down with the 200 planes we could muster. Then came the nightmare: they can certainly do the same to us. What can we do against it? We went to evaluate SATS (Short Airstrip for Tactical Support) at the Marine Corps bases of Cherry Point in North Carolina, Parris Island in South Carolina and Schleswig in Germany. SATS was a high energy device (two Phantom J-79 jet engines) catapulting planes, aircraft carrier fashion, from a 300 meter strip of aluminum emergency runway and cable arresting them upon landing. The loads proved to be too high for our fighters, built to Air Force rather than Navy specifications. We realized that we had no answer in the case that the Arab coalition would strike first, hence the Allon, above mentioned, defense policy statement and the IDF exasperation at the US, etc. asking us to wait, and at our own government's hesitations. The State of Israel was barely 19 years old and had no choice but to preempt. Israel is 54 years old now and should be much wiser at not taking risks. It still cannot afford them now.

Conclusions

The nature, magnitude and intensity of the strategic and tactical obstacles which will face the Israel Air Force during the balance of this decade are a direct consequence of the conduct and outcome of the US (and allies'?) "war against terror".

If the Saudi Arabian originating and financed (let the West stop cheating itself) Sunni-Wahabi (Al Qaeda) fundamentalist terror will be uprooted together with its Egyptian, Sudanese, etc., offshoots, if the Iranian-Shiite fundamentalist terror and its branches in Syria, Lebanon and among (the mostly Sunni) "Palestinians" will be checked, if the Ba'ath "Islamic Socialism" – a mirror image of Islamic fundamentalism – will be dethroned in Syria and Iraq, and if the Middle East totalitarian regimes will be really, in fact and not only on paper, cleaned of nuclear, biological or chemical weaponry, the Middle East will have reached the above mentioned Scenario 1, and peace, be it a Peace of No War for the time being, will become a realistic proposition.

The abandoning, by the US, of the "war against terror" in the Middle East, at this post-Afghanistan stage, will certainly be interpreted by Islam as a crushing,

"fundamentalist/Ba'ath – adrenaline-flooding victory" over the infidel, and will revive terror with a vengeance the world over, following a respite needed for Islamic reorganization, misunderstood by the West (in its quest for "a mature, decent compromise"), the kind the world has witnessed, for instance, following the US/UN non-victory at the end of the Gulf War, that, according to Bernard Lewis, will be interpreted by Islam as "cowardice". Where Israel and the Israeli Air Force are concerned, this will be the background to a worst-case scenario, whether Scenarios 2, 3 or 4 or other. During the decade ending in 2010, **Israel will certainly not be able to cater for Scenarios 2, 3 or 4** or similar by being able **credibly to deter or fight a conventional war** with a Pan-Arabian/Iranian coalition led by an aggressive fundamentalist/Ba'ath leadership whose morale is at its peak following what it believes to be a major Western setback, whose mass destruction weapons and ballistic missiles, now out in the open, have received a measure of legitimization by remaining unmolested at the end of the war against terror, whose needs are supplied by Western fellow travelers who never really contemplated fighting terror and whose terror is directed mainly at itself.

Were the war against terror to be prematurely discontinued by the US, and were US, UN, NATO or other intervention, diplomatic or otherwise, not to be effective enough to disarm rogue governments of their mass destruction weapons and ballistic missiles, the Israel Air Force will remain the only major tool of Israeli deterrence or war fighting in Iraq and/or Iran.

Although the IAF has proven in the past its tactical and technological prowess, it seems that it will have to undergo a major facelift, such as:

- It will have to maximize its long-range, accurate, real-time strategic intelligence. Intelligence is like a "macro-gun sight". It enables hitting the choice targets while saving numbers of missions and ammunition.

- It will have to maximize its second strike capability credibility, hence efficiency, in volume, diversity, concealment and open, clearly stated policy. For instance, since any country's successful launching of a mass destruction attack against Israel is bound to reduce considerably its overall deterrence in a situation of non-belligerence (at best), it is practically certain that a Pan-Arab coalition attack against Israel is to follow. This being the logic, Israel must openly declare, *ante-factum*, (in tune with Rhafsanjani's statement) that its second strike targeting includes **all** Pan-Arabia and Iran, and prepare to make good if tested. World opinion may be conditioned to see this policy as legitimate by having the Air Force make this strategy known over a period of time, as a result of the petering off of the war against terror. Faced with the potential mass-murder of its population, the Israel Air Force has to be conditioned to revert to the US-British World War II interpretation of total war. The chances of deterring a mass destruction threat while adopting a "pinpoint" response policy are nil, hence an *a priori* clear statement to this effect may save thousands of lives by increasing the deterrent effect of the second strike capability.

- It will have to do everything it can to develop, test, manufacture and deploy a BPI (Boost Phase Intercept) capability to match the operational requirements as dictated by the enemy ballistic missiles' performance and numbers.

- It will have to rely heavily on recoverable and non-recoverable UAVs, stealthy or not, for tasks such as defense suppression, decoys, EW in all its aspects, intelligence gathering and strike. GPS navigation, a warhead making up for a warhead lethality that compensates for miss-distance and a relatively efficient self-defense (EW and infrared) suit, should be well within in-house technological and financial competence.

- It will have to maximize its traditional combat and auxiliary manned force and equip it with the best it can procure. There is no substitute in sight for manned aircraft.

- It will have to assume operational responsibility for any second strike capability, whether **deployed on land or at sea (thus involving unity of command)**.

The "*Summa Summarum*" of this lengthy deliberation is that, unless the US persists in fulfilling to the end the task it assumed when declaring "War Against Terror", the Middle East security situation will badly deteriorate, beyond that prior to September 11, 2001, given the *de facto* admission by the world that the possession of mass destruction weapons by rogue, irresponsible, rich regimes which practice terror on a world scale, is an irreversible reality. Were this to be the case, the main tool to prevent the spread of world chaos, starting, unfortunately, with the Middle East, will be the Israel Air Force. **Given its physical limits, the IAF will probably have to go beyond conventional warfare. Only the successful conclusion of the "War Against Terror", as defined by President Bush, will defuse the Middle East growing crisis.**

Endnotes

[1]   *Encyclopaedia Britannica*, Volume 2, p. 193, 1963, this writer's emphasis.

[2]   Oxford University Press, 1999.

[3]   *National Post*, Canada, January 16, 2002.

[4]   *Commentary*, January 2002.

[5]   See *Revolution in Warfare? – Airpower in the Persian Gulf*, by Thomas A. Keaney and Eliot A. Cohen, 1995, Naval Institute Press, Annapolis, MD.

[6]   Ibid.

[7]   Ibid.