



The Strategy of Deterrence and Air Power

by Sanu Kainikara

FOREWORD

The idea of conventional military deterrence as an effective pillar of national security is a contested one. However, a simple calculus might read thus:

- the perception of the one to be deterred that the situation is not already so threatened that the status quo is unacceptable;
- both sides are rational actors; survival is important;
- the one deterring effectively understands the one to be deterred, has correctly judged military power to be an effective tool, and has transparently postured and weighted it against things that are valued;
- the one to be deterred perceives the deterrer's capability, and the will to use it, as credible;
- the one to be deterred judges the cost of acting against the deterrer to be too high; and
- therefore, deterrence is achieved.

If all of this is true, then conventional military deterrence is a viable strategy, or at least an important part of one, to secure a state. But the world is not so simple, and effective deterrence relies on understanding and addressing nuance. As well, military power is but one tool available to a state and, dependent on circumstance, not always the best choice.

What then is the contribution of air power as part of a conventional military deterrent posture in today's world? This paper takes a frank look at the issue.

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AUTHOR'S FOREWORD

In its simplest form deterrence aims to inhibit or prevent someone from doing something. From a national security perspective deterrence is the first stage in ensuring the protection of the state's interests, starting with avoiding conflict by employing a number of national power elements and ending with offensive combat operations if necessary. Deterrence, in the classic sense, includes a number of steps that provide graded responses to emerging situations with conventional methods and nuclear forces as last resort options.

A nation that adopts a strategy of deterrence has to ensure that its response capabilities in case of direct or covert attack are extremely robust and that potential adversaries perceive them as such. The line dividing the perception of powerful capability and perceived ineptitude in the application of force is very thin and clearly visible. It is therefore, necessary to ensure that one's own nation is seen as being on the right side of the divide.

In the past few decades it has become apparent that the conventional military forces of the developed world are overwhelmingly superior to those of groups that pose contemporary threats to international security. While this superiority deterred these non-state and quasi-state entities from initiating action for a period of time, the primary effect was to accelerate the move towards the adoption of asymmetry as a viable warfighting concept. The conflict scenario is undergoing constant change as this cat and mouse game of asymmetry and solution is played out in the on-going battles across the world.

It is under these circumstances that the concept of deterrence built on conventional military capability has to be examined. Within military capabilities, air power has always played a crucial role in all aspects of warfighting. Air power is a primary contributor to the strategy of deterrence in many aspects. When deterrence is viewed as a process, it can be envisioned as a succession of related, sometimes parallel steps. Logically, these steps would be to detect the beginning of threatening plans; dissuade the potential adversary from making such moves; deter by ensuring that the adversary understands the capabilities that can be brought to bear; defeat any move if it is made; and destroy the adversary's capability to make such moves in the future. Air power contributes directly to all these steps.

All military strategies that draw on national security strategy for their relevance will have to take into account the vital and critical contribution that air power makes to ensure their success. In the contemporary whole-of-government approach to national security, the role of air power as an enabling and protecting agent has become ingrained. In the acceptance of the strategy of deterrence as a major building block in the pursuit of national security in an ever-changing world—where threats are more amorphous than ever before and response options are often constrained—air power with its inherent flexibility will be a prized capability. This paper examines the concept of deterrence and the contribution of air power to its success.

Sanu Kainikara
Canberra, August 2008

Deterrence is appropriate only when adversarial leaders are motivated largely by the prospect of gain rather than by the fear of loss, are free to exercise restraint, are not misled by grossly distorted assessments of the political-military situation, and are vulnerable to the kinds of threats a deterrer is capable of making credible.

...The timing of deterrence is also important. The effectiveness of deterrence is enhanced if it is used early, before an adversary becomes committed to the use of force and becomes correspondingly insensitive to warnings and threats.¹

INTRODUCTION

Employing the concept of deterrence to ensure national security is not a modern phenomenon. However, it assumed the status of an explicit defence strategy only in the 20th century. Most of the powerful nations of the world accommodated some form or the other of deterrence in the broader calculation of national security throughout the first half of the century. For example, in the early 1900s, German naval strategy, formulated by Admiral Alfred von Tirpitz, relied on deterrence in an oblique manner for its success. The calculation was that Great Britain would not fight even a weak German navy, if the Germans could inflict sufficient damage to the British fleet to ensure that other rivals could then challenge it.

The introduction of nuclear weapons post-World War II brought in a completely new strategic dimension to the concept of deterrence. Three major factors accounted for this change—there was no effective defence against a nuclear attack and therefore, the only defence was to ensure that an attack did not occur; nuclear retaliation by a nation that was attacked would be devastating; and the scale of destruction could, and in most cases would, exceed any benefit the initiating nation had expected to achieve. This was the beginning of deterrence by what is known as mutually assured destruction (MAD) that was part and parcel of the entire Cold War era. The US-led North Atlantic Treaty Organisation (NATO) that became an umbrella for the Western nations to withstand the communist threat emanating from the Soviet Union made up for its inferiority in conventional weapons by ensuring a substantial nuclear capability. The threat of nuclear retaliation was used as the deterrence tool even against possible conventional aggression.

However, with the passage of time and greater awareness of the extreme devastation that nuclear weapons would bring, the understanding of nuclear deterrence changed. While MAD was applicable between states that possessed nuclear weapons, the moral and ethical dimensions of using nuclear weapons against a non-nuclear state became central to the humanitarian debate. This posed challenges to the concept of deterrence based on nuclear capabilities. Even as the Soviet Union went into decline and MAD started to move away from centre stage, deterrence as a concept was being realigned.

The end of the Cold War and the break up of the Soviet Union in the 1990s changed the perceptions of national security across the world, leading to a ripple effect on prevalent national security strategies. The primary change was the dramatic alteration in the context of the deterrence strategy that had existed between the United States and the Soviet Union till then. From a stable nuclear deterrence posture of MAD, the context shifted rather rapidly, to an unstable world with power becoming widely dispersed between nation-states and groups that are transnational and at times have quasi-state status. The application of a deterrence strategy in the contemporary strategic scenario is more complex and requires more measured and flexible actions than ever before.

The relative roles of nuclear and conventional weapons have changed and the likelihood of conflicts that lead to wars of national survival has receded, at least in the democratic world. Deterrence today is focussed on averting conventional wars and lesser types of conflicts, either between states or between states and non-state adversaries. However, it must also be admitted that the slow proliferation of weapons of mass destruction (WMD) including

¹ Ned Lebow & Janice Stein, 'Beyond Deterrence', in Ned Lebow, *Coercion, Cooperation and Ethics in International Relations*, Routledge, London, 2007, p.176

nuclear weapons, possibly even to non-state entities, is an issue that cannot be ignored within the concept of deterrence. The difficulty in enforcing deterrence on transnational extremist groups that may possess and is likely to use WMD is exacerbated by the moral dilemma that faces a democratic government in retaliating in kind.

THE CONCEPT OF DETERRENCE AS A NATIONAL STRATEGY

Deterrence is the art of producing, in the mind of the enemy, the fear to attack.

- Sterling Hayden

Deterrence is an exercise in seduction and coercion—involving the use of promises and threats—to ensure that a potential or actual adversary is dissuaded from pursuing actions detrimental to one's own interests. It involves maintaining the status quo by ensuring that the cost of challenging it will be prohibitive, thereby making the status quo more acceptable than any other situation. The viability of deterrence is completely dependent on a nation's demonstrated physical capacity and preparedness to deliver on both promises and threats and the perception of its collective will to do so. This could mean the willingness to inflict unacceptable damage to aggressors so that they refrain from committing any act that is potentially damaging to the nation's security. The combination of will and resources has to be credible for the concept of deterrence to succeed.

Deterrence presupposes that all decisions are made after an unbiased and rational cost-benefit analysis of the actions being contemplated and that this analysis is susceptible to outside manipulations, essentially by making the cost side of the equation far too high vis-à-vis the perceived benefits. This may be a major flaw in the acceptance of deterrence as a basis for national security strategy.

All sovereign states, irrespective of their size and capability and the threats and challenges that they face, strive to ensure adequate national security. One of the major elements that most nations examine while formulating their security strategy is the effectiveness of maintaining a deterrent military capability as a cornerstone. Effectiveness of the military however, is only one crucial element. Within the national security strategy deterrence should be studied as a dynamic, process-oriented concept that involves determining who should attempt to deter whom from doing what, when and where and by what means rather than as a simplistic cost-benefit analysis. This is an involved and complicated process with myriad variables in each of the steps, some of which cannot be tangibly measured.

The concept of conventional deterrence is a contested idea that is not readily analysed easily. This is mainly because the efficacy of the concept is critically dependent on the context of its application. Adopting conventional deterrence as the basis of a security strategy is a complex and sophisticated undertaking, based on two distinctly different yet mutually supporting methodologies—denial and punishment. Deterrence by denial is based on convincing would be aggressors that all attempts to attack the nation are bound to fail. Obviously such a concept can only be built on great geographic, strategic, political and economic strength and resilience. Essentially, deterrence by denial is based on the known futility of potential attacks on a nation and its larger interests for reasons of ineffectiveness and the vehemence of repercussions. There is a subtle nuance to this stance in that the concept of denial is effective only if supported by the demonstrated capability of the nation to be able to react offensively in case an attack was carried out against it. In other words, the nation openly shows potential adversaries that no attack on it or its interests will succeed in degrading the functioning of the country to a degree that would affect its normalcy and that there will be comprehensive retaliation to any such attack.

Deterrence by punishment relies on assured reprisal upon an adversary who attempts to damage national interests by any means. The trigger to initiate such punishment need not always be an attack on the nation, but could also be adversary actions that directly or indirectly impinge on the nation's broader security interests. In recent times, pre-emptive attacks on potential adversaries who have unequivocally indicated their intention to threaten national security are also being accepted as an extension of the strategy of deterrence by punishment.

Pre-emption should actually be viewed as a concept that fits in between the strategies of denial and punishment. In all cases, the effectiveness of deterrence is dependent on the decisiveness of the action being initiated.

From a strategic viewpoint, pre-emption may be a more effective means of enforcing deterrence in an insurgent or terrorist style threat scenario. Conventional reaction to an insurgent threat is fraught with the danger of being indecisive, drawing out the conflict into a protracted low intensity confrontation and eroding the concept of deterrence itself.

There are two basic flaws in adopting deterrence as a foundational basis for a national security strategy. The first is that the concept is built on the assumption that the adversary's rationale in selecting a particular course of action, as well as casualty acceptance and tolerance of material and/or psychological damage that would come with the pursuance of that course of action both are the same or fairly similar to one's own. For example, it is fairly obvious that a suicidal opponent will not be stopped by either form of deterrence. Therefore, the deterrent effectiveness of a particular capability that a nation possesses or an action that it can undertake against a potential adversary is dependent on the adversary's perception of that capability or action vis-à-vis their own contemplated or proposed course of action. Therefore, building effective deterrent capabilities will need to take into account the cultural ethos of the adversary because what is reasonable behaviour to one nation, culture, ethnicity and social order may not seem rational to another. Effective deterrence is reliant on the perception of the adversary.

The second flaw is that the ultimate aim of deterrence is to preserve the status quo. This means that when it is successful there is 'nothing much happening'. Deterrence as a concept is aimed at the cognitive domain of a human being and it is extremely difficult to measure its effectiveness. Security policies based on the assumption that adversary minds have been deterred can very easily be frustrated. In addition, the maintenance of status quo in a volatile strategic context that is permanently in flux requires adept manipulation of deterrent capabilities and dynamic adaptation of strategic security priorities. The dexterity necessary to achieve this is normally beyond the capabilities of most democratic nations.

In the current international security scenario, wherein asymmetric unconventional conflicts will be the norm, the options available to a sovereign nation and its conventional military forces are limited and present at best difficult choices. A nation has to decide between a military response that would in all probabilities lead to an indecisive stalemate or adopting the concept of deterrence with no assurance of certain success. At the best of times deterrent strategy is difficult to enforce to the degree required; the current strategic security environment greatly increases this difficulty. The dilemma is all pervasive.

CONTEMPORARY ISSUES IN A DETERRENCE STRATEGY

The Soviet Union is gone. The Cold War is over... The deterrence strategy does need to evolve so that it's appropriate for the kinds of emerging threats to exist.

- Donald Rumsfeld

A majority of the conflicts around the world are being conducted between states and non-state entities that have assumed a number of identities and are called variously insurgents, terrorists, guerrillas etc., dependent on different viewpoints. The strategy of deterrence is susceptible to failure when it is applied by a nation-state against such adversaries who have very limited and obscure aims, both politically and materially. Nowhere is this more apparent than in the Middle East, where Israel has been employing the concept of deterrence for the past four decades with varying degrees of success. These irregular adversaries normally initiate limited action that bring into focus a strategic dilemma for the nation-state every time it is encountered—whether to escalate the encounter to ensure decisive victory or to limit retaliation in order to contain the situation. Both have downsides; escalation could potentially become very costly in terms of casualties, international opinion and finances, whereas limited retaliation would normally leave those who have challenged the status quo, the basis of deterrence, unpunished. Throughout history, nation-states reliant predominantly on the strategy of deterrence

for their security have tried to walk a fine balance between these two opposing options, not always with complete success.

With change and conflict becoming increasingly common, the prevalent international politico-strategic environment is extremely complex. This environment is affected directly and indirectly by the interplay of domestic, regional and international politics. In the last two to three decades, three major trends have emerged that have made it progressively harder for nation states to assure national security through an enforced strategy of deterrence.

The first trend is the significant and evolving changes in the international strategic security environment brought about by the collapse of the Soviet Union and the end of the Cold War. For smaller and middle-power nations these on-going changes have necessitated constant fine tuning of their national security interests. Their inability to sustain a broad strategic international security outlook has made it increasingly difficult for smaller nations to define national security interests outside ever-narrowing regional contexts. This in turn adversely affects the formulation of long term priorities in the allocation of resources to national power elements. It was commonly believed that the world would become unipolar with the United States as the sole super power who would lead the world in comparative peace. Further, the collapse of the Soviet Union also brought about a reappraisal of the United States' international diplomatic priorities. At least in the immediate aftermath, the US consciously advanced the peace process in the Middle East and other volatile regions and also brought about considerable political pressure on even their traditional allies, like Israel, to arrive at negotiated settlements to seemingly intractable problems.

The second trend is the proliferation of cheap but effective missile systems—surface-to-air and surface-to-surface—in the developing world. This has dual implications. The relative ease of acquiring and operating these missiles provided a hitherto unknown capability to smaller and economically unstable nations as well as non-state disruptive entities. At the strategic level, the United Nations and the developed world had to come to terms with the fact that these nations, who till then had not featured in the larger geo-strategic calculations in any meaningful way, now had the capability that fuelled the intentions to disrupt peace enforcement and peace keeping campaigns that did not suit their own interests. The second implication is more at the operational level, but it has become an increasingly difficult problem for conventional military forces to counter. Missiles permit an adversary to attack from a distance, without having to cross borders, with almost no warning and can cause serious damage to infrastructure and lower civilian morale significantly. From a deterrence viewpoint, missile attacks make targeted retaliation almost impossible. For these reasons, insurgent and terrorist groups use missiles, of varying calibre and effectiveness, to carry out limited and sporadic attacks on nation-states that they consider adversaries.

The third and perhaps the most important trend in terms of its impact on the whole concept of deterrence is the shift in warfighting to unconventional conflict—a global phenomenon. In the more volatile areas of the world, despite the regional arms build-up and the weakening of super-power patronage and control in the wake of the end of the Cold War, the likelihood of the outbreak of a conventional, large-scale state-on-state conflict has actually receded. However, this situation has not automatically transformed these regions into areas of benign and peaceful coexistence. If at all, the move seems to be in the opposite direction. More regions in the world have become prone to low intensity conflicts fuelled by religious extremism, ethnic intolerance and ideological discontent.

AIR POWER AND DETERRENCE

The three major trends enumerated above have direct bearing on the strategy of deterrence and adversely affect the international strategic security environment. The combined effect has been to diminish the capacity of an overwhelming conventional military force to be an effective deterrent. In addition, the threats facing traditional nation-states have changed radically and are not as obvious as the threats that were encountered in earlier, more stable times. Ill-defined threats that have widened their operational capabilities ominously bring about rapid geo-political changes and instability that have an almost immediate impact on the concept of national security. Countering these threats is complex, with a state's international influence becoming only a minor element in

the broader enforcement of national security. Nations will be compelled to initiate complex actions against unidentified threats in the pursuit of national security and this will characterise the world of the future.

Despite the significant shifts in the strategic environment, the strategy of deterrence continues to be one of the central elements in national security considerations. This is mainly because of the reluctance of the developed world to initiate lethal action against diffused adversaries that might lead to unintended casualties and collateral damage. However, the unquestioned capability to carry the war to the adversary and inflict unacceptably heavy damage is also central to pursuing deterrence as a viable security strategy. The capacity to inflict such damage while avoiding unacceptable collateral damage requires the capability to carry out decisive, precision strikes at will, over long distances. This is a role well suited to the inherent characteristics of air power.

The strategy of deterrence is built on four cardinal principles—intelligence, credibility, perception and applicability.

Intelligence

In very generic military terms intelligence can be described as the means and processes employed for collecting, interpreting and disseminating data that could enhance operational efficiency. There are two dimensions for intelligence to be useful in terms of supporting the concept of deterrence. First, from an operational perspective, it needs to provide relevant information regarding adversary manoeuvres that should be monitored and interdicted if necessary. The second dimension is more important and requires the capability to gather timely and accurate intelligence that can be interpolated with future scenarios so that issues that could become problems at a later stage can be identified and addressed. Essentially, the contribution of intelligence to deterrence revolves around it being accurate, well analysed and distributed in a timely manner to the required personnel. These are activities in which air power can play a critically important role.

The increased availability of a number of long-loiter armed and unarmed uninhabited aerial vehicles (UAV) capable of surveillance of a large area or of narrow-field reconnaissance for as long as necessary, has transformed air power's capacity for intelligence gathering. They represent a completely new dimension to detecting and monitoring adversary activity. Developments in airborne intelligence, surveillance and reconnaissance (ISR) capabilities have major implications for the enforcement of a deterrent strategy, especially when directed against irregular adversaries who tend to operate from within the civilian population. It is now possible to watch a single individual for days on end from the air, if necessary, and then initiate appropriate action, to apprehend or neutralise, as required. This capability is not lost on the potential insurgent or terrorist and acts as a very powerful deterrent tool.

Credibility

Deterrence is dependent on the combination of threats and incentives being credible and is as much a function of capability as political will. Political will involves the willingness of the nation as a whole to incur casualties, bear the costs and accept the risks involved in asserting its will to deter potential adversaries. The credibility of capability rides on the political will to use such capabilities to inflict unacceptable damage to would-be adversaries if they initiate action contrary to the national interest. The credibility of a strategy of deterrence is dependent on the opponent being convinced that fearsome punishment will be forthcoming; through an optimum combination of capability and the will to employ it; if any action inimical to the state's well being has been initiated.

High-technology air power today has the capacity to bring to bear precision and persistence of a degree that creates opportunities to apply lethal force or demonstrate such capabilities graphically as a precursor of action. This can dislocate the psychology of the adversary because it will be difficult to anticipate how air power will put them at risk, creating stress and diminishing their fighting efficiency. For example, NATO forces in Afghanistan have had unusual success in targeting Taliban commanders with pin-point accuracy through air attacks. This has created both physical and psychological impact on the Taliban's operations.

Credibility in modern operations is also dependent, to a certain extent, on avoiding collateral damage whenever force is used. It is also important to ensure that the local population—the uninvolved opinion makers—does not

see the military forces as an occupying force, since that will lead to the gradual erosion of the moral aspect of any operation. Therefore, a number of situations will preclude the use of forces on the ground to pursue the concept of deterrence. Under these circumstances air power with its reach, penetration and accurate fire power, operating from friendly air bases, can deliver credible attacks in support of deterrence.

Perception

Since deterrence is a matter of perception it is of the utmost importance to be able to understand the adversary in terms of vulnerabilities, values and needs. In military planning, the adversary leaders' risk acceptance or aversion must be judged and used as a central factor in the larger analysis of the application of the strategy of deterrence. The overall assessment and estimates of adversary perceptions must identify the level of confidence in them for the military to be able to pursue deterrence with any modicum of success. In the application of military force, calculating what constitutes unacceptable loss and destruction for a particular adversary is extremely difficult. For example, even though deterrence was not part of the US strategy in Vietnam, destroying the ability of the North Vietnamese forces to pursue the war was part of the strategy. Although this is second order deterrence by punishment, it did not work because of the willingness of the North Vietnamese to accept extraordinarily high attrition and heavy damage.

The four very broad functions of air power—detect, decide, deter and defeat—can be employed in varying degrees to understand and possibly alter the perception of an adversary and ensure the veracity of the concept of deterrence. Air power contributes directly to influencing the perceptions of the adversary by monitoring and analysing the actions being initiated against own forces and then deciding the ideal course of action to deny any advantage to the adversary. Directly indicating to the adversary that their value system and centres have been identified by overt non-kinetic air action is a very potent tool of deterrence. In the contemporary environment, irregular adversaries are intelligent and adaptable with adequate understanding of the differences in perceptions between different cultures and nations. They capitalise on this by adequately diffusing their own weaknesses while targeting the vulnerabilities of conventional forces and a larger state's inability to be indifferent to casualties. However, if adversaries are convinced that their own vulnerabilities have been correctly identified and that they can be targeted effectively, the risk involved would become unacceptable, leading to their acceptance of the status quo. Modern air power has the capacity to ensure adequacy of such actions from detection to neutralisation, with minimal political fall out.

Communication is a crucial element in altering perceptions. Communication can also be manipulated to deny the adversary clear understanding of the actions being initiated or can be direct to demonstrate intentions. Once again, movement of troops by air and over flights can be used to communicate to the adversary latent capabilities in support of deterrence. For example, the movement of British forces to Kuwait in 1961 and the 1994 US deployment to the Middle East were both movements of forces to communicate a warning to the adversary. Rapid movement of forces sends a more effective message to would be adversaries than even very powerful forces that remain in their peacetime posture and locations. Air power is at the vanguard of such actions since time is of the essence in executing such communication in order to avert any unfortunate incidents that would require the actual employment of force to ensure deterrence by punishment.

Applicability

In recent times it has become increasingly difficult to identify the perpetrators of various acts until after the event, which brings into focus the 'deter whom' component most poignantly. This is more so in the case of insurgents and terrorists who employ the concept of suicide bombing to bring death and destruction at the tactical level. Threats or even substantial damage or destruction to the infrastructure of these entities are inconsequential. It is apparent that not all actions can be deterred.

Even under these circumstances, deterrence must be pursued since it is not possible to clearly understand how much worse this type of threat might be without deterrent actions. Applicability of deterrence is dependent on the quantum of influence that can be brought to bear in a particular situation and the amount of resources that can be committed. Sustained ground operations in insurgent areas will invariably lead to mounting casualties

and therefore, punitive actions—ranging in severity from a show of force with minimum use of force to use of lethal force as required. Air power can carry out all these actions efficiently.

By its on-call precision strike capabilities, air power sends a very powerful message to all irregular forces; that they are being constantly monitored, that they can and will be targeted at will from the air and that there is very limited countermeasures to this other than air power capabilities themselves. This inflicts a kind of disconcerting sense of vulnerability to the insurgents, similar to what they seek to inflict on conventional forces by the use of asymmetric attacks with improvised explosive devices. Even kinetic air attacks can enforce deterrence by targeting insurgents in areas where they are known to oppress the local population and thereby also contributing to the 'hearts and minds campaign'. For example, the destruction of an al Qaeda detention and torture compound in Iraq by aerial attacks from a B-1 bomber brought the local population out in jubilation and also marked the end of sustained insurgent activity in the area.

Summary

Conventional air launched weapons have evolved dramatically in terms of accuracy, lethality and proportionality. They can be launched from extreme ranges and project power into hostile territories, not inhibited by physical barriers or national boundaries, with relatively low risk of friendly casualties. At one end of the air power functions spectrum this is an effective tool in enforcing deterrence by punishment. The effectiveness of air strikes is however based on accurate and timely intelligence and updated situational awareness about the status of the targets. Intelligence is at the other end of the spectrum and is a non-kinetic contribution to the application of air power as a deterrent capability. No other military capability so comprehensively encompasses the full spectrum of activities required for the efficient projection and application of force, especially when supporting a strategy of deterrence.

It has also to be borne in mind that the deterrent effects of the application of lethal force are relatively slow to become clearly apparent and it may take days or even weeks for their full impact to be felt. Therefore, the deterrent capability of a particular force projection capability is proportional to the adversary's ability, perceived or otherwise, to respond to it.

The two major changes in the security environment—the proliferation of missiles and the shift to low intensity conflict—has a detrimental impact on the contribution of air power to the concept of deterrence. Air power will not be able to interdict airborne missiles or reach the launch base of long-range missiles in time to deny missile launch, which confers on irregular groups an effective capability to question deterrence built on maintaining the status quo. Building and maintaining an effective security strategy based on deterrence is difficult even under normal circumstances within the traditional concepts of threats and security, it becomes almost impossible in politically unstable conditions wherein threats are unconventional and diffused and the adversary itself is not clearly defined, except as an amorphous entity of questionable capability.

A CASE STUDY OF THE ISRAELI EXPERIENCE

Israel must appear as a country which has a deterrence.

- Shimon Peres

Israel, as a sovereign nation, has very limited geo-strategic depth and therefore, has always been vulnerable to even short range artillery attacks that could be mounted from enemy territory. Although it has had to fight for its existence from its very inception in 1948, it was only after the resounding victory of the 1967 Arab-Israeli conflict, that Israel consciously adopted a policy of deterrence based on a combination of denial and punishment in almost equal parts. The classic air operation, meticulously planned and audaciously executed with precision on the morning of 5 June 1967 by the Israeli Air Force (IAF) resulted in the destruction of the majority of the Arab air forces on the ground. This operation left a lasting impression on the Arab nations, particularly Egypt, regarding the unquestioned superiority of the IAF.

The IAF has been consciously designed to be able to mount responsive retaliatory tactical strikes as well as carry out long range strategic attacks on leadership and vital infrastructure, in other words the centres of gravity, of the adversary. For these reasons, the IDF has consciously accepted its air force as the 'first choice' power projection capability, making air power the centrepiece in Israel's policy of strategic deterrence. It has been openly stated by the Israeli Government that if necessary it would carry out strikes on population centres in pursuance of a deterrence strategy to politically and socially destabilise the enemy.

Forty years is not a sufficiently long time to analyse events, especially armed conflict, in a completely detached and dispassionate manner. There are far too many factors that would still be contentious and far too many participants who would still have biased opinions of the actions that were initiated and operations conducted. Therefore, analysing the 1967 and 1973 Arab-Israeli Wars with a view to verifying the validity of deterrence as a national security strategy has to be done with caution.

The 1973 Yom Kippur War

The fallibility of Israel's deterrence-by-denial security stance was clearly demonstrated by the events of the 1973 Yom Kippur War. The battle plans of the Egyptians and the Syrians were conceived along the Russian operational concept of a ground-based mobile surface-to-air missile air defence system built around concentric circles of mobile missile umbrellas—expected to deny the qualitative advantage that the IAF enjoyed at the strategic, operational and tactical levels. Egypt and Syria planned limited land operations within the air defence umbrellas. The political aim was to break the impasse that followed the 1967 ceasefire that had also forced the Arab nations on the defensive. They hoped to achieve this by capturing and holding limited Israeli territory that would make it imperative for Israel to recapture them with the resultant high casualties that would be unsustainable for the Israeli Defence Forces (IDF).

The initial Arab success during the conflict in inflicting large losses to IAF aircraft was a heavy blow to the operational tactics of the IAF. More importantly it brought into sharp focus the perceived irrefutability and relevance of air power as a strategic and operational deterrent tool.

Although Israel finally defeated the combined Arab armies, the limited military victories that the Arab forces won at the beginning of the campaign were sufficient for them to achieve a political breakthrough. Through negotiations and his willingness to recognize Israel as a sovereign state by signing a peace treaty in March 1979, Anwar Sadat was able to regain all Egyptian territory lost in 1967. The basic fact that emerged was that deterrence based primarily on denial was a very fragile concept to be adopted at the grand strategic level of national security, especially if the nation lacked geographical and strategic depth.

The 1973 war was seen by the Egyptians as a resounding victory—after all they had initiated the war, crossed the Suez Canal and gained control of territory several miles east of the Canal. Deterrence is heavily reliant on perceptions for its success and the psychological dimension, vis-à-vis Israel's deterrent capabilities, was unequivocally changed by the Yom Kippur War.

Consequently, after 1973, Israel's security strategy shifted emphasis to punishment-backed deterrence, supported by the concept of *hachra'a* or decisive victory. The aim was to reinforce the strategy of deterrence-by-punishment, both psychologically and materially, by ensuring that Israel's enemies paid a prohibitively high price for any action taken against the state. The concept revolved around the capability of the IDF to take the fight to enemy territory; rapidly penetrate enemy lines, destroy enemy equipment in a scale that would make them non-operational for a sufficiently long time; and capture enough territory for later use as bargaining chips in negotiations. These three combat aims had to be achieved within the short time frame that was expected to be available before international pressure would enforce a ceasefire. In turn this has necessitated ensuring that the IAF is the most potent air force in the region.

Post-1973: Strategic Actions

Establishing the military might needed to ensure decisive victory within a very narrow window of opportunity however, came with an inordinately high price tag. In the decade following the Yom Kippur War, the IDF increased its armoured divisions from three to eleven, the number of tanks rising from 1075 to 3600; combat aircraft numbers were increased from 374 to 600; and the regular ground forces were doubled to 180,000. By 1985, Israel's annual defence expenditure stood at 32 per cent of GDP! On the face of it deterrence seems a fairly affordable and even cheap option, but the reality is very different.

The increased air power capability was dramatically demonstrated in two momentous missions that are even today studied as prime examples of air power validating the concept of strategic deterrence as policy. The first was in 1981 when eight F-16 and six F-15 aircraft attacked the Iraqi Al Tuwaitha Nuclear Research Centre at Osirak, near Baghdad and the second, four years later in 1985, when the IAF attacked the PLO headquarters in Tunis with ten F-15 aircraft in retaliation for the killing of three Israeli soldiers by terrorists in Cyprus. The overwhelming success of both the missions underscored the dominance of the IAF in the region and reinforced Israel's reliance on a policy of deterrence for its security.

In a convoluted manner, the spectacular success of the IAF in employing firepower to impose unquestioned strategic superiority at will has in itself brought about a slow deterioration in its capacity to deter the adversary.

From a traditional perspective of national security, if events that took place merely thirty-five years ago can be viewed through the prism of historical analysis, the 1973 Yom Kippur War can be described as the one event that conclusively altered the politico-military-strategic environment in the Middle East. There are three major reasons for this. First, even though Arab victories were very limited and tactical in nature, they conclusively put to rest the till-then prevalent perception of the invincibility and infallibility of the IDF. More importantly, the IDF was denied the decisive victory that had been in its hallmark in previous conflicts and on which the strategy of deterrence depended. Second, the importance of even their very limited battlefield successes is demonstrated by the disproportionate political gains the Arab nations made as a result of the Israeli setbacks. Third, as a result of the political gains that came with limited victory, by 1981 Arab strategic thinkers were openly stating that there was sufficient and continuous erosion of the Israeli capability to ensure the efficacy of the concept of deterrence.

Even though the Arab forces came out second best at the end of the 1973 conflict, the effectiveness of surface-to-air missiles in denying the IAF strategic superiority was not lost on Israel's adversaries. Thereafter, it was only a matter of thinking through the concept to evolve offensive tactics based on the employment of surface-to-surface missiles in the attack mode. Since then the proliferation of missiles in the region has been the main conventional threat facing Israel.

The Era of Missile Proliferation

Although Israel came under missile attacks by Iraq during the 1991 Gulf War, under intense US pressure, it did not respond to these provocations. However, it has chosen to retaliate on a large scale to rocket and missile attacks from Lebanon by Palestinians and Hezbollah in 1982, 1993 and again in 2006. The non-retaliation to the Iraqi SCUD missile attacks, for whatever reason, could be considered in a limited manner to be a strategic failure of deterrence. By the same token, the intense retaliations into southern Lebanon should be seen as attempts to restore the efficacy of deterrence as a viable security strategy.

From the perspective of Israel's adversaries, most of whom enjoy quasi-state status, there are some undeniable advantages in relying on missiles as a weapon of choice. First, they are relatively cheap and easy to obtain in the international arms market. With their economic strength the Arab states can procure them in large quantities and have very large stockpiles. A significant number, that will actually only be a small percentage of the total holding, can then be syphoned off to subversive groups without raising undue suspicions within the international community and arms control agencies. Second, the accuracy and long range of the missiles permit them to achieve strategic surprise. In addition, the randomness of these attacks can disrupt normal life and in times of conflict can also delay the mobilisation of reserves on which the IDF is critically reliant. A sustained missile campaign has the capacity to disrupt the Israeli economy as was graphically demonstrated in northern Israel during the 2006 Israeli-Hezbollah conflict. The effectiveness of modern missiles has altered the strategic balance in the Middle East.

Israel is today confronted by an even greater danger, that of a range of unconventional and low intensity conflicts fuelled primarily by Palestinian discontent and growing Islamic militancy. The earliest instance of this change in the modus operandi of the anti-Israeli forces can be traced to what has come to be called The First Intifada that took place between 1987 and 1993. The emergence of quasi-state entities like Hamas and Hezbollah and the growing influence of hardline Islamic militants in these organisations have become significant security challenges for Israel. To counter these threats the IAF has resorted to the use of attack helicopters and the concept of targeted assassinations as a form of deterrence-by-punishment in an accentuated manner. Such actions have not, however, deterred the adversaries to the anticipated degree. Instead they have greatly increased the prevalent animosity against Israel, bringing to question the validity of deterrence based on selective punishment. The legality of the concept of targeted assassinations is also doubtful, and is currently being challenged in the Israeli Supreme Court.

The 2006 Israel-Hezbollah Conflict: Did Air Power Flounder?

Since 1967, the doctrinal ethos of the IDF has been oriented towards the use of air power as a first-choice offensive capability. The overwhelmingly superior air power that the IAF is capable of projecting in the Middle East has ensured that, historically, the IDF relied on the Air Force to ensure victory on their terms. Politically also, air strikes were more palatable than ground incursions because they could produce greater destruction with lesser probability of own casualties and a limited foot print.

For the first time in its history, in 2006, the IDF was being led by an aviator who had commanded the air force for four years before becoming the Chief of Defence Staff. This, and the example of the 1999 Kosovo success, led opportunistic leadership within the IAF to influence a somewhat militarily naive political leadership to continue to build Israel's deterrent strategy with air power as the centrepiece. It came to be believed at the highest levels of decision-making, without sufficient supporting evidence, that air power capabilities could be expanded at will to neutralise emerging new threats and contain new security challenges. Therefore, it was not surprising that the operational plans for the 2006 conflict placed the IAF firmly as the primary element around which other, lesser, tactical plans would evolve. This air power-dominated operational strategy was employed against a diffused enemy with no discernible centres of gravity, fighting an asymmetric low intensity conflict that negated all the advantages such a strategy espoused. In fact the fundamental flaw in the strategy was exposed at the outset of the conflict, when the tempo was dictated by the Hezbollah missile and rocket attacks which the IDF could not control or dominate throughout the 33 days of the conflict. Hezbollah held the initiative and the IDF remained reactionary to Hezbollah actions through the entire conflict.

In sharp contrast to the strategic miscalculation, at the operational level, the IAF excelled. It flew in excess of 8000 fighter and 2000 attack helicopter sorties without a single combat loss. Even though there was no air opposition, this was a laudable achievement. The IAF also adapted very rapidly to the realisation that there was a failure of intelligence regarding the actual amount of missiles stockpiled as well as the intricate resupply network that the Hezbollah had established over the years. The sensor-to-shooter cycle was effectively reduced with the IAF being able to destroy missile launchers within minutes of the launcher being activated.

There is no doubt that the IAF, and on a larger scale the IDF, had complete superiority in the realm of conventional warfare; a superiority that has been demonstrated time and again in state-based force-on-force conflicts for over

fifty years. However, in campaigns against irregular adversaries like the Hezbollah who have no identifiable centres of gravity or even any appreciable high value targets, conventional military advantage does not necessarily translate to victory or even effective deterrence. Hezbollah did not have industrial centres or even robust and recognisable command and control nodes that could have become high-value assets to be targeted. Such terrorist or insurgent groups do not present lucrative targets for aerial attacks because they are normally embedded within the civilian population of the nation from which they operate. Under these circumstances, identifying targets that would produce the desired long-term effects is impossible and therefore, opportunities to carry out effective strategic attacks are even rarer.

When used against an opposition that perpetuates the general perception that innocent civilians are being targeted through skilful manipulation of the media, employment of air power will always be seen as being in contradiction of the two cardinal principles of the application of lethal force—proportionality and discrimination. The 2006 Israel-Hezbollah conflict was no different. From the initial acceptance by the international community, including most Arab states, of Israel's right to retaliate against the kidnapping of two of its soldiers, the vehemence of the military retaliation and the morality of the continued application of force came to be questioned by the same community as the conflict escalated. The effectiveness of air power against unconventional adversaries is to a great extent dependent on destruction rather than denial. The context of the battlefield in these circumstances is such that irrespective of the accuracy of the lethal attacks, there will always be claims of civilian casualties. This is a drawback in the employment of air power in insurgency situations that must always be factored in at the planning stage itself to avoid diluting the strategic effects being created.

From Hezbollah's perspective, it was openly admitted by its supreme leader after the conflict that they had not anticipated the ferocity and determination of Israel's response. All insurgent groups are heavily dependent on support from the general population, even those who are not directly involved, for their success. When retaliation by regular armed forces creates disruption of normal life for the population to a degree that this popular support starts to get eroded, the insurgent group will have to take notice. This is the reason for the Hezbollah initiating social and humanitarian aid work towards the later part of the conflict. The overall picture that emerges is an indication that there would be a more cautious approach to confronting Israel in the future, which could be construed as the reinstatement of the concept of deterrence based on preponderant military power in the broader security strategy.

Summary

The scenario that was enacted in Israel's national civil defence exercise, conducted from 5-10 April this year (2008), is a timely reminder that even after 60 years of independent existence, its survival cannot be taken for granted. The exercise simulated numerous and indiscriminate missile and rocket strikes on both civilian and military targets; a direct reflection of how Israel perceives future conflicts will unfold. This gloomy outlook is further accentuated by public opinion that constantly indicates a sense of insecurity, especially after the inconclusive 2006 Israel-Hezbollah conflict left a lingering uncertainty regarding the nation's vulnerability to terrorist threats.

The 2006 Israel-Hezbollah conflict was a defining point in Israel's strategic security environment. Two major issues that have long-term implications for Israel's security surfaced at the end of the conflict. First, the foundation of Israel's security strategy, the concept of deterrence—till then considered unassailable—was seen to be fallible. Second, Hezbollah's success in continuing missile and rocket attacks throughout the 33 days of the conflict was seen by Israel's adversaries as victory and worthy of emulation, manifesting in a proliferation of missiles in the region. An additional fallout emanated from the method in which these missiles were employed—from hidden launch pads and indiscriminately targeting civilian areas—which made countering such attacks almost impossible. A conventional force has very limited chances of success when faced with such an adversary with no discernable presence or identifiable centres of gravity. Under these circumstances, there may be very little choice but to avoid such a conflict by resorting to a strategy of deterrence.

CONCLUSION

Air power is a very potent force projection tool with a significant deterrent capability. However, its employment has to be carefully tailored to fit within the prevalent context of the conflict, the desired effect to be created and the strategic end-state being sought. In the more than 100 years of the use of air power as a weapon of war, if there is a continuous thread that can be discerned in its varied employment, it is the unending enthusiasm of its supporters to exaggerate greatly the ability of air power to be a weapon of political significance. This trend is visible from Douhet to the present and the 2006 Israel-Hezbollah conflict is no exception.

Ensuring national security through the implementation of a strategy of deterrence—through denial, punishment or a combination of both—requires more than the capability to excel operationally in the application of air and all other constituents of military power. Deterrence as an overarching security strategy can only be effective when all elements of national power are aligned to achieving necessary effects that in optimum combination will provide the level of deterrence required to secure the nation. This is not an easy balance to achieve. Escalation of a conflict to force political outcomes does not normally have the desired effect.

Historically, the employment of conventional military power against a diffused adversary using asymmetric modes of combat has seldom achieved tangible effectiveness in the long-term. The strength of almost all these adversary groups is founded on religious faith-based ideology rather than purely political ideology bolstered by material and military prowess. Countering faith-based ideology is extremely difficult and would require a judicious combination of subtle ideological offensive and judicious force application in a contextually appropriate mix. The ultimate answer to the issue is politico-ideological and the military only plays a limited part in the overall strategy.

For the half century following the Second World War, nations across the world presupposed their national security on a robust and effective military power projection capability. Accordingly, most developed nations have relied heavily on competent military power, especially air power, to ensure their security. In recent times, the world has been confronted with a completely new and complex threat in the form of non-state and quasi-state entities that perpetuate violence against soft civilian targets as a self-declared moralistic right. That none of these groups have been fully neutralised, even with the full force of conventional military forces ranged against them, is a noteworthy and salutary fact for all democratic nations to analyse and understand.

At the end of the 2006 Israel-Hezbollah conflict it was widely speculated that military superiority cannot assure the success of the concept of deterrence. Now, after two years, it is plainly obvious that it would be incorrect to draw such a decisive conclusion from the events of the conflict. However, the biggest challenge that nation-states face now is to reverse the change in perception that seems to have taken place in the mind-set of the non-state and quasi-state entities that the strategy of deterrence based on predominant military power has been categorically eroded once and for all. After all, deterrence is only a matter of perception.

An effective strategy of deterrence primarily based on the concept of punishment through massive retaliation will only be effective and remain valid so long as conventional military forces determine the balance of power. However, global and regional strategic environment, national security imperatives and the nature of threats have altered radically in the past decade. The challenges that face the international community at the beginning of the 21st century are very different from those of the past. Increased regional instability, rapid population growth and the simultaneous rise of Islamic fundamentalism in the Middle Eastern states, the conscious shift to unconventional, asymmetric low intensity warfare conducted by state-sponsored and quasi-state entities like al Qaeda and Hezbollah and the proliferation of missiles, combined with the constraints on conventional military forces' freedom of action have undermined the effectiveness of the deterrent strategy.

It has to be accepted that deterrence has not always stopped attacks on states. However, in the final analysis, when the full history of security built on a deterrence strategy based on overwhelming military power is viewed in the grand strategic context, it must be seen as a success. The ubiquity of air power in providing credible options to carryout actions that sustain a deterrent strategy places it at the forefront of enduring military capabilities that ensure national security.

Deterrence is an on-going process and cannot be applied in a piecemeal fashion. Its effectiveness in having kept nations comparatively safe, even when conflicts had to be hard fought and won cannot be measured with any semblance of accuracy. However, what is clear is that without the demonstrated effectiveness of deterrence as a strategic policy world history may well have been very different.