

AEROSPACE POWER AS A DETERRENT

SANU KAINIKARA

In order to prosper, every nation must have sufficiently robust measures in place to protect and promote their fundamental interests and the myriad requirements that arise from this primary requirement. The current global security environment is extremely complex and competitive with political, economic, demographic and technological changes making it difficult to anticipate emerging challenges to the strategic politico-military stability of a nation. While national security has traditionally been a military concern, it has now evolved into the most complex policy issue for a government to deal with. For all governments, securing the country's borders is the most important task.

The need to ensure national security necessitates the development of appropriate security strategies as a fundamental requirement to ensure the prosperity of a nation. These strategies must encompass all elements of national power in a concerted manner to ensure that the desired end-state is achieved in the most resource-optimised manner. They must be able to link the effects created by the actions of individual elements of national power

Professor **Sanu Kainikara** is a former fighter pilot of the IAF. In 2002 he joined the Australian Public Service, as the Royal Australian Air Force's Air Power Strategist, retiring in November 2020. Having authored 23 books on national security, airpower, and Indian history, he is currently an Adjunct Professor in the School of Humanities and Social Sciences at the University of New South Wales. He is also Distinguished Fellow, Centre for Air Power Studies, New Delhi.

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to the broader 'Effect' required to achieve the desired national political objective. Therefore, development of strategies for the individual elements of national power requires a thorough understanding of national policy and Grand Strategy, the level at which individual strategies coalesce and support policy. Accordingly, national security strategies span a broad continuum from benign attempts to influence and shape the environment to the application of lethal force in the pursuance of absolute national security and the conduct of wars of national survival.

National security cannot be based solely on a single plan because of the inherent complexity of the global security environment. To deal with the evolving and complex challenges faced by sovereign nations perennially, appropriate strategies must be continually fine-tuned and developed. Although the term strategy has a military heritage, it is now common understanding that the art of strategy cannot be limited to the military and warfighting to ensure national security, but needs to include all elements of national power and must function during both peacetime and in war. This is known as the Grand Strategy, which controls and coordinates all elements of national power to achieve the desired national objectives. The desired objectives will always be political and delineated by the higher national policy.

Below the higher-level Grand Strategy, each of the elements of national power formulate strategies for the optimum employment of resources to achieve the desired end-state, individually or in conjunction with other elements. Accordingly, military strategy aims to optimise the employment of resources available to a commander to achieve the required objectives. It is concerned not only with wars, campaigns and battles, but also with the threat of force to achieve national objectives.

THE SPREAD OF MILITARY STRATEGIES

There are three fundamental factors that are irrefutable and always hold true with respect to military strategies. One, military strategies deal primarily with the theories, hypotheses and concepts that guide the employment of military forces rather than facts and scientific sureties. It is an art with built-in uncertainties and unknowns within its construction and can never be fully correct. Two, an appropriate military strategy can never be developed in isolation from broader

national security paradigms and is strongly influenced by the foreign and domestic policies of the government. As a corollary, military strategy needs to retain a minimum required flexibility to cater to policy changes at the strategic level of governance.

Three, even a cursory analysis of the history of security challenges reveals that no two situations are amenable to being contained by the implementation of the same strategy. In other words, military strategies must be dynamic, and strategists must be adept at recognising the changing circumstances and adapting the strategies to emerging challenges.

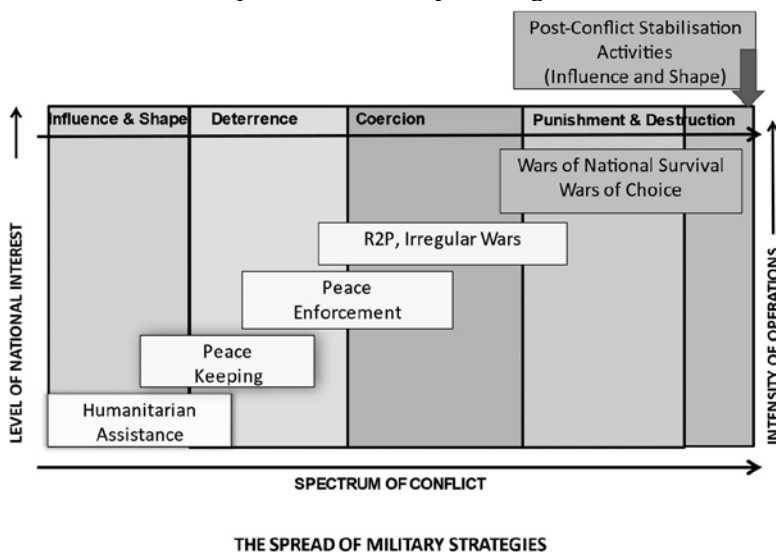
While the above factors are irrefutable, the concept of the employment of military forces and the understanding of the term conflict have changed dramatically in the last decade of the 20th century. There is a shift in the concept of conflict, which entailed the application of force through the employment of military or irregular forces, to a more broad definition that spans the entire gamut of operations ranging from delivering humanitarian assistance at the lower end, to conducting a war of national survival at the other end. As a result, military strategy has grown into a complicated art form to accommodate the wide range of actions undertaken by military

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forces. The spread of military strategies is very broad, but four overarching strategies can be distinguished—influence and shape, deterrence, coercion and punishment. Each of these strategies can be expanded in a nuanced manner to examine the full details of employment of military forces within them.

Figure 1 depicts the spectrum of conflict superimposed on the four military strategies in a generic manner. The operations listed are only indicative and not exhaustive.

Figure 1: Spectrum of Conflict Superimposed on the Spread of Military Strategies



There are two fundamental factors that underpin a clear understanding of military strategies: one, there is an indelible connection between the spread of the four strategies mentioned and the spectrum of conflict; and two, the strategies are not linear progressions indicating the increasing use of force but that the spread is cyclical. The spectrum of conflict can be superimposed graphically on a linear spread of the strategies, and it will be seen that the indicative operations will be placed under the appropriate strategy. To

be noted is the fact that the indicative operations normally straddle two strategies. The strategies, to be viewed as a cycle, can be applied starting at any point in the continuum, but they must always end with the application of the strategy of influence and shape to direct the activities of elements of national power.

THE STRATEGY OF DETERRENCE

So, what is deterrence? Deterrence is an exercise in seduction and compulsion, using promises and threats, to ensure that a potential or actual adversary is dissuaded from pursuing actions detrimental to one's own interest. Deterrence aims to maintain the status quo vis-à-vis the security environment by ensuring that anyone challenging it would find it prohibitive in the cost that would have to be paid, thereby making the status quo more acceptable than any other situation. The credibility of a deterrent stance of a nation is dependent on two primary factors: the demonstrated capacity of the nation to deliver on threats and promises, and the national will to inflict unacceptable damage to any adversary or aggressor that questions or attempts to change the status quo. Thus, the credibility and success of a nation's deterrent posture is dependent on a balanced combination of resources and will.

Deterrence can be adopted as a centrepiece of a nation's security strategy, around which national capabilities are built and fostered. To be effective as the heart of national security, however, certain conditions must be met. First, the nation's response capabilities must be overwhelmingly superior to anything that the adversary could bring to bear, and the adversary must perceive them as such. Second, a nation must demonstrate the will to apply this great force at its command whenever it is necessary, i.e. great power must be buttressed by strong will to ensure the sanctity of the security requirements of the nation.

To preserve national security, countries have relied on the concept of deterrence for centuries, but it became an explicit strategy only in the 20th century. Most militarily powerful nations factored in some form or the other

of the concept of deterrence in the broader calculation of national security. The introduction of nuclear weapons in the post-World War II era brought in a completely new strategic dimension to the concept of deterrence, because of three major factors. One, there was no effective defence against a nuclear attack and therefore, the only way to counter it was to ensure that such an attack did not materialise. Two, nuclear retaliation by a nation that had already been attacked would be devastating; and three, the scale of destruction would in most cases outweigh any benefits that the initiating nation had originally anticipated. The concept of deterrence was embedded in mutual assured destruction (MAD) throughout the Cold War. Gradually, the threat of nuclear retaliation became a tool of deterrence, even against the possibility of a conventional attack.

There is an inherent simplicity to the concept of deterrence. In its simplest form, deterrence aims to inhibit or prevent someone from doing something that is contrary to one's own interests. Deterrence as a concept has a moralistic slant to it, which is based on the belief that peace is preferable than war and that all nations abide by accepted international norms. This is of course a simplistic view of the world and the complex interactions of sovereign nations. The primary purpose of deterrence is to avoid actual conflict by employing an appropriate combination of the elements of national power in order to persuade a potential adversary to not initiate any actions that are inimical to one's own interests. Its foundation is built on the belief that all entities subscribe to the idea that peace is always better than war. Steps of deterrence in the military sense are designed to provide a range of options that may be scaled up or down depending on the situation.

All sovereign states, irrespective of their size, capability and the threats they face, strive to ensure adequate national security. In formulating national security strategies, maintaining a deterrent posture as a cornerstone is always examined. While deterrence is a dynamic concept, it requires a complex analysis to determine who should deter whom from doing what, when and where. However, at the very basic level deterrence pre-supposes that all decisions at the strategic level of national security are made after a rational cost-benefit

analysis of the actions being contemplated. Any cost-benefit analysis is prone to external influences and therefore, deterrence as a fundamental national security strategy may not always work to the best effect.

The strategy of deterrence and the role of air power in its application must be examined with a practical caveat attached to them. In the past few decades, the conventional military forces of the more developed world have become overwhelmingly superior to those that are fielded by rogue-states and non-state entities who pose challenges and threats to international security. While the demonstrated superiority of these forces deterred these quasi-militaries from initiating any action for a period of time, it accelerated the process of the perfecting asymmetric warfare as the favoured method of conflict. This development necessitated a change in the approach of conventional forces to the conduct of conflict and diluted the effect of a deterrent posture as a security strategy. At the highest operational level, the conflict scenario is now extremely dynamic and one of a 'cat and mouse' game of counter and counter-counter moves and solutions.

The end of the Cold War and the break-up of the Soviet Union in the 1990s changed the perception of national security globally and led to a ripple effect that influenced national security strategies. The most dramatic change was felt in the concept of deterrence as a strategic security strategy. The context of national security had shifted to a rapidly destabilising and unstable world with the power distribution becoming widely dispersed between nation-states, quasi-states and transnational non-state entities. At both strategic and operational levels, deterrence strategy must be applied with great agility in today's worldwide security context.

There are two basic flaws in adopting deterrence as the primary basis for a national security strategy. The first is that the adversary's rationale for adopting a particular course of action is considered to be the same or fairly similar to one's own. It also presumes that the adversary would have a similar attrition tolerance and acceptance of physical and psychological damage to one's own. This is a complex analysis to make, since intangibles such as culture, religion, warfighting ethos, etc., would have to be factored into the

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calculation. Because the precision of such an analysis is insufficient to be depended upon wholly, strategic decisions cannot be fully based on it. The fact remains that what may be rational for one nation, may not be so for another. Effectiveness of deterrence is almost completely dependent on the perception of the adversary regarding the capabilities and intent of the deterring entity.

The second flaw is that deterrence as a concept is aimed at the cognitive domain of the adversary and therefore its effectiveness, especially in the near-term is extremely difficult to measure. The ultimate aim of deterrence

is to maintain the *status quo*. In a volatile strategic security environment, which is permanently in flux, maintaining the status quo requires adept manipulation of deterrent capabilities and dynamic adaptation of strategic security priorities. The strategic dexterity necessary to manipulate resources and match it to strategic priorities is very high and is normally beyond the capability of most democratic nations.

At the absolute base level analysis, deterrence, while a laudable concept, does not provide the necessary level of assurance that the desired national security objectives would be accomplished.

AIR POWER AS A DETERRENT CAPABILITY

Despite the obvious flaws in the concept, especially in the current shifting strategic environment where adversaries are diffused, deterrence continues to be a central concept in national security considerations. There is a global reluctance on the part of conventional military forces to apply lethal force when such an action might lead to unintended casualties and collateral damage, which invariably leads to detrimental political fallout. The result is always a dilution of the impact of a deterrent strategy. However, the

unquestioned capacity to carry the war to the adversary at will and to inflict unacceptable damage to the adversary remains central to the effectiveness of deterrence.

The capacity to inflict such damage while limiting unnecessary collateral damage is built around the capability to carry out decisive, precision strikes at will over long distances. Precision, proportionality and discrimination are the three characteristics of air power that make it the ideal tool to enforce a deterrent strategy.

When deterrence is analysed as a process, it can be delineated into a series of related steps, most of the time successive and sometimes running parallel to each other. Logically these steps would begin with detecting emerging threats (intelligence); dissuading the potential adversary from initiating any action (credibility); deterring the adversary from initiating actions by ensuring that one's own capabilities that can be brought to bear are well-understood (perception); and defeating any action already initiated and destroy the adversary's capacity to initiate such moves in the future (applicability). The strategy of deterrence is therefore built on the four cardinal principles enumerated earlier in this section—intelligence, credibility, perception, and applicability—and air power contributes directly to all these steps.

INTELLIGENCE

The term intelligence encapsulates the means and processes by which data is collected and interpreted, analysed and information so produced is disseminated to the appropriate agencies to enhance operational efficiency. There are two dimensions to the usefulness of intelligence in supporting the concept of deterrence. First, at the operational level it must provide relevant information that indicate the adversary's intentions, which should be monitored and interdicted if necessary. Second is at the strategic level

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and more important in the long-term. An inherent capability to gather timely and accurate intelligence that can be interpolated with possible future scenarios to identify and neutralise issues that could become challenges into the future is necessary to successfully pursue deterrence. The contribution of intelligence to the success of deterrence revolves around it being accurate, well-analysed and disseminated in a timely manner. These are activities in which air power plays a critical role.

The increased availability of high altitude, long-endurance, armed and unarmed uninhabited aerial vehicles (UAV) have transformed air power's capacity for intelligence gathering. Capable of wide-area and narrow-field reconnaissance for extended periods, these UAVs represent a completely new dimension to detecting and monitoring adversary activities. Refinements in airborne ISR activities have particular impact on the strategy of deterrence, especially in the current environment of irregular warfare when adversaries tend to function from within the local civil population. The ability of airborne assets to monitor the movements of even a single individual from high in the skies for protracted periods of time, acts as a powerful deterrent to irregular adversaries.

CREDIBILITY

Deterrence is dependent on the combination of threats and incentives being credible, which in turn is the function of a balanced combination of capability and political will. Political will is the collective willingness of the nation to bear the costs—political, economic and moral—and accept the risks associated with asserting its will, to deter potential and actual adversaries. Credibility rides on the political will to create and maintain the necessary capabilities and the demonstrated will to use such capabilities to inflict unacceptable damage to potential adversaries. As a corollary, credibility of the strategy of deterrence is dependent on the adversary being convinced that the deterring nation is fully capable of, and willing to, inflicting fearsome punishment when necessary, through an optimum combination of capability and the political will to employ it.

Modern air power, facilitated by high-technology systems, can bring to bear precision, proportionality and discrimination in the application of lethal force or demonstrate such capabilities as a precursor to actual action. Carefully planned fire power demonstrations are exercises in such activities. These actions have the capacity to dislocate the psychology of the adversary and make it difficult for them to anticipate the manner in which air power would be employed, increasing the stress on their decision-making calculus—disorientating or even paralysing it. In contemporary irregular conflicts, the use of soldiers on the ground has become an unpalatable option because of their negative political connotations vis-à-vis support of the local population. The situation points to air power being the only option available to pursue the strategy of deterrence. Its reach and penetration combined with the attributes of precision and proportionality makes it ideal for use in environments where geographic and/or political barriers constrain the employment of surface military forces. The recently conducted Balakot strikes by the Indian Air Force is a case in point.

PERCEPTION

The success of a deterrent strategy hinges on the perception of the adversary. As a corollary, it becomes critically important to understand the adversary in terms of their vulnerabilities, values, centres of gravity and risk acceptance. Based on this knowledge the adversary must be targeted in the cognitive domain to influence their perception of one's ability to inflict damage, if and when necessary, to bolster deterrence. Success hinges on perception management. Further complicating the effectiveness of the concept of deterrence is the fact that in the threat of the application of military force, calculating what would be unacceptable loss and destruction for a particular adversary is extremely difficult.

The four very broad functions of air power—detect, decide, deter and defeat—can be employed in varying degrees and combinations to influence the perception of an adversary vis-à-vis deterrence. Air power's direct contribution to implementing the national security strategy of deterrence involves monitoring and analysing adversary activities and then deciding

on the optimum action to deter and defeat them. Signalling to the adversary that their value system and centres of gravity have been identified and can be targeted at will is a very potent tool of deterrence. Irregular forces, the most common adversaries in modern conflict, employ asymmetric strategy and tactics to exploit the vulnerabilities of a conventional military force. However, identifying their vulnerabilities and informing them that these vulnerabilities can be targeted with unacceptable damage emphasises the deterrent capabilities of air power.

APPLICABILITY

In recent times, identifying the culprits of numerous acts that disrupt national security equilibrium has grown increasingly challenging. Therefore, the debate regarding ‘whom to deter’ becomes increasingly poignant. Irregular forces that resort to the tactic of suicide bombing cannot normally be deterred because threats and even substantial damage or destruction of their infrastructure are inconsequential for these entities. However, deterrence can be pursued even if the actions only reduce the intensity of the threat posed by these irregular entities. The applicability of the concept of deterrence is dependent on the quantum of influence that can be brought to bear in a particular situation. The quantum by itself will be variable in a circumstantial manner.

Air power has the ability to escalate the threat of force to its actual use at will and in a graded manner, which is conducive to the application of deterrence. Further, air power’s on-call precision strike capabilities in combination with its airborne intelligence gathering capacity can be employed to send a powerful message to irregular forces—that they are being constantly monitored and that they can and will be targeted at will from the air and that there are no countermeasures to neutralise this. This introduces a disconcerting sense of vulnerability on potential insurgents, which acts as a deterrent.

SPECTRUM OF THE STRATEGY OF DETERRENCE

The efficient implementation of the strategy of deterrence is dependent on two primary factors: the inherent and demonstrated will of the nation

to employ all elements of its national power to safeguard its national interests; and the presumed rationality of the adversary in analysing and understanding the consequences of adopting actions inimical to the interests of the deterring nation.

The concept of deterrence can be sub-divided into four stages or sub-spectrums in a linear manner, with each stage having increasing military involvement. The first stage is denial, followed by increasing the pressure on the recipient in the second stage of proactive diplomacy through a show of force, moving on to the third stage of creating an explicit threat through overt actions, and finally by carrying out punitive actions through the application of focussed force. At this stage, if the strategy is not producing the desired effects, it must be considered to have failed and must be abandoned for another strategy. The first three stages are all in the realm of perception management and the fourth is the actual application of force in a controlled manner.

Figure 2: Sub-Spectrums of the Strategy of Deterrence



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Proactive Diplomacy. The next step of proactive diplomacy is normally engagement through the provision of focused economic aid and political support, as required, for a potential adversary. Such assistance could also involve military advice and assistance on matters of internal security in volatile regions and situations. The primary function of the military forces would continue to be force projection, but in a more intrusive manner, wherein providing training to foreign forces would also be an option. The provision of non-lethal air power capabilities such as ISR and airlift will create a two-pronged influence on the recipient nation—one on influencing national security dialogue and another on the doctrine and strategy being developed.

Explicit Threat. When the first two stages have failed to elicit the desired response, the deterrent posture would have to be expanded to indicate and demonstrate resolve. Explicit threat in this case is not only to be conveyed through diplomatic channels, but also by the forward deployment of forces and the conduct of offensive patrols. These actions are intended to bolster the enforcement of sanctions and if necessary, of more restrictive no-fly zones.

Denial. Deterrence through denial is the hardest of the sub-spectrums to achieve, especially for 'middle power' nations. Denial needs fully demonstrated geographic, economic, political and strategic strength of a very high order to be effective. Even a perceived weakness in any of these cardinal factors will almost immediately collapse the deterrence capacity of a nation. Denial requires an open show of force, which is well-suited for air power capabilities. Air power can create a very visible demonstration of the inherent power of a nation—through rapid provision of humanitarian assistance and airlift used

Air power is ideally suited and could be considered the mainstay for such actions mainly because of its ability to overcome national boundaries and geographical obstructions without having to create semi-permanent physical presence in the recipient nation.

Punitive Action. Deterrence moves from the realm of perception management to military action when punitive actions are undertaken. However, punitive actions are merely indicative of what could follow, a foretaste, a formal and open warning to recalcitrant adversaries to demonstrate the intent of the deterring nation. Such actions can either be pre-emptive or preventive, depending on the evolving circumstances. Precision, proportionality and discrimination inherent in air power strike capabilities make it the first-choice weapon to carryout punitive action. This is emphasised by the fact that surface forces would have to physically violate geographic borders to carry out such actions, which would normally be politically untenable.

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CONCLUSION

All military strategies that are derived from national security strategies will have to factor in the vital and critical contribution that air power makes to ensure the relevance and success of these strategies. In a whole-of-government approach to national security, based on effects-based strategies, the role of air power as an enabling, enveloping and protecting element of national power has become ingrained. In the acceptance of the strategy of deterrence as a major building block in the pursuit of national security objectives in an ever-changing world—where threats are more amorphous than ever before, and response options are often constrained—air power with its infinite agility and flexibility will be a prized capability.

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