STRATEGIC REACH-STRATEGIC DEPTH AND THE QUESTION OF THE IAF'S STRATEGIC POSTURE

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Interest and articulation of "strategic reach" has lately been on the increase in the Indian Air Force (IAF); and concurrently the rationale of expanding military contingencies ranging from peace-keeping to disaster management has focussed attention on the need to translate the idea of strategic reach into strategic effect. It is obvious that if the strategic reach of the IAF is increasing, then we need to play close attention to its implications for strategic depth and how its exploitation could be optimised to our advantage.

Let us begin with exploring the concept of "strategic depth" – an often used term in military literature though mostly interpreted differently by different people. For example, over the decades, Pakistani elites have bemoaned the lack of their country's strategic depth. After 1971, Bhutto propagated the concept of Pakistan being not only a "South" Asian state, but also a co-religionist "West" Asian country. Its army leadership very often talked about the need to expand the country's strategic depth. During Gen. Zia-ul Haq's rule, a pervasive belief was promoted that the army was not only the defender of Pakistan's territorial boundaries, but also had a legitimate role in defending Pakistan's "ideological frontiers." Not surprisingly, strategic depth as a sequel to this formulation was often interpreted in religious-ideological terms to include Muslim populations and countries. But the core of politico-strategic factors remained dominant in the thinking and planning to expand the country's strategic depth and, tragically, the bulk of the people killed in

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consequent conflicts in the name of promoting Muslim interests were Muslims, whether in Afghanistan or in Jammu & Kashmir.

Militarily, of course, strategic depth has been interpreted in two ways. One is to signify the distance between the border/battle front and the combatants' territorial space for military manoeuvre behind it which would not place its full military potential, industrial core areas, capital cities, heartlands and other key centres of population at risk to sudden enemy attack and/or provide the enemy attack an advantage of time and space. But adequate geographical and strategic space could also permit a country to withdraw its military field forces deeper into its own territory, absorb the offensive thrust of the enemy short of its goal and far from the defender's sources of power, and apply concentrated military power at the attacker's selected vulnerabilities.

Mao's "People's War" doctrine was premised on this philosophy, exploiting the strategic depth that China's geographical spread provided, to allow the attacker's offensive to peter out, with its logistic lines extensively stretched and vulnerable; followed by concerted offensive by the defender against an over-extended enemy and defeating it with a combination of guerrilla and conventional war. In other words, strategic depth would permit the conduct of a tactical retreat, luring the attacker deeper into the country, extending its logistic lines of communications while shortening those of the defender, and then shifting to a strategic offensive. But progressively this approach became untenable when the attacker sought only limited territorial gains rather than occupation of the whole country.

The second approach has been to trade space for time. This, of course, requires that the country possesses adequate geographic depth and does not present too many valuable targets in the geographical areas through which an attacker would advance. Russia exploited its strategic depth in this form in the face of the Franco-Russian War when Napoleon attacked it in the early 19th century; and again during World War II when Hitler launched his eastern offensive. In both cases, the attackers managed to reach the gates of Moscow but found themselves too weak by that time to occupy it. The Soviet Union had shifted the bulk of its military industry even further, locating it east of the Urals.

Historically, countries have sought to generate strategic depth by controlling territory ahead of their traditional borders even where their own geographic spread has been large. The rationale behind that has invariably been to create a glacis of space outside the borders in relation to an external military threat. Depending upon geo-political factors, this has normally taken the shape of "buffer states" (as in the classical British policy in the late 19th and early 20th centuries across India's borders) and/or "client states" in the form of military alliances and political-economic influence as in the case of the Soviet Union (in Eastern Europe-Central Asia) and the United States (with its ring of military alliances in Europe and Asia). Conceptually, in consonance with the growth of its comprehensive national power, China has been expanding its "core" while shifting its "periphery" outwards, with Chinese characteristics.

What is important to note is that strategic depth is not limited to landmass. Oceans have provided enormous strategic depth to countries like the United States, allowing it to pursue a policy of non-alignment in relation to European military conflicts and rivalries during the 19th century, permitting its power to grow unhindered by costly entanglements in armed conflicts. Britain itself enjoyed the benefits of the English Channel and the oceans beyond it providing it strategic depth and defence for centuries as long as it could maintain superior naval power. It is the strategic depth offered by the oceans that facilitated the European powers, especially those that dominated the seas, to establish their colonial empires in the 18/19th centuries.

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THE SHRINKING OF STRATEGIC DEPTH?

But the traditional concepts of strategic depth have been strongly undermined by two factors. The first was the advent of air power a century ago when its fundamental attributes clearly indicated that it could directly target the enemy's heartland, regardless of terrain obstacles or the necessity of having to defeat the ground forces. Advances in technology kept extending the range, payload, accuracies, versatility and lethality of air power over the decades. The impact of

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military power's ability to target another country without necessarily having to fight and defeat the enemy's land forces was first felt in the employment of naval power which could be employed for destructive purposes independent of land forces. This was obviously limited to the areas contiguous to the seas. But the critical factor that played a major role in the application of force was the ability of naval forces to tactically withdraw into the maritime strategic depth if the opposition was too strong and come back to fight another day, so to say. Hence, this was always contingent to the attacker retaining naval dominance. The repeated Portugese naval attacks on India's west coast in the 16th century represent the advantages of maritime strategic depth while denying the advantage of the landmass-based strategic depth that India enjoyed.

Technological and doctrinal advances allowed air power to apply destructive force across a wide spectrum of roles, missions, targets and effects at great ranges, with ever increasing accuracy, under diverse conditions. This has witnessed dramatic growth in recent decades largely because air-to-ground warfare has finally shifted from the historically line-of-sight (LOS) air strikes to beyond-visual-range (BVR) capabilities. While air-to-air warfare had acquired BVR attributes long ago, air-to-ground warfare has moved into this arena more recently, signifying a virtual revolution in military aviation – an RMA of a different sort. Reconnaissance, surveillance and target acquisition (RSTA) technologies and capabilities, coupled with space-based systems, have advanced so much that any element of the military that moves can be detected, and anything that is detected can be destroyed from the air, and often very quickly.[1]

Precision strike capabilities of aerospace power have brought in dramatically enhanced effect and discrimination even with ballistic missiles.[2] Specialised

1. For an early study, see Jasjit Singh, "Reconnaissance, Surveillance and Target Acquisition," *Strategic Analysis* (IDSA) 1987.
2. Report of the US Presidential Commission on *Discriminate Deterrence*, Washington DC, January 1988.

munitions like bunker busters and precision guided munitions (PGMs) air-delivered at long ranges, place ground targets at great risk. The dramatic example of an unmanned combat air vehicle (UCAV) controlled from continental US locating and destroying a terrorist in a vehicle in the broad expanse of Yemen is a case in point. The speed and reach of air power has made it difficult to trade space for time; and, hence, the dominant trends to seek strategic depth by forward defence, buffer zones and military alliances. China, for example, which had relied on territorial air defence, has shifted to a more forward reaching and "active offence" based air force strategy that aims nothing short of "command of the air."[3]

Another facet of modern air power, hardly visualised in spite of dozens of aviation related terrorist acts, was the use of hijacked unarmed airliners to carry out coordinated strikes at the World Trade Centre and the Pentagon on the morning of September 11, 2001 (with a fourth aircraft possibly aiming for the Capitol which failed to carry out its nefarious act and crashed along with the innocent passengers). The natural focus of studies has been on the terrorism aspect of the attacks. But what we need to consider here is that while air power had largely outdated the traditional concepts of strategic depth, the strikes on "9/11" clearly implied the shrinking of the strategic depth of the vast land-cum-ocean areas of the United States which had traditionally relied on this depth for security and strength. In a more innocent display of air power overcoming strategic depth was the earlier case of Rust, the young German pilot, who flew an unarmed light aeroplane all the way across the heavily defended Warsaw Treaty air space to land in the Red Square outside the Kremlin in Moscow in 1988. Both events clearly demonstrated the vulnerabilities of the two superpowers. But from the perspective of our present examination, these examples demonstrate that expansion of aerospace power capabilities has led to the shrinking of strategic depth in its classical mould.

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The second aspect is the fundamental change in the nature of warfare.

3. White Paper, *China's National Defence in 2004*, Beijing, December 28, 2004.

Historically, territory was the central object of war since territory implied resources, both material as well as human, which could be acquired by the conquering state. The British Empire had been largely built upon, expanded, and defended by the manpower and material resources of India and, hence, it came to be called the "jewel in the crown." Territory also made it incumbent on any state that sought to acquire it to defeat the defending land forces before that territory could be occupied and its resources expropriated; and that is where strategic depth assumed importance. But for a range of reasons that we need not go into here, occupation of a country or even a significant portion of its territory through military force had become a high-cost low-benefit phenomenon by the last decades of the 20th century.[4] The possession of nuclear weapons by the contending states, for example, has virtually eliminated the possibility of territorial conquest with military power.

But if territory itself was no longer a prime political-military objective, what was the worth and significance of strategic depth in its different manifestations? What would be the role of buffer states/territories in the 21st century? If Pakistan's forays into creating and expanding its strategic depth westward into Afghanistan and eastward into India (Punjab and Jammu & Kashmir), physically, militarily or ideologically, are any indication, the costs are enormous and the gains, if any, of questionable value.

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On the other hand, there is no gainsaying that the extent and control of geographical spread (over land and sea) continues to be a distinct asset in the exercise of employment of military power. But if territory has been shrunk for the purposes of providing strategic depth, the air space above a large geographical spread has expanded the aerospace strategic depth. It is inevitable that air space would be contested as long as states in conflict are willing and

4. Iraq's invasion and annexation of Kuwait in 1990, and US invasion and occupation of Iraq since 2003 are visible examples.

capable of doing so. It becomes important in this context, therefore, to examine the role that strategic depth could play. It would also be relevant to note here that since air dominance is critical to employment of military (land, naval and air) force, this would need to be planned for during peace time and then, when and where required, acquired through contest in war.

STRATEGIC REACH

The Indian Air Force has been focussing on "strategic reach" as a major factor of its transformational processes. It has been acquiring the wherewithal for expanding that reach in recent years to trans-continental ranges not only with its transport fleet but also with its combat aircraft.

There is a larger politico-economic rationale behind the attempts to expand the reach of the IAF. India's economy has been growing at an average of 9 per cent in recent years after maintaining an average of over 8 per cent during the previous decade. External trade has increased manifold. This is in spite of the acute deficit of energy in the country. Sustaining the past levels of economic, industrial and trade growth would require additional sources of affordable energy. Our import dependency on oil has already reached 73 per cent of total consumption; and gas imports would soon touch similar figures. The acquisitions of hydrocarbon equities across the world, ranging from Venezuala to Sudan and Sakhalin in the east indicate the expanding economic interests that may have to be protected in unforeseen contingencies. At the same time, with increasing globalisation and integration of Indian economic and trade activities across the world in this process, the Indian expatriate community has been expanding, which could become hostage to political instability and local-regional contingencies. These contingencies may, in some cases, require sufficient and appropriate military capabilities to back up our political-diplomatic steps.

At the same time, the task of international peace-keeping, mostly undertaken by us for nearly six decades either under the UN mandated missions or at the request of a legitimate government of a friendly country, demands increasing strategic reach. Concurrently, peace-keeping in today's world has become more complex and more often than not, and often rapidly slides into peace-enforcement

operations. India's geographical spread itself requires a substantive strategic as well as tactical airlift capability with the Indian Air Force to meet diverse commitments in diverse terrain and weather, from the Himalayan mountains to the jungles of the northeast and the desert of the western region, for rapid response. Natural disasters in and outside the country pose a special type of challenge as the Gujarat earthquake earlier and the tsunami in December 2004 had demonstrated. Political direction indicating the growing national interests abroad has been clearly articulated by Prime Minister Manmohan Singh.

The strategic reach of the IAF for these and other unanticipated contingencies abroad would be crucial (and likely to increase in the coming years and decades) for the pursuit of our national interests, ranging from evacuation of Indian citizens from conflict zones to disaster relief, peace-keeping, peace-enforcement, etc. But this is a subject that requires a detailed study by itself. Suffice it here to state that expanding the strategic reach of the IAF for combat and non-combat roles would need to be strengthened further in the years to come.

But what we would like to focus on here is the issue of strategic depth in relation to the challenges of national defence and the influence strategic reach would (or should) have on the strategic posture and deployments of the IAF.

To begin with, while Pakistani elites have demonstrated near paranoia about the lack of their country's strategic depth, the issue of strategic depth in India's defence has been virtually absent in strategic thinking. The only time it received some indirect – and actually negative – attention was before the Chinese attack in 1962 when influential army leaders argued for a tactical withdrawal from the Himalayan regions contiguous to the borders in the face of any Chinese attack, and then to fight the People's Liberation Army (PLA) in the plains of Assam. When war finally came, this belief may well have contributed to the hurried withdrawal from the Sela Pass (where the Burma experience of fighting battles in "boxes" in which many of our senior officers had participated, could well have held the Chinese for months). In the face of the Chinese advance, the army actually decided to defend the country south of the Brahmaputra in a distorted implementation of the concept of strategic depth.[5]

5. Maj. Gen. D.K. Palit, *War in the High Himalayas* (New Delhi: Lancer International, 1991), pp. 344-345

The absence of strategic thinking on exploiting geography could well be due to the widespread belief (except before 1962) that the country was powerful enough to fight at the borders and prevail. It is interesting to recall that while Pakistan sought to expand its strategic depth by invading Jammu & Kashmir in 1947 and create a buffer zone by hanging on to the occupied territories of Pakistan Occupied Kashmir (POK), we did little to even ensure forward defence in spite of the directions of the Defence Committee of the Cabinet based on the defence minister's proposal for the creation of a 10-mile broad *cordon sanitaire* along Kashmir's western border (with Pakistan) to interdict infiltration of invaders.[6] Small wonder that six decades later, it is Pakistan that seeks further expansion eastwards while we have virtually forgotten that this buffer zone is Indian territory, but does not provide us any advantage of a buffer! On the other hand, this territory has become the launch pad for Pakistani covert and overt aggressions over the decades.

This also points to a second reason in that we have not approached the issue of national defence from a strategic perspective. While this can be explained largely by the British imperial policies of retaining strategic planning and capabilities under their direct control and limiting Indian involvement only to the tactical levels, and the fact that the Indian officers in the armed forces had little experience of strategic planning, this factor cannot adequately explain why this tendency appears to have continued decades later into what is nearly the third generation of military leadership in the country since World War II . The major factor, at least as it concerns the air force, is that the Indian Army (like so many armies earlier) had perceived the air force almost exclusively as a support Service, perhaps at a somewhat higher level than the ASC (Army Supply Corps) transportation system in relation to airlift and as an extension of its corps of artillery in terms of firepower support. The fact that the army as the largest Service itself has been oriented toward land warfare for territorial defence with a near total concentration on "boots on the ground" has not allowed adequate attention to be paid to the role of air power in the changing operational-technological environment of the past five decades. This, of course, has been changing in recent years.

6. Jasjit Singh, *Defence From the Skies* (New Delhi: Knowledge World, 2007), p. 53. The fact that all three chiefs were British at that time and they opposed the proposal at the meeting, may have had something to do with this.

But we also need to recognise the reality that till recently, the IAF itself had not really sought a strategic role for itself in national defence. It had essentially looked at fighting a hostile air force without a clear focus on the "effect" sought toward an identifiable end-state. A perceptive RAND study had politely but candidly stated:[7]

> "The IAF has not figured prominently in Indian thinking about defence."

> "At least from the outside, it appears that the air force did not take the initiative in pushing concepts of air power or in preparing an air plan for the defence of India. While it did not wish to appear as just a supporting service, the IAF was largely forced into that role."

A PARADIGM SHIFT IN THE MAKING

It is against this broader context that we would like to focus on the IAF's increasing strategic reach in the context of taking advantage of strategic depth. The first issue is that with greater strategic reach, the air force can obviously reach further into a hostile territory, expanding the battle space. The primary limitation of this expansion would be the ability of aircraft to operate in hostile air space with integral fuel. Aerial refuelling, so critical to modern expansion of reach, would necessarily have to be undertaken in safer skies.

But, in principle, with expansion of strategic reach, coupled, of course, with enhanced RSTA and air intelligence capabilities, much larger space would be opened up for targeting, and the number of targets and options would increase exponentially. This flies against the conventional wisdom that force multipliers would enable force reduction in future. In turn, precision strike capabilities in an expanded battle space would place a greater premium on target intelligence and information, and, hence, for strategic reconnaissance and intelligence covering potential area(s) of operations during peace and war. These would require additional assets in terms of platforms and sensors; and the larger numbers of targets would demand larger numbers of platforms as shooters with onboard sensors and weapon guiding systems and precision weapons.

7. George Tanham & Marcy Agmon, *The Indian Air Force: Trends and Prospects* (Santa Monica : RAND, 1995), p. 42.

The failure to exploit the country's vast geographical depth in the past can be traced to the following factors:

- Historically, a defensive culture that amounts to the "Panipat Syndrome" due to the propensity of Indian rulers to defend as close to the seat of power as possible rather than exploit strategic depth which would have required a fighting withdrawal.[8] Strategically, the optimum points of defence from invasions from the northwest were the two main passes – the Khyber Pass leading to Peshawar, and the Bolan Pass further south, opening to Quetta. But this was not followed even though the territory east of these passes as they opened into plains mostly belonged to erstwhile India. Indians opted to defend often at Panipat, a short distance from Delhi, the traditional seat of power, forsaking the landmass between the eminently defensible passes and Delhi.
- A "defensive-defence" doctrine and philosophy at least at the political level,[9] which in the past was often interpreted to imply a strategy of defending "every inch" of territory.
- Opportunities for forward defence-based strategic depth were given up during the Kashmir War 1947-48 and never seriously reclaimed; and the loss of Tibet as a buffer zone without settling the boundary.

EXPLOITING AEROSPACE STRATEGIC DEPTH

But the most important aspect from our point of view has been the impact of non-utilisation of India's strategic depth. Empirical evidence is overwhelming in respect of the IAF. Close to 80 per cent of the IAF's operational bases are located within a zone less than 300 km from the international border with China as well as Pakistan, with the balance (except for three) located at less than 400 km. This deployment posture owes a great deal to the factors noted

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8. This also signifies the culture of lack of long-term thinking, unwillingness/inability to address challenges in time and rely on intuitive reactions once the crisis become a veritable threat.
9. Shri K.C. Pant (then defence minister), "Philosophy of Indian Defence" in Jasjit Singh and V. Vekaric, eds., *Non-Provocative Defence: The Search for Equal Security* (New Delhi: Lancer International, 1989) pp. 206-214.

above. But the type of weapons acquired after 1962 have had profound, even if unintended, consequences on the IAF's strategic posture and effect.

A series of steps triggered by the Chinese invasion in 1962 and the unwillingness of the United States to supply arms to India resulted in increasing reliance on Soviet military equipment for a variety of reasons, among which the most prominent were the lower cost of Soviet weapon systems of high quality, payment in rupees in an era of severe shortage of hard currency, and payment for weapon systems acquired on long-term credits at nominal rates of interest. The cost to the exchequer can be gauged from the fact that in the late 1980s, the French Mirage 2000 and Soviet MiG-29 carried a similar unit cost tag; but the real cost of the MiG-29 worked out to one-third the price of a Mirage 2000!

Contrary to conventional wisdom, the Soviet Union had pursued a defensive military strategy. This, in fact, was most visible with respect to air power which relied very heavily on ground-based terminal defences with anti-aircraft artillery and surface-to-air missiles (SAMs). Till the mid-1980s, except for the strategic bombers for nuclear delivery, Soviet combat aircraft had limited operational radius of action, carried limited weapon loads, and had limited BVR/all-weather capabilities. At one stage, as many as 32 combat squadrons (out of 39) were equipped with Soviet aircraft, with limited range and payloads. And even Canberra light bombers had to transit for refuelling for bombing missions in Pakistan during the 1965 War.

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In view of this factor, the most logical option to extend the combat radius of aircraft to be able to hit key targets across the borders was to adopt a basing philosophy of forward airfields which rapidly became near permanent stations rather than the earlier concept of staging airfields. It is worth recalling that the two airfields where we lost a large number of aircraft on the ground to Pakistani air strikes in the first few hours in the 1965 War, were located less than 50 km from the international border, and the third (Kalaikunda) had little air defence

warning cover. A number of such airfields were constructed after the 1965 War, some of them as little as 60 km from the border. This, in turn, drastically reduced the warning period for incoming strikes. It was not surprising, therefore, to witness the Pakistan Air Force (PAF) concentrating their counter-air strikes in 1971 targeting only the forward bases. And, hence, dependence on SAMs increased rapidly. At one stage, the IAF had three dozen SAM squadrons absorbing technical manpower at par with Jaguar squadrons. The Anglo-French Jaguar was advertised and sold as a "tactical fighter" but was christened "deep penetration strike aircraft" in the IAF!

It is against this background that the strategic reach of the IAF started to increase from mid-1990 in spite of strong resistance from some influential sections of the air force. For example, the change in the standard of the preparation of Jaguar and Mirage 2000 to include aerial refuelling probes (standard equipment in Britain and France) took place in the early 1980s, but aerial refuelling tankers were acquired more than a decade later. The airborne early warning system was perceived as contributing little to operational capability; and the indigenous development programme remained underfunded. It would take another two decades before the thinking changed.

The central question that we must address is that now that the air force has moved firmly into expanding its strategic reach, how can this be leveraged for greater strategic effect, especially when its force level has been dropping and could take a decade or more to recoup ?

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The issues of state-of-the-art RSTA capabilities, precision strike at long ranges, integral electronic warfare and other defensive capabilities, and so on (which would all cost large sums of money and difficulties in access to technology, etc.) need to be addressed in their own right. But the aspect that we wish to focus on here is that of strategic posture in the shape of force deployment for substantially enhanced strategic effect by exploiting India's strategic depth. In principle, if the IAF operational bases are relocated beyond

about 400-500 km from the international border, it would place them completely outside the reach of PAF aircraft and what it could possibly acquire in the next two or more decades. Acquisition of aerial refuelling capability by Pakistan would be of little value since it would have to be undertaken mostly over the Indian air space, increasing its vulnerability to IAF interception. This is obviously less applicable in the case of China since the strategic depth available for exploitation by the IAF is limited in the northeast region. The rational solution would be to look for that depth in Manipur and Tripura, on one side, and southern Bengal, Bihar, Orissa, Jharkhand, and Chattisgarh region, on the other. It is worth recalling that this is the region where the United States Air Force (USAF) had built a large number of bases to exploit India's strategic depth in World War II to strike targets in Southeast Asia, China and Japan.

The counter-argument to this approach, besides that of costs involved in creating new air bases, would be that dense air defence systems, concrete covered aircraft shelters, parallel taxi-tracks, mutual support from other air bases, etc. have reduced the vulnerability of air bases and, hence, the premium on air base attacks in counter-air strategies. This is only partly true. Aircraft will remain vulnerable during the critical phases of taxiing, take-off, circuit and landing. In the past, enemy strikes during these phases were much more a matter of chance; and even then, significant air effort was expended to cover the launch and retrieval of operational missions. But with enemy airborne early warning/airborne warning and control system (AEW/AWACS) able to 'see' aircraft launch and retrievals, counter-air operations out to nearly 300 km inside our territory would assume a new and deadly dimension. The experience of the Israeli Air Force shooting down 86 Syrian combat aircraft through a similar process in June 1982 stands as testimony to the potential of strategic effect in the changing environment.

It is useful to note here that Pakistan already possesses aerostat radars and unmanned aerial vehicle (UAVs), has ordered 6 Swedish Erieye AEW&C systems, has sought to acquire 3 American P-3 aircraft with Hawkeye AEW systems, and has been evaluating the Chinese AWACS. By any logic, that is a lot of air surveillance capability for a country of Pakistan's size and commitments

which would play a much greater offensive role in counter-air operations than in defensive counter-air. Meanwhile, covering most of peace-time flying from current air bases would help Pakistan build an air power order of battle (ORBAT) of the IAF tactics, quantum of flying, and aircraft capabilities so critical for working out air strategy.

It needs to be recalled that in past wars (of 1965 and 1971), we devoted nearly 50 per cent of air effort to air defence, mostly over our operational air bases because they were within striking range of the PAF. In other words, the advantages of mass and larger size had to be employed in reactive terminal defence which the enemy often chose to ignore, as indeed it did in 1971, concentrating on air bases closer to the border. This, in turn, led to increasing reliance on ground-based SAMs and reinforcing a defensive mindset .

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A key element of our strategy should be to shift our operational bases out of the range of PAF air surveillance, reduce our air defence commitments for 80 per cent of our air bases and plan to meet the PAF with the IAF almost fully on the offensive. Technology matched with geography would give us the advantage of monitoring the PAF peace-time training, as well as strike at their vulnerabilities in war. The sheer advantage of the unambiguous prospect of air dominance – at the planning as well as operational levels – would constitute a powerful and credible deterrence against any misadventure by Pakistan in the future.

In the case of our friend in the north and northeast, the balance of strategic depth lies with the other side. Geography and short range combat aircraft had forced us to forgo operational advantages. But with the strategic reach of the IAF increasing, it is possible to at least reduce the balance of advantage against us.

There is an obvious issue of costs and redundancy of the enormous assets created over the decades if we have to reorientate our strategic posture to exploit

increasing strategic reach and achieve strategic effect. The first question that may appear rhetorical but actually, in this context, is not, is: what cost is acceptable for ensuring credible deterrence against war and success in the case of deterrence failure? With the unit cost of Su-30 class aircraft crossing Rs 200 crore, the cost of removing operational bases beyond the reach of the enemy air force assumes a different dimension than in the case of the Rs 1 crore MiG-21 or Rs. 0.6 crore Gnat. More concretely, we will continue to need a certain number of existing operational bases for a variety of reasons. Thus, a phased programme over the next 15-odd years could be drawn up in the first instance with objective calculations of costs, etc. to relocate around half of the existing bases which are within 300 km of the borders. Judicious planning could ensure one air base in the country's heartland accommodating far more air assets than existing forward bases. It is not intended here to go into the details of comparative costs and other advantages which would/could accrue as spin-off. What is important is to recognise that mere strategic reach would be ephemeral if it cannot be converted into strategic effect; and that requires exploiting our aerospace strategic depth. This combination of the two demands a serious paradigm shift in the strategic posture of the IAF.

What is important is to recognise that mere strategic reach would be ephemeral if it cannot be converted into strategic effect; and that requires exploiting our aerospace strategic depth.