

AIR POWER IN SUB-CONVENTIONAL WARFARE IN THE SOUTH ASIAN REGION: PAST LESSONS AND FUTURE TRENDS

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While the armed forces of the important states, and increasingly those of the developing countries as well, raced each other to see which one could produce and field the most powerful modern weapons, war did not stand still. Albeit, wars have never been the sole form of armed conflict and earlier the most important wars had been fought by states with their regular armies. However, after the 1945 War, this kind began to turn into an endangered species. One of the first 20th century armies to feel the fury of sub-conventional war was the German *Wehrmacht*¹. First in Yugoslavia, Russia, Greece, and Poland, then increasingly in other countries such as Italy, France, and even Holland, Belgium and Scandinavia, the Germans were faced with armed opposition which disrupted their rule, tied down their resources and inflicted casualties.² Although they were perhaps the most ruthless conquerors in history and killed millions, they failed to stamp out even one of the movements under reference. On the contrary, the more brutal the operations became, the stronger the resistance evolved. In fact, this almost set off a logic to resort to sub-conventional means to

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1. *Defence Power*, refers to the German armed forces in World War II.

2. Charles Townshend, *The Oxford History of Modern War* (Oxford: Oxford University Press, 2000), p. 355.

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gain certain rights, make believe or otherwise. In fact, this logic led to a whole series of 'wars of liberation' in Palestine (1946-48); Indonesia (1947-49); Indo-China (1946-54), Malaysia (1948-60); Kenya (1953-58); Algeria (1954-62); Cyprus (1955-60); Aden (1967-69); and a host of less important cases.³ How can one explain the victories won by those, initially at least, who did not possess much military experience or organisation, hardly any weapons in comparison, and had limited economic resources? While circumstances differed from one place to another, the bottom-line answer was always the same: the more powerful and more modern the technology, the less adaptable it became to stamp out this kind of warfare at the sub-conventional strata.

India faces a huge challenge of tackling the lower end of the spectrum of warfare which we refer to as sub-conventional war, associated with the ongoing conflict in Jammu and Kashmir (J&K), the Naxalite problem, the uprisings in the northeast and the linkages to terror attacks like in New Delhi,⁴ Mumbai,⁵ Bengaluru, Ahmedabad ⁶ and other towns and cities. These are all but grim reminders of this new reality where even the finest militaries in the world have been rudely jolted by the pervasive influence of this genre of warfare.

After World War II, progressive nations with large and powerful militaries began to develop military power as a means of coercion as a matter of state policy by engaging in coercive diplomacy. The linkage between the coercive capability of the larger powers and the emergence of sub-conventional warfare becomes important when we witness the means

3. Ibid., p. 356.

4. "The Indian Media has Called for Tougher Laws and Strategies to Combat Attacks by Militant Groups in the Country", published on September 15, 2008, at <http://news.bbc.co.uk/2/hi/7615941.stm>

5. "Mumbai Terror Attacks Lead Papers", published on October 27, 2008, at http://news.bbc.co.uk/2/hi/uk_news/7751739.stm

6. Wilson John, "Indian Security Agencies Struggle will Probe into Serial Bombings in Gujarat and Karnataka", published on August 6, 2008, at http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=5103

of combating terrorists, insurgents and 'freedom fighters', in remarkably new ways which test the capabilities of established military forces in what is referred to variously as asymmetric, irregular or even hybrid warfare. When we look across the spectrum of this kind of conflict, countries like the United States (US), Soviet Union, later Russia, United Kingdom (UK), India, Israel and Sri Lanka have all used divergent tactics with the essence of deterrence and coercion to achieve similar objectives. It can be conveniently deduced that sub-conventional warfare has emerged as an effective counter to a larger ability to coerce, and the tools used are in stark contrast to the tools of conventional coercion, be it diplomatic or military. What, then, is this sub-conventional war and the methods used in this kind of warfare? The inability of countries to counter coercion with open force, and fight conventional wars with entities such as non-state actors has led to the emergence of war-fighting concepts which logically precipitate from the failure of coercion, which invariably leads to gradually escalated use of force.

Air power formed the primary tool when engaged in such escalation, and also the much-needed catalyst for conflict resolution, too. Examples exist in the form of the Vietnam conflict, the British intervention in Ireland, the Soviets in Afghanistan and the Russians in Chechnya, the Indian Peace-Keeping Force (IPKF) operations in Sri Lanka, and the Lebanon War of 2006. In the modern era of warfare, the Israelis have been pioneers in the use of air and space assets to prosecute campaigns against non-state actors like Hamas and Hezbollah, even without committing ground forces. Similar have been cases of the recent exploits by the American and Coalition forces in Afghanistan. Though their strategy has met with success, it has also evoked widespread criticism. It has certainly opened new vistas for employment of air power, where deterrence and coercion seem to have worked side by side and complementary to one another; but there are some important questions that can be answered only after we see the outcome of the application of air power in combating sub-conventional warfare. This is especially so in South Asia, with a backdrop of the restraining factors and limitations of air power in such wars. It will also be pertinent to note what technology has to offer via

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perspectives and possibilities on the use of air power in sub-conventional conflicts. Finally, the trend that can be seen in the likely future is on air power application in such a manner that the perpetrators of sub-conventional warfare are confronted with an unacceptable exerting pressure that exhausts them. If yes, then, is air power still an instrument of coercion or rather compellence, though this time not against established nations directly but against non-state actors, terrorists and insurgents?

Nations do get involved when state boundaries and regional power politics assist in the existence of sanctuaries from where non-state actors are able to operate with impunity, at times, and, to that extent, transnational sanctuaries have remained a persistent source of the problem throughout history. Having faced typical confrontational elements of sub-conventional conflict, it should now be time enough for India to focus on the Naxalite movement which also has a similar genre, given the alacrity with which they have struck and have been troubling India since the early Sixties. In conjunction with uprisings in the northeastern states, they now threaten the very fabric of governance and rule. Understanding the movement is not within the purview of this article, however, how to deal with the nature of the movement's threatening posture with an 'air-first' response or simply air power will be considered in some detail while discussing India's response to its internal sub-conventional tackle. After years of trying to fingerprint the uncertain genre of this kind of warfare, the terms flexibility and unpredictability, with which these wars are fought, reflect the degree of difficulty the armed forces face in formulating tactics and strategies to fight battles in such an atmosphere. Choosing the right weapons and training regular forces to think and train in a manner that contradicts the age-old tenets of war-fighting are other dilemmas that merit constant attention.

AN EXISTENTIAL PROBLEM: SANCTUARIES

Despite adherence to ideology, the perpetrators of sub-conventional conflict use the international system, and their version of hiding behind the veil

of state boundaries has been a norm which makes state forces somewhat incapable without regional and inter-country cooperation, both diplomatic and military. Some states oppose, but are incapable of completely stopping this use of their territories. Others, for reasons ranging from regional power politics, to sympathy for the ideology, either provide direct support, or knowingly allow use of their lands. Therefore, international borders, and the transnational sanctuaries and supply lines that get inherently protected, are crucial issues in such warfare. Transnational sanctuaries play a role in such warfare from the onset. Active sanctuaries have been used throughout the world. In the Greek Civil War (1946-49), the Communist rebels enjoyed the use of sanctuaries in Albania, Yugoslavia, and Bulgaria.⁷ The Communist insurgents fighting the British-supported government in Malaya⁸ from 1948 to 1960, had sanctuaries in neighbouring Thailand. The anti-French rebels in Indochina (1945-54) could look to China for supply and refuge,⁹ and the anti-French fighters in the Algerian War of Independence (1954-62) had sanctuaries in Morocco and Tunisia.¹⁰ In all these cases, the anti-government forces were generally successful as long as they had access to, and made use of, their sanctuaries.

Shortly after the Americans and their allies took Kabul in the fall of 2001, the Taliban and Al Qaeda retreated to the mountainous Afghan frontier with Pakistan. In the Tora Bora region, south of Jalalabad, they made use of old supply stores to dig into the mountains and valleys, and continue the fight. In December 2001, Allied forces launched a series of assaults on the enemy positions, eventually killing and capturing many, though many others escaped across the border into Pakistan. In the March 2002 Operation Anaconda near the Pakistan border south of Kabul, events followed a similar course. Coalition troops encircled Al Qaeda positions in

7. See Ulrich Sinn, "Greek Sanctuaries as Places of Refuge", in Nanno Marinatos and Robin Hagg, eds., *Greek Sanctuaries: New Approaches* (London: Routledge, 1993) for an understanding; and Michael Brecher and Jonathan Wilkenfeld, *A Study of Crisis* (Ann Arbor: University of Michigan Press, 1997).

8. See John A. Nagl, *Counterinsurgency Lessons from Malaya and Vietnam* (Westport: Praeger Publishers, 2002).

9. Jacques Dalloz, *The War in Indo-China 1945-54* (Dublin: Gill & Macmillan, 1990), p. 153.

10. Paul-Marie De la Gorce, *The French Army : A Military-Political History* (New York: George Breziller Inc, 1963), p. 455.

a mountain valley roughly 25 miles from the border. The fight continued till the enemy's collapsing and breaking up into smaller groups to flee to Pakistan.¹¹

Pakistani officials have repeatedly asserted that their "forces are fully capable of securing and protecting Pakistan's borders."¹² Indeed, Pakistani forces must have worked to kill and arrest hundreds¹³ with periodically launched raids or air strikes along the border in search of the leaders. One prominent effort came in January 2006, when a US air strike targeting Al Qaeda leaders in the border village of Damadola killed civilians in the village, resulting in civilian protests against Pakistan's government for cooperating with the United States. Later, Afghan President Hamid Karzai and Pakistani President Pervez Musharraf had a brief public dispute over Pakistani efforts to police the borders.¹⁴ The tenuous situation along the frontier continues to this day.

Another example was the Syrian border which continued to be a problem even after the end of major conventional operations in Iraq by May 2003. L. Paul Bremer, the Administrator of the Coalition Provisional Authority in Iraq, wrote in his memoirs about a July 2003 discussion of the major problems where he stated that Iraq's long, porous border with Syria had offered the primary escape route for the fleeing extremist fighters. But Syria seemed immune to most diplomatic or economic underpinnings and seemed susceptible only to direct military intervention which was unlikely with the US forces engaged in Iraq and Afghanistan.¹⁵ In order to effect better security along the frontier, the border was divided into sectors and schedules set up to observe various areas of infiltration. Air force and navy pilots flew observation missions, as did Unmanned Aerial Vehicles (UAVs). They also

11. Richard W. Stewart, *The United States Army in Afghanistan: Operation Enduring Freedom* (Washington, DC: US Army Center of Military History, 2003), pp. 26-44.

12. "Pakistan Rejects US 'Right' to Incursions," *Los Angeles Times*, January 5, 2003, available at <http://www.latimes.com/news/custom/showcase/la-print-edition.htmlstory>

13. "Pakistan Says 50 Killed in Airstrike on Terror Camp," *Los Angeles Times*, September 10, 2004, available at <http://www.latimes.com/news/custom/showcase/la-print-edition.htmlstory>

14. Zahid Hussain, "Political Fallout in Pakistan Strike Tests a US Ally," *Wall Street Journal*, January 16, 2006, available at <http://online.wsj.com/public/page/news-global-world.html>

15. L. Paul Bremer, *My Year in Iraq: The Struggle to Build a Future of Hope* (New York: Simon and Schuster, 2006), pp. 104-105.

buried seismic sensors called steel rattlers to detect moving vehicles at the border. But the territory could never be completely shut down along with the border. Part of the problem was the ingenuity of the insurgents. The foreign fighters came in a lot of different ways. Water trucks had false tanks where human beings could be stowed away. Commercial traffic at border crossings offered numerous trucks loaded with fruit and merchandise, but they also catered to false hiding places where Rocket Propelled Grenades (RPGs) and weapons could be stacked up, and, of course, there was no time to unload a complete truck and then load it back up.¹⁶ Air power had very little to leverage on such occasions.

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India also faces this problem with the porous borders in the northeastern states.¹⁷ Also, in spite of the fencing along the border and Line of Control (LoC), there have been numerous instances where infiltration has been reported and acknowledged.¹⁸

APPLICATION OF AIR POWER IN COMBATING SUB-CONVENTIONAL WARFARE

Despite a mighty effort in Vietnam, a world's great superpower proved unable to prevail in the face of a relentless enemy. Vietnam is also remembered as a symbol of a military disaster, never to be repeated. The military had for too long ignored many of the most important lessons even during the war. In fact, Robert Cassidy explains a shortcoming: "The American military culture's efforts to expunge the spectre of Vietnam, embodied in the mantra 'No More Vietnams,' also prevents learning from those lessons." There are lessons to be learned from Vietnam, including many relating to transnational sanctuary. The full range of issues relating to the tricky diplomatic problems

16. Thomas A. Bruscino, Jr, *Out of Bounds: Transnational Sanctuary in Irregular Warfare* (Kansas: Combat Studies Institute Press, 2006), pp. 2-5.

17. P. C. Shekhar Reddy, *Peace and Development in the Northeast: A Virtuous Spiral* (New Delhi: Mittal Publications, 2007), p. 73.

18. Press Trust of India, *Data India Issues* 27-53 (New Delhi: Press Institute of India, 2005), p. 290.

of international frontiers and sub-conventional warfare were on display. So, too, were the responses. A wealthy and technologically advanced modern state had within its ability to attempt a wide variety of schemes to deny the Communist enemies their transnational sanctuaries. The failures and successes among those efforts, coupled with a solid understanding of the reasons thereto in the overall effort provide a variety of insights on the issue of transnational sanctuary in sub-conventional engagement.

The same could be said of the Soviet War in Afghanistan (1979-89). The Soviets had amassed an enormous and technologically advanced military, like the Americans before Vietnam, but they had not invested much time or effort in developing any sub-conventional doctrine, so they had to play 'catch up' when intervening in Afghanistan. Like the Americans, they tried a wide variety of techniques to stop the insurgents from making use of their transnational sanctuary. But unlike the Americans, the Soviets had no compunctions whatsoever about using the most brutal techniques to put down insurgency.

In 1979, when the Soviet Union intervened in Afghanistan to support a pro-Soviet government, the world was initially impressed with the use of the Russian Spetnaz (Special Forces) and air power, but the war turned into a long, messy, and brutal struggle between the Soviet troops, their Afghan supporters and the opposing Mujahideen.¹⁹ Air assets, both fixed-wing aircraft and helicopters, were used by the Soviet forces to lethal effect in Afghanistan, although rarely in a way to advance any political objectives. While aircraft were used extensively for resupply purposes in Afghanistan, and for bombardment to depopulate important rural areas, their main use was in support of ground operations. The main helicopters used were Mi-24 (Hinds), which carried four anti-tank missiles, had a maximum speed of 275 km per hour, and a 300 km range. With a crew of two, they could carry 8-10 troops. Fixed-wing aircraft came in different forms; while the Tu-16 and Su-24 bombers operated from bases in the USSR itself, the MiG-23/27 (Flogger) and Su-25 (Frogfoot) aircraft were deployed

19. Thomas K. Adams, *The Army After Next* (Westport: Greenwood Publishing, 2006), p. 19.

in Afghanistan from 1980.²⁰ Attack aircraft were used most often for planned strikes against clearly identified targets, while helicopters performed the majority of 'on-call' strikes. Directed against civilians, these assets proved lethally effective but were certainly less effective against small resistance groups. The main problem was shortage of assets. The Soviet Army could never muster enough helicopters and air assault forces to perform all the necessary missions and the airborne and air assault forces were usually understrength. Furthermore, from late 1986, the supply of Stinger missiles to the Afghanistan resistance forced Soviet aircraft to take evasive actions which to a great degree compromised their initial military effectiveness.²¹

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The expanded use of the Spetsnaz forces in Afghanistan did mark an important turning point. With the increase use of Special Forces, the USSR moved towards overcoming one of the greatest weaknesses, namely the limited autonomy granted to relatively small groups of troops in a theatre of operations in which flexibility and local initiative were vital. They formed the core of a more specialised counter-insurgency force, which, comprising not only the Spetsnaz but also airborne, air assault, and designated reconnaissance troops, came to a total of 15 to 20 per cent of the force.²² In spring 1985, the Spetsnaz forces were deployed along the Afghanistan-Pakistan border with a view to attempting to close it as more than 60 per cent of Afghanistan's border with Pakistan fell under their control. The Spetsnaz forces were better equipped and trained than their regular counterparts. However, they also suffered their losses and on three occasions, were completely wiped out by the resistance groups because of isolation from air cover.²³ On occasions, too, the benefits of surprise were lost with the Special Forces inserted only after a period of bombing and reconnaissance. This may have minimised the losses

20. William Maley, *The Afghanistan Wars* (New York: Palgrave Macmillan, 2002), p. 48.

21. Ibid., p. 49.

22. Ibid.

23. Ibid., p. 49.

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on the Soviet side, but it also allowed the resistance groups to make good their escape to survival. When the Soviet forces opted to 'drive out the population', they set about doing it in some of the most barbarous ways one could imagine. Mud-brick buildings, of the kind which pre-dominated Afghan villages, were no match for aerial bombardment, rockets, and artillery.

Intelligence lies at the heart of effective military operations, although it cannot compensate for poor tactical execution. Information to facilitate military operations was gathered in a number of different ways. Helicopters were, of course, used for reconnaissance purposes. However, once it became necessary to collect more detailed Human Intelligence (HUMINT), the Soviet forces ran into difficulties, largely because of the instrumentalities, besides shortcomings prevalent in the existing system. The Soviet forces' dependence on their own system led to the troops having to do with limited ranges and their equipment coped poorly in the mountainous terrain even when it came to air-to-ground or just ground communications. Secondly, the resistance groups tended to rely on human messengers and made limited use of radios, thus, making interception difficult. Procedures used by the Soviet troops were cumbersome and inefficient. One really could not conclude whether it was the widespread deficiencies in communication between air and ground or any other reason that was reflective of endemic inflexibility, lack of imagination, compartmentalisation and reluctance to depart from rote and textbook procedures even when they did not work ²⁴ and led to almost catastrophic results, till the Soviets finally decided to withdraw. However, it could be reasoned that lack of good communication was one of the marked reasons for operational failure in certain areas during combat.

The most effective weapon against the resistance was the Mi-24 helicopter gunship. By mid-1982, Soviet helicopter strength (the Mi-6 heavy transport

24. Ibid., p. 52.

and assault, medium transport and assault and the heavily armoured Mi-24 Hind gunship) was estimated at roughly 600-700 machines, of which some 200 were thought to be Mi-24 Hinds.²⁵ Helicopters gave the Soviets mobility similar to that of the Americans during the Vietnam War with the US Huey Cobra attack helicopter. However, they had their share of operative shortcomings too. The gunships would inevitably continue on their flight-path unless they had come specifically to target a village. The guerrillas soon learned to leave their animals standing in small groups while they crouched motionless. In more exposed and open terrain, camps were pitched at night among nomad tents and herds so that a few extra strings of animals would not stand out in the event of a dawn air patrol.

While less protected Mi-8s were being brought down by guerrilla fire and even sprays of Kalashnikov bullets, the Hinds could fly with more impunity because of their armour protection though they still had their share of vulnerabilities. Only from the third year of occupation did one begin to see evidence of Mi-24s being knocked down.²⁶ Although considerable numbers of helicopters of all types as well as jetfighters had been shot down by the end of 1984, some of them by anti-air missiles, overall resistance weaponry had still not improved by this time to the point that the Soviets no longer dominated the skies. Nevertheless, all types of aircraft were now being forced to fly higher in the sky. The Soviets had also rediscovered what the British had learnt during their Afghan campaigns in the 19th and 20th centuries about the deployment of assault 'rangers' or commandos. Reliance was placed on Mi-8s as a primary form of transport while the Mi-24s provided close air cover which ultimately became the mainstay nature of operations for the Soviets. The air assault rangers proved particularly useful and effective in establishing forward positions during swift cordon and search, including search and destroy, missions.

25. Edward Giradet, *Afghanistan: The Soviet War* (London: Taylor & Francis, 1985), p. 42. Travelling with the guerrillas in Nangarhar province, the author recalls the panic-stricken state of the rebellious group at the appearance of gunships, not realising that they were practically invisible from the air against a backdrop of rocks, tress and bushes.

26. Ibid., p. 43.

Although to a lesser degree, the helicopters were used for escort convoys through vulnerable mountainous terrain. Flying in pairs, Mi-8s or Mi-24s would 'leap-frog' the length of the column, providing vehicles with a constant but not necessarily unassailable form of protection. Gunships also regularly crested the heights in the way of establishing pickets on mountain tops and ridges in order to control the lower slopes. While generally, troops have to climb themselves, the Soviets preceded ground offensives in the highland regions by dropping commando units on high points and then picking them up again when the operation was over.

As the resistance became increasingly adventurous, the airports and air bases became targets and the invincible Mi-24s were flying 'extremely' high to avoid the gauntlet of anti-aircraft and heavy machine-gun fire in areas where the guerrillas had established rudimentary but efficient aerial defence systems.²⁷ Once the guerrillas temporarily overran the city of Kandahar, forcing the government officials to run to the airport for shelter, and the Soviets had to retaliate mercilessly with their planes and artillery, inflicting such heavy losses that the local inhabitants asked the guerrillas to leave, which they did. However, such incidents did not carry the precedent and content of any operational logic.

The Soviets were into massive induction of troops since 1983. They gradually introduced up to five air assault brigades of specialised heliborne 'rangers' better suited for combat in the mountains, which were deployed in different locations around the country. This was in addition to seven motorised divisions²⁸ plus the 105th Airborne²⁹ – a total of some 8,5000 troops. An additional 30,000 men were also included, some of whom were used in cross-border operations. By early 1985, the figure had risen to the generally accepted one of 115,000, with 30,000-40,000 regularly deployed for special operations from bases inside Soviet Central Asia. In one of the cited operations in Kunar Valley which formed a 60-mile fertile farming district close to the Pakistan border, it was evident that the Soviets pounded the area for two days, then, while the troops were dropped from helicopters along the nearby

27. Ibid., p. 44.

28. Each division consisted of three infantry regiments, one tank and one tank regiment.

29. 105th Airborne consisted of six paratroop regiments as well an artillery one.

ridges and on to rooftops, columns of tanks and BMP infantry combat vehicles swept rapidly, ploughing down whatever came in their way.³⁰

The Soviets in Afghanistan were actually using weapons that were standard with their ground forces and these also included T-72 tanks and 152mm self-propelled howitzers but the weapons receiving the most attention were armed helicopters and, of course, chemical agents.³¹ The helicopters were usually used in pairs. In carrying out air strikes, the Mi-24 gunships were often used in conjunction with Su-25 fighter bombers or MiG fighters. When a guerrilla band was located, gunships and fighter bombers would be summoned in to bomb and strafe the target until the suspected guerrilla group was believed to be eliminated. Consequently, the number of sorties steadily increased. Even by mid-1981, three sorties per day was the normal average.³² As the sortie average increased, failure due to mechanical and pilot fatigue also rose and at times accounted for nearly 80 to 85 per cent of recorded incidents/accidents.³³ The Su-25 was a new aircraft that was being used outside the USSR only in Afghanistan. The Su-25 was a single-seat close support combat aircraft equipped with 500-kg bombs and rockets and a heavy calibre Gatling-type machine-gun. It could fly for long periods, dive steeply, and turn in mountainous valley areas. Having mentioned the use of chemical agents by the Soviets, the first public report came from the US government on March 22, 1982, where it was charged that reports had been received of 47 separate chemical attacks with a claimed death toll of more than 3,000 and the reports were indicative of both fixed-wing aircraft and helicopters being employed to disseminate chemical warfare agents by rockets, bombs and sprays.³⁴

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30. Giradet, n. 25, pp. 32-33.

31. J. Bruce Amstutz, *Afghanistan: The First Five Years of Soviet Occupation* (Washington D.C.: National Defense University, 1986), p. 170.

32. Ibid., p. 171.

33. Ibid., p. 172.

34. Ibid., p. 173.

The difficult question arises when the use of air power is weighed against political implications. The temptation to use air bombardment to soften up the target before the ground attack is very great.

AIR POWER IN SRI LANKA

J. A. Khan states in his book *Air Power and Challenges to the IAF* that during the Indian Peace-Keeping Force (IPKF) operations in Sri Lanka, in many instances, the Army was not satisfied with the cooperation requested from the Indian Air Force (IAF).³⁵ He also states that there is an obvious anomaly at the decision-making level and it must be rectified in the interest of military operations required for national defence and security. Whether the decision-making is awry at the military or political level will stand immaterial when the country's defence and security is at stake, and, interestingly enough, we will observe some additional dilemmas when looking at the internal security status and its handling with air power when discussing later about tackling the Naxalism menace in India with an 'air' response. The difficult question arises when the use of air power is weighed against political implications. The temptation to use air bombardment to soften up the target before the ground attack is very great. Unless clearly mandated by a political statement, use of air power is a clear instance of the prevailing of the military over civilian judgements.³⁶ Till the recent onslaught on the Liberation Tigers of Tamil Eelam (LTTE) with an aim to annihilate and eradicate them, the use of air power even by the Sri Lankan Air Force was limited.³⁷ There was an instance where the President of Sri Lanka sent Foreign Minister Lakshman Kadirgamar as a special envoy with a request to bomb Elephant Pass and other forward operational bases of the LTTE should Jaffna be on the verge of falling to the LTTE.³⁸ There was never a question then of Canberra bombers being alerted or Mirage fighters standing by at their base for such offensive operational missions which could have had huge collateral consequences. It was only

35. J. A. Khan, *Air Power and Challenges to IAF* (New Delhi: APH Publishing, 2004), p. 195.

36. Adrian Wijemanne, *War and Peace in Post-Colonial Ceylon 1948-1991* (New Delhi: Orient Longman, 1996), pp. 49-50.

37. "International Dimension of the Sri Lankan Conflict: Threat and Response", Issue 27 of Marga monograph series on ethnic reconciliation (Ethul Kotte: Marga Institute, 2001), p. 15.

38. Saroj Pathak, *War or Peace in Sri Lanka* (Mumbai: Popular Prakashan, 2004), pp. 195-196.

humanitarian assistance that could be rendered as it was once again felt that the application of destructive air power would make the difference but, at the same time, would create a situation that could be irremediable, as civilian casualties would surmount beyond reason and explanation.

It is not that coercive air power was entirely out of fashion when it came to selective application. The Sri Lankan Air Force employed strike aircraft to target the LTTE and with a certain amount of precision which contributed to stalling the guerrillas to a considerable extent. After the Sri Lankan Army Chief Sarath Fonseka was targeted, the Sri Lankan Air Force conducted a series of air attacks on LTTE bases. This commenced with effect from April 24, 2006, and one such strike, on July 27, 2006, in the Verugall river region in Trincomalee and Keppapulavu in Mullaitivu district, in retaliation of the LTTE closing the sluice gates of Mavil Auru Dam which supplies water to land held by farmers, was particularly effective during a phase when the battle for control of waters had become crucial.³⁹ Though India did try to persuade Sri Lanka against unilateral application of air strikes, the Sri Lankan Air Force continued with air strikes till almost the last phase of their operation in wiping out the LTTE bastions. Adverse public implications aside, the Sri Lankan armed forces were certainly gaining ground through effective use of air and firepower along with the resolution of the armed forces that had become battle hardened over a period of time.⁴⁰ The concern on the Indian side was palpable from the very beginning of the IPKF operations. Then Prime Minister Rajiv Gandhi, in a statement in the Parliament on November 9, 1987, had said, "IPKF was given strict instructions not to use tactics or weapons which would result in casualties among the civilian population in Jaffna".⁴¹ Coercive air power will, in most cases, have consequential damage

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39. Brig Rahul K. Bhonsle, *South Asia Security Trends* (New Delhi: Atlantic Publishers and Distributors, 2007), p. 111.

40. *Ibid.*, p. 100.

41. P. A. Ghosh, *Ethnic Conflict in Sri Lanka and Role of Indian Peacekeeping Force* (New Delhi: APH Publications, 1999), p. 123.

which can be difficult to handle, and almost close to moralistic impossibility when the ethnicity and origin of groups being targeted is an issue.

All may not have been said about the aspects of application and understanding of air support when actual operations got going. On October 11, 1987, the IPKF began their advance towards Jaffna across landmines and booby traps. 91 Infantry Brigade, 72 Infantry Brigade and 18 Infantry Brigade made initial quick progress in their operations to seize Jaffna University campus and the LTTE tactical headquarters, but soon were slogging their way because any area that was vacated in the rear was by the LTTE cadres and soon the IPKF would have to clear the block. One of the main reasons cited for the tardy progress was the lack of offensive air support.⁴² What the Air Force was asked to provide was air support with photo- reconnaissance which they did with their Jaguars and MiG-25s.⁴³ Debit this to faulty planning or improper understanding of the application of air support, but it certainly provided thought for not committing similar mistakes when the LTTE 'command centre' at the Jaffna University campus was being attempted. Insertion of a heliborne force was attempted which went awry from the beginning when the force was split because of navigation error, with the Mi-8s coming under heavy fire and damage, having no retaliatory power with them; also, no gunships were permitted as escorts.⁴⁴ The failure of such a combat air support operation was inevitable among other things which led to the cessation of such heliborne operations. Air power applications akin to surgery cannot be done piecemeal, with fragmented insertions.

Combined tactical operations at the company and battalion level involving the Army, Navy and Air Force were undertaken at an appreciable level. These operations were mainly conducted for searches, raids and domination of selected/designated areas, including induction and extraction of troops. Armed helicopters supported landing and disengagement of troops on several occasions. Even distant places could be dominated in this fashion. It was, however, difficult to achieve total surprise in spite of tactical and

42. Ibid., p. 124.

43. Ibid., p. 125.

44. Maj Shankar Bhaduri, Maj Gen Afsir Karim, AVSM, Lt Gen Mathew Thomas, PVSM, AVSM, VSM, *The Sri Lankan Crisis* (New Delhi: Lancer, 1990), pp. 75-76.

circuitous routes followed by the aircraft despite being conducted in the hours of darkness. The entire coastline was covered with fishing colonies infested with LTTE informers. Thus, the LTTE were invariably successful in receiving timely warning and could hide themselves as well their weapons by merging with the fishermen and the boats. Nevertheless, it was noted that a successful and integrated unified command structure was evolved, at least at the ground level and, very

often, helicopters were used for surveillance over vehicle convoys, train movements and to provide fire support when necessary. There was an existential problem of communication between helicopter crews and ground forces on several occasions but in spite of this persistent problem, it resulted in the LTTE having to vacate important areas in the hinterland, and moving deep into the jungles.⁴⁵

One area where the IPKF found itself tactically weak was the large number of small teams drawn out at company and battalion level⁴⁶ which could be integrated for fighting the guerrilla type of warfare. Air support was visibly the most essential component in such war-fighting as the units and sub-units were required to cover large areas in conformity with an overall design and plan which in itself required flexibility in grouping and regrouping and also involved setting up of additional bases or shifting bases in a very short time. For this, the air element was vital to keep the guerrillas on the run and isolate them.

During the last year of the operations against the LTTE, the Sri Lankan armed forces did not refrain from any kind of assault, including air attacks. For example, on April 30, 2008, the capture of an LTTE base called the 'LTTE 18-Base' in Northern Sri Lanka which also claimed an LTTE leader, was assisted by Sri Lankan Air Force fighter jets which were launched to assist the ground troops, while Mi-24 helicopter gunships raided LTTE locations

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45. Ghosh, n. 41, p. 115.

46. Ibid., p. 116.

in the Mannar front.⁴⁷ Nitin Gokhale reveals in his book *Sri Lanka, From War to Peace* that the Mi-17s given by India to Sri Lanka made a huge difference in subsequent operations when it came to conducting some daring missions either for deep penetration of troops or extraction operations. The air effort provided the ground troops a greater degree of confidence while operating behind enemy lines and was the key factor in the Special Forces delivering spectacular results, as revealed by Sri Lankan Army officers.⁴⁸

AIR POWER IN 'AF-PAK.'

The war in Afghanistan commenced in October 2001. After it was reported by the *National Commission on Terrorist Attacks upon the United States (The 9/11 Commission)* on July 22, 2004, that the attacks were conceived and implemented by members of Al Qaeda with their direct links with the Taliban, the US achieved a broader Coalition, including a first wave of air assets to which Australia contributed air-to-air refuelling tankers, Orion electronic gathering aircraft, F/A-18 fighter aircraft, New Zealand pitched in with two C-130 Hercules, Netherlands sent ground attack fighters and Apache gunships, Portugal provided 37 air traffic controllers, and Poland a transport C-130,⁴⁹ besides what the US had to induct as part of the effort. In fact, in the post-Cold War period, the US military which had designed itself to fight two wars simultaneously in either the Middle East or Europe, or Asia, had by the year 2000, determined by these objectives, acquired a more effective range of fighting capabilities which made them more mobile with the provisioning of more helicopters and heavy lift military air transports to shorten transportation time from bases to operative areas. Consequently, new air force technologies were also developed, including sophistication of the drones.⁵⁰

47. "Sri Lanka: 70 LTTE Rebels Killed in Army Offensive", posted on May 01, 2008 at <http://ibnlive.in.com/news/sri-lanka-70-ltte-rebels-killed-in-army-offensive/64313-2.html>

48. "India Behind Lanka's Victory over LTTE: Book", posted on August 23, 2009, at <http://timesofindia.indiatimes.com/india/India-behind-Lankas-victory-over-LTTE-Book/articleshow/4924585.cms>. Incidentally, the Chinese gifted four F7 GS fighter planes with interception radars and heat-seeking missiles.

49. Robert Catley, David Mosler, *The American Challenge: The World Resists US Liberalism* (Hampshire: Ashgate Publishing, 2007), pp. 111-112.

50. *Ibid.*, pp. 166-167.

Even before 9/11, the US had undertaken overt actions using air power. The first was in August 1998, and the second in September 2001. The first consisted of two cruise missile strikes – one against a pharmaceutical plant in Khartoum and the other against training camps in Afghanistan. This was in response to the bombing of US Embassies in Kenya and Tanzania.⁵¹ The second attempt came after the 9\11 attacks when the US demand that Afghanistan hand over Osama bin Laden was backed by the movement of heavy bombers within striking distance of Afghanistan – but neither the coercive methods nor the intention of further application yielded any direct and concrete outcome.

Over the last three years, drone strikes have killed about 14 terrorist leaders but, according to Pakistani sources, have also killed some 700 civilians.

Air power application aims at ultimate victory. This would translate into a political-military victory which occupies an intermediate position between victory at a tactical level, which has a shorter term and more focussed effects in battle, and victory at the grand strategic level, which has wider and more significant implications for the state and the international system.⁵² Therefore, a broader explanation would encompass the use of such overwhelming force which would signal the resolve of policy-makers to warn the adversary of the impending political purpose. But the value of this concept is its ability to emphasise that the relation between the scale of destruction and the implications of victory is clearly understood by the adversary; otherwise, the concept involves political risks, which the US faces in the dilemma of whether to continue, and for how long, in Afghanistan.

While violent extremist action as seen in sub-conventional means of conflict may be unpopular, for a frightened population, it may not seem more ominous than a faceless instrument that from afar often kills more innocents than militants. Press reports suggest that over the last three years, drone strikes have killed about 14 terrorist leaders but, according

51. Robert J. Art and Patrick M. Conin, "Coercive Diplomacy" in Chester A. Crocker, Fen Osler Hampson, Pamela R. Aall, eds., *Leashing the Dogs of War: Conflict Management in a Divided World* (Washington D.C.: United States Institute of Peace, 2007), pp. 308-309.

52. William C. Martel, *Victory in War: Foundation in Modern Military Policy* (New York: Cambridge University Press, 2007), p. 97.

to Pakistani sources, have also killed some 700 civilians.⁵³ (This translates into 50 innocents for every extremist eliminated and a strike rate of approximately 2 per cent – hardly a precision). After the assassination of Benazir Bhutto in December 2007, and an internal debate, President George W. Bush had authorised a broad expansion of drone strikes against a wide array of targets. The appeal of drone attacks is two-fold. One, they are measurable and, two, they minimise own casualties. But on balance, the benefits seem to be outweighed. Public outrage at the strikes is hardly limited to the region in which they take place. Covered extensively by the news media, they offend the people's deepest sensibilities, alienating them from the government and, therefore, contribute to instability. Dead non-combatants represent an alienated family which can be targeted to provide more recruits in the name of the movement—there has been evidence of the growing numbers of extremists in spite of regular elimination.

The use of drones displays every characteristic of a tactic or more accurately, a piece of technology, substituting for a strategy. These attacks have to be executed with a concerted information effort directed towards a real understanding of the dynamics which may make such attacks more effective. Such drone strikes, even while attempting to separate the extremists amidst the civilian population, in the attempt to break their power to intimidate, cannot achieve this objective. Imagine, for example, that burglars move into a neighbourhood. If the police were to start blowing up people's houses from the air, would this convince homeowners to rise up against the burglars? Isn't it more likely to turn the whole population against the police? And even if the people wanted to turn the burglars in, how exactly would they do that? Yet, this may be the same basic logic underlying the drone war. The drone strategy is similar to the French aerial bombardment in rural Algeria in the 1950s, and to the "air control" methods employed by the British in the tribal areas in the 1920s.⁵⁴ The historical

53. David Kilcullen and Andrew McDonald, "Death from Above, Outrage Down Below", published on May 16, 2009, in *New York Times*, available at <http://www.nytimes.com/2009/05/17/opinion/17exum.html>

54. David E. Omissi, *Air Power and Colonial Control: The Royal Air Force, 1919-1939* (New York: Manchester University Press, 1990), pp211-222. The idea being put forth is the intrusive nature of air power that is not accepted over a period of time.

resonance of the effort encourages people to see the drone attacks as a continuation of power and control policies.

This is not to suggest that the use of air power as part of a larger design is a strategic error but to emphasise the futility of the insistence to kill, without evaluating the wasted resources behind thousands of hours of intelligence, surveillance and reconnaissance devoted to the elimination of one man, when the same resources and air effort could have achieved apprehension of the guilty, or at least efforts on that count, protection of the people, and winning over of their hearts and minds. Surgery is one thing and complete recovery after the process without collapsing the patient during the operation and after is another.

The reliance on air power has been heavy and beginning August 2009, the Pakistan Air Force has been bombing targets in South Waziristan, while the Pakistan Army has said it has sealed off many Taliban supply and escape routes.⁵⁵ According to local residents in the region, close to the battle zone, it appears that the army appeared to be mostly relying on air strikes and artillery against militants occupying the high ground. It has also been mentioned that the insurgents were firing heavy machine-guns at helicopter gunships, forcing the air force to use higher-flying jets,⁵⁶ meeting almost the same consequences and dilemmas that the Soviets faced in the 1980s. The outcome that will finally emerge from the offensive use of air power against the militants is still awaited, but the recent onslaught is reported to have resulted in the displacement of as many as 150,000 civilians, possibly more, with as many as 350,000 whose future is unknown. The United Nations has been stockpiling relief supplies in a town near the region while hoping that a

Reliance on air power has been heavy and beginning August 2009, the Pakistan Air Force has been bombing targets in South Waziristan, while the Pakistan Army has said it has sealed off many Taliban supply and escape routes.

55. Mir Ali, "Pakistan: 60 Militants Killed in Operation Against Taliban", posted on October 18, 2009, at <http://www.foxnews.com/story/0,2933,568380,00.html>

56. The Pakistan Army is up against about 10,000 local militants and about 1,500 foreign fighters, most of them from Central Asia. They control roughly 1,275 square miles of territory, or about half of South Waziristan, in areas loyal to former militant chief Baitullah Mehsud, who was killed in a US missile strike in August 2009.

The coercive use of air power to counter sub-conventional combat and its repercussions do not foretell a reduced use of this medium in such applications.

major refugee crisis like the one that occurred during the offensive in the Swat Valley, does not occur.

FUTURE TRENDS

The coercive use of air power to counter sub-conventional combat and its repercussions do not foretell a reduced use of this medium in such applications. The air force will continue to operate under limitations but with the induction of more advanced technology, the problems of collateral damage and repercussions in the form of outcry from the general public and human rights organisations can be alleviated to a large extent. To this end, the following has been witnessed:

- Induction of high resolution infrared sensors.
- Identification of high value targets by army ground observers and also air force spotters.
- High grade imagery with sophisticated surveillance devices which are ground as well as air-based. Assistance is also being provided through satellite-based tracking.

The above has provided a rare window into this other air war though it is not that only passive measures had been the trend in recent times. Since May 2009, F-16 multi-role fighter jets of the Pakistan Air Force have flown more than 300 combat missions against militants in the Swat Valley and more than 100 missions in South Waziristan, attacking the mountain hideouts, training centres and ammunition dumps of the militants.⁵⁷ The changes being made are with the sole aim of reducing civilian casualties in terms of life and property but they are also dictated by the necessity of military operations in areas where there is a reluctance to commit ground troops, particularly in rugged terrain. It is also analysed that air strikes alone cannot ultimately substitute for ground forces or for better application in sub-conventional means of fighting, though they comprise a valuable tool

57. Eric Schmitt, "Pakistan Injects Precision into Air War on Taliban", posted on July 29, 2009, at <http://www.nytimes.com/2009/07/30/world/asia/30pstan.html>

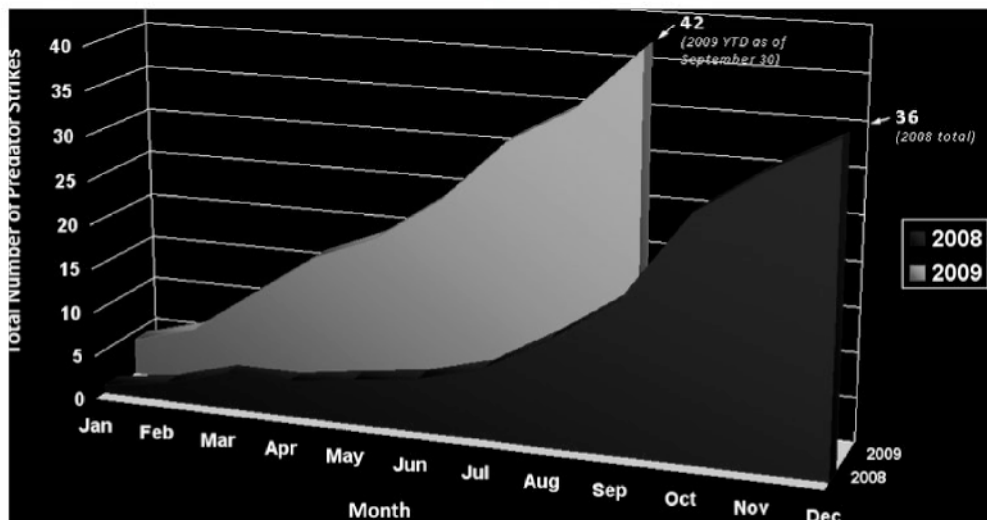
for fighting in inaccessible terrain. The scepticism that remains is that no damage assessment or information on the air strikes is available which can provide a qualitative comparison of what was intended and what has been achieved, or the actual effect.

Another aspect to be considered is that air strikes are only one component of solving the problem at hand. To develop truly sustainable continuity and depth in operations for extended periods, the key would rest in application of concepts and technology tailored to the specific environment. For example, in the arena of UAVs, rather than monitoring the cutting edge of advanced UAV systems and trying to manage cost economics concepts and technology, it might be better to seek simple, low-cost, and easily maintained systems that could fit easily into less advanced command-and-control processes. Opportunities might be found in rotary- and fixed-wing lift platforms; sensor payloads; strike platforms; command, control, and communications systems.

Operational air advisory teams of the armed forces can roll out military capabilities in support of the overall political strategy. Effective institutional infrastructure required for sustaining effective air power, ranging from recruiting and retention, through education and training, through logistics and resource management, to acquisition and procurement of material can be provided for initial advisory missions for the state paramilitary forces. A wing level structure could provide an umbrella for an embedded advisory capability. This is with emphasis on the fact that air activity to counter such kind of sub-conventional war has shown evidence of increase, contrary to a wane, though not particularly in India due to reasons not being discussed here. Fig 1 below indicates the number of predator strikes in the Afghanistan-Pakistan border region in 2008-09 (September).

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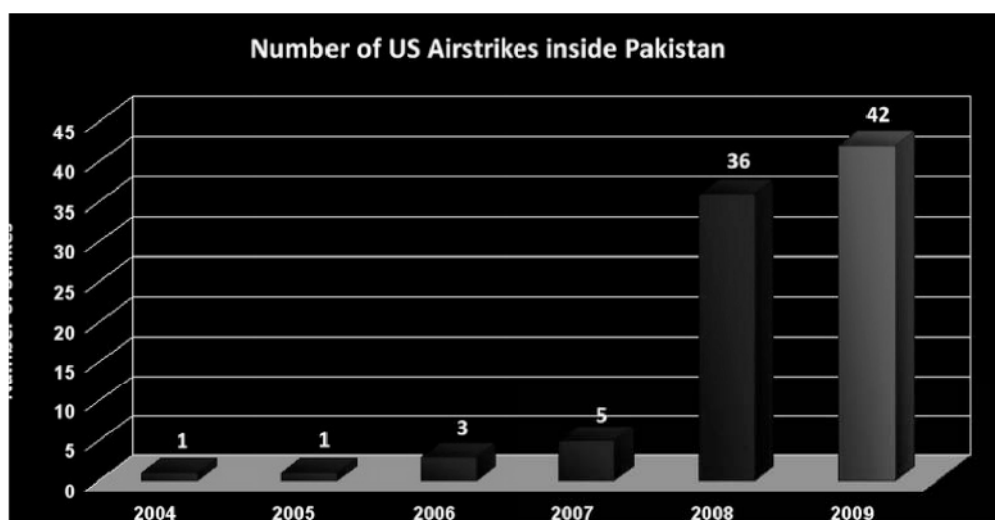
Fig 1



Source: <http://www.longwarjournal.org/multimedia/US-strikes-Pakistan-Sept2009>

Fig 2 also indicates the number of air strikes, that have shown an increase in the present onslaught in the Afghanistan-Pakistan border.

Fig 2



Source: <http://www.longwarjournal.org/multimedia/US-strikes-Pakistan-Sept2009>

The above gives evidence of the trend of increasing use of air power over the years to strike militants with either manned or unmanned aircraft. However, the lost lessons of air power have also echoed with the 'big-war' paradigm of the air doctrine, the foundation of which was laid during the formation of air power theory. The development of air power theory did change the strategic landscape of the 21st century but the limited practicality of full scale application in sub-conventional war is still evolving. The passive measures and defensive strands have been evident to various proponents of air power intervention. The realisation seems to be dawning that sub-conventional conflict, still seemingly insignificant to some, has different dimensions that can be applied selectively to avoid militants getting undue advantage through the media and public opinion.

INDIAN PERSPECTIVE

India has been battling with the sub-conventional form of warfare for decades and more intensely since the eruption of the uprisings in the northeastern states as well as J&K from the latter half of the 1980s. This kind of warfare has been extended into the hinterland, permeating into the country through its coastline as well as porous borders. How is air power useful or effective in such scenarios when the evident results are commonly evaluated on the kinetic and visible effects of such application? The Indian government had contemplated the use of air power against the Maoists but the rules of engagement in such situations had to be stringent by all measures.⁵⁸ It was clearly marked out that there would be no excessive force, no collateral damage, and only on positive identification and assurance of the above could any retaliatory but defensive action be taken. There have been some interesting responses, with a marked public one that stated that a decision to strike with air power against Naxals, who are armed, and have been killing paramilitary personnel and civilians alike for the past so many

58. "Chidambaram Favours IAF Firing on Naxals", posted on October 07, 2009, at <http://www.indianexpress.com/news/chidambaram-favours-iaf-firing-on-naxals/526200/>. This was after the Maoists had stepped up intense activities and also covered the background of an Indian Air Force helicopter being fired upon and, hence, the requirement of defensive action, including survivability of own forces.

To some, the justification of using armed UAVs in the future as part of precision in warfare and effects-based operations has appealed considerably.

years, can be called for. Does one not approve of Pakistan's action in using air power to eliminate the Taliban? It may be debatable, but the fact is that in our country, while it is our very own people, they also have been killing their very own people.

The connotations are different even with the background that coercive force, in this case air power, can be used to defend against any threat which aims at disintegrating India from within

or outside. First, any threat is to be exterminated from the roots and mere surgical extraction in bits will not solve that part of the menace which is firmly embedded. The airwaves have been humming with commentators who believe that Naxalism is an expression of the deep resentment of the marginalised tribals and the poor, and that development, not force, is the solution, which has also been adequately substantiated,⁵⁹ and this major deep-rooted part cannot be eliminated by air power.

To some, the justification of using armed UAVs in the future as part of precision in warfare and effects-based operations has appealed considerably. What counters this in good measure is the non-compliance of international humanitarian law which prohibits arbitrary execution, and this increasingly is being perceived as carrying out indiscriminate killings.⁶⁰ The onus here comes on the government to reveal and explain about the ways in which arbitrary and extra-judicial executions are carried out without the legal basis of selecting targeted individuals. With this, two other distinctive shortcomings area drawn up: first, it further desensitises the soldier and he becomes immune to the humanitarian aspect of dealing with humans even though they may be termed as enemies; and, second, the calibrated use of force may not be possible as it simply destroys or shoots to kill, as compared to injuring and taking into custody.

59. "We are looking into the causes of the alienation and development deficiencies...." of the Naxal groups "How they Fight" *India Today*, October 26, 2009, p. 25.

60. "United Nations Investigator Questions the Legality of US Use of Drone Strikes", *International Herald Tribune*, October 29, 2009, p. 4.

This is not to say that air power has no role to perform. A substantial portion of air power rests in its non-kinetic effects and application. Most states in India have not been able to impart any in-service training to their personnel in 20-25 years,⁶¹ and so lies the fact behind their level of competency. It is also important to note that the third dimension is required to gain over outnumbering influence and leverage a multi-pronged strategy to tackle the guerrillas. Therefore, along with equipment, training becomes the essential factor before any strategy can be relied upon to deliver the ushered outcome. The air power component of the Indian armed forces is the only constituent organisation that can be relied upon to provide the necessary training to the state and central police personnel. To this effect, the entry of the state's Special Forces to fight the Naxals has marked the Cabinet Committee on Security's decision not to use helicopters in combat operations but only for relief and rescue.⁶²

An offensive strategy against Naxal hideouts by making use of satellite data can always be made available by the Indian Space Research Organisation (ISRO). This, if given a practical shape, will involve the use of our weather microwave imaging satellite RISAT-II to pinpoint the support bases and movement of Naxal groups in the depths of the forests. This satellite is equipped with an X-band Synthetic Aperture Radar (SAR) and was launched in April 2009. It is capable of providing high quality images even under the cover of darkness, cloud and haze. ISRO describes RISAT as a satellite meant for monitoring floods, landslides, cyclones and agriculture-related activities. However, military analysts point out that this satellite, realised by ISRO in association with Israel Aerospace Industries (IAI), can help heighten our vigil against terrorist activities and troop movements. Designed for a lifespan of two years, RISAT-II is in a position to revisit an area in about 4-5 days. This revisiting capability is critical to intelligence gathering and surveillance and, therefore, may have to be assisted by UAVs. Moreover, the highly agile RISAT-II can be manoeuvred to change its viewing angles as

61. Mahendra Lal Kumawat, "Winning the Silent War", *India Today*, October 26, 2009, p. 26.

62. Vishal Thapar, "IAF Not to Take Part in Anti-Naxal Combat Operation" published on October 08, 2009, at <http://ibnlive.in.com/news/iaf-not-to-take-part-in-antinaxal-combat-operation/102920-3.html>

For air power, combating the enduring insurgent characteristics calls for a fundamental review of the traditional balance of emphasis given to kinetic and non-kinetic air activities.

per the requirements of the users. From a strategic perspective, it implies that the satellite is ideal for monitoring human movement with a high degree of precision. RISAT-II, therefore, could prove really beneficial in zeroing in on Naxalite hideouts in the depths of the forests, and carrying out operations with minimum collateral damage. Incidentally, the Special Task Force (STF) set up to capture the notorious forest brigand Veerappan, from his forest hideout, had made use of the data from the Indian Remote Sensing (IRS) earth observation satellite of ISRO.⁶³ It is argued that satellites cannot always track down individuals;⁶⁴ however, jungle bases, tracks and other tell-tale signs can be deciphered and confirmed from other intelligence sources. Total dependence on one platform may not be the solution but having seen the geographical extent of our geographical vulnerable borders and permeable coastline, it may be justifiable; besides, force augmentation would require the deployment of UAVs.⁶⁵

For air power, combating the enduring insurgent characteristics calls for a fundamental review of the traditional balance of emphasis given to kinetic and non-kinetic air activities (i.e. the mindset of striking targets outweighs information gathering). Although it is a simplistic error to typify conventional warfare means as being the primary domain for kinetic capabilities, the situation in our country is sufficiently distinct and demands a transfer of emphasis from the primacy given to kinetic capabilities. In particular, in the imperative to win and maintain the consent of both the indigenous population and the international audience, the additional use of force without sufficient constraints has

63. Radhakrishna Rao, "Aerial Support for Countering Naxals," Paper No. 2981 at <http://www.ipcs.org/article.database.php?article>

64. "Satellites Can't Track Down..." published at <http://timesofindia.indiatimes.com/news/city/bangalore/Satellites-cant-track-down-Veerappan/articleshow/20697516.cms>

65. The Coast Guard at present has 44 Air Units, including 24 coastal surveillance aircraft, 16 Chetak helicopters and four Advanced Light Helicopters (ALH). Rajat Pandit, "Year After 26/11, Coasts Still not Secure", *The Times of India*, October 29, 2009, New Delhi, p. 10.

reached high levels of scrutiny. However, this does not remove the need for lethal force in situations, and is replete with incidents like air strikes to extricate the almost battalion strength of surrounded soldiers from Naga insurgents way back in the 1960s. The battle-winning impact of Close Air Support (CAS) to isolated or outnumbered ground forces cannot be denied in the face of humiliation and failure to defend the survivability of own forces. However, the increased priority that non-kinetic capabilities should attract is disguised by the factor of the insurgents' imprudent attempt in 'force-on-force' engagements where restraint becomes the key for state forces, as such operations by the insurgents are designed to provoke in most of the cases. It is also pertinent to note that India's problem of tackling sub-conventional tactics will keep enlarging in proportions which may not be matched with mere state force level increase in personnel. Presently, approximately 70,000⁶⁶ paramilitary personnel have already been deployed to begin operations in Naxalite affected states and, simultaneously, two influential separatists groups in Assam have also decided to step up their activities to stage terror attacks, taking the cue from the Taliban sponsored suicide attacks.⁶⁷ The country may not be able to cope with the nature of the problem and geographical expanse through only an increase in personnel without the induction of air and space technology across the front. It is not a question of tackling 10,000-15,000 militants; it involves countering their activity across 20 states and over 223 districts, and it is noted that the casualties now exceed those in J&K.⁶⁸

India's problem of tackling sub-conventional tactics will keep enlarging in proportions which may not be matched with mere state force level increase in personnel.

The changing nature of conflict highlights the establishment of 'find, fix and strike'. While air and space power makes the amorphous environment quite transparent, it also assists in finding as well as fixing the insurgents;

66. "Carrot and Stick", *The Times of India*, October 29, 2009, New Delhi, p. 18.

67. "Ulfa, Bodos to Carry out Suicide Attacks", *Asian Age*, October 29, 2009, p. 1.

68. Amarnath K. Menon, "Tackling the Red Terror", *India Today*, October 26, 2009, pp. 19-20.

the striking part can be handled in the appropriate measure by the state forces. The traditional military imperative to know what is happening or likely to happen behind a 'hill' will persist, grow, and manifest every change or step in a sub-conventional war tackling strategy. There may be certain reposturing of air power capabilities and application but unprecedented results can be forthcoming wherever air power is applied as it holds relevant solutions to addressing rising operational challenges in the sub-conventional kind of warfare.

CONCLUSION

To ensure a grounded and balanced understanding of tackling sub-conventional means of warfare with air power, there will be a need to take steps to expand opportunities for formal understanding and education on the social, psychological, cultural, political, security, and economic aspects. It is particularly important to study the impact of any air action and be able to distinguish characteristics that are idiosyncratic to a particular kind of conflict which happens to be sub-conventional in the present consideration. The Air Force does not have the force structure and personnel to support a strategy as outlined in the problem-solving matrix of the country. The cadre of specialists available with the armed forces of the country is the fulcrum on which the Services' broader capabilities are pivoted to support the police and paramilitary forces. In absolute terms and when compared with the present challenge facing the nation, air power can and should move quickly to remedy this situation. In particular, expansion of aviation advisory capacity and aspects of non-kinetic application for conflict mitigation should have the capacity and ability to shape the understanding of exploiting opportunities provided by applying air power in a way irrelevant or invisible to mainstream thinking.