THE USE OF AIR POWER IN SRI LANKA: OPERATION PAWAN AND BEYOND

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The ethnic conflict between the Liberation of Tamil Tigers for Eelam (LTTE) and the Sri Lankan government is one of the longest ethnic conflicts of modern times. The conflict owes its origin to both a perceived and actual neglect of the aspirations of the Tamil minority residing in Northern and Northeastern Sri Lanka comprising the Jaffna Peninsula, Killinochi (NW of Mullaittivu), Mannar, Vavuniya and Trincomalee (refer Map below).



MAP 1: MAP OF SRI LANKA

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^{1.} Taken from Encarta 2006.

Sri Lanka's stability has always been vital to India's strategic depth around its oceanic southern flank.

The initial secular thrust of the Sri Lankan government in the 1950s and 1960s gave way to a more sectarian approach to nationbuilding in the 1970s, with an emphasis on the dominance of the Sinhala community, Sinhalese language and Buddhism as a

religion. The conflict, which started off in the late 1970s as a civilised and legitimate protest by an ethnic minority (Tamils) against an established state, flared up into a military conflict in 1983 when the LTTE officially declared their goal for the Eelam (independence). The two main protagonists in the conflict were the LTTE and the Sri Lankan state. Increasing violence and belligerence of the Prabhakaran led LTTE resulted in the declaration of an emergency in Sri Lanka in 1985 and scope for misunderstanding between New Delhi and Colombo. Inevitably, India gradually got drawn into the conflict due to two main reasons. Firstly, the proximity of Northern Sri Lanka comprising the Jaffna peninsula and Mannar to the South Indian state of Tamil Nadu precipitated a continuous influx of both refugees and militants into Tamil Nadu, creating a security problem for India. Secondly, Sri Lanka's stability has always been vital to India's strategic depth around its oceanic southern flank. Any instability in Sri Lanka without a suitable response from India could have invited attention from other global players like Pakistan, China and the USA—something that India wanted to avoid at all costs. A friendly or even neutral Sri Lanka was what India was looking for. Therefore, India had to lay down a threshold for itself, after which it was bound to step in to assist in conflict mitigation and, if the need arose, in conflict termination too. The mid-1980s saw an extremely aggressive LTTE take on the Sri Lankan defence forces with some success leading to extreme instability in the region, and the possibility of Sri Lanka asking Pakistan, China or the US for help in stemming the expanding insurgency. This was when India stepped in and offered to broker a sustained peace agreement and pave the way for a peaceful solution to the ethnic crises. The Indo-Sri Lanka Accord of July 29, 1987, was the result of this strategic gamble by India. Based on the initial mandate, the thrust of the agreement focused on the following aspects from an Indian point of view:

- Prevention of any forces detrimental to India's strategic interests from acquiring bases and gaining a foothold in Sri Lanka.
- Neutralising the centrifugal forces that were activated in Tamil Nadu in the wake of the ethnic conflict.
- Separating the belligerents viz the Sri Lankan armed forces and the LTTE to pre-1987 positions.
- Implementing and enforcing a ceasefire within 24 hours of signing the accord. This warranted a surrender of weapons by the LTTE within 72 hours.

The initial euphoria with which the Indian Peace-keeping Force (IPKF) was received in Sri Lanka wore out very soon because of the reluctance of the LTTE

to lay down arms and the hesitant approach of the Sri Lankan forces to comply with the terms of the agreement in both letter and spirit. This resulted in the alteration of the military objectives of the IPKF from peace-keeping to peace-enforcement, which inevitably saw an escalation of hostilities between the LTTE and IPKF, something that the IPKF was not really prepared for. With the 'proxy war'² in Jammu and Kashmir (J&K) not yet having gained momentum, the experience of the Indian armed forces in dealing with irregular or unconventional warfare was restricted to the ongoing counter-insurgency operations in the

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northeast against relatively small and disorganised militant groups and operations against militant groups in Punjab that culminated in Operation Blue Star in 1984. 1987 was actually the first time that the Indian Army (IA) and Indian Air Force (IAF) came up against a well armed, well trained and tactically proficient guerrilla force, the LTTE.

^{2.} This is a term used by India to describe the Pakistani assisted insurgency in J&K and acts of terrorism perpetrated in various parts of India by *jehadi* groups with roots in Pakistan.

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AIR POWER IN ACTION

The baptism by fire of the IAF in a fullfledged counter-insurgency makes it important to analyse how it coped with this "unconventional scenario." It is also important to analyse how the use of air

power in Sri Lanka has increased over the last 20 years and assess its relevance and effect on an unconventional conflict. In furtherance of this aim, the article would deal with three distinct phases of the utilisation of air power in Sri Lanka.

- The first phase would be the employment of air power in Operation Pawan by the IAF from July 1987 to March 1990.
- A brief mention would be made of the period between March 1990 and beginning of 2006 which saw the emergence of the LTTE's air wing and the growing capability of the Sri Lanka Air Force (SLAF).
- The current phase of bitter fighting would form the chronological culmination of the study of the air war between the LTTE and SLAF. This portion would also be the most contemporary in terms of similarities with a number of ongoing conflicts.

Certain doctrinal issues would emerge that highlight the growing effectiveness of air power in breaking the will and resistance of non-state actors who challenge the authority and legitimacy of the state. The most controversial issue that restricts the use of air power in low intensity conflict operations (LICO) and counter-insurgency operations (COIN) viz., its potential for escalation would also be discussed briefly and a question will be asked using the Sri Lankan template - can escalation caused by the utilisation of offensive air power in an unconventional scenario ultimately lead to deescalation and conflict termination? Air power in the hands of non-state actors does not really serve the purpose of limiting the scope of an "unconventional war." It only strengthens the hands of the state and allows it to unleash its entire range of offensive military capability that includes air power. That is exactly what has happened in Sri Lanka. It is opined that the increasing use of air power will result in decisive conflict termination, with the SLAF continuing to target the LTTE leader Prabhakaran, keeping him on the run and preventing him from exercising the kind of unfettered command and control that has been possible over the last 25 years.

EARLY YEARS

Before dissecting the use of air power during Operation Pawan, it is important to throw some light on the state of the SLAF during the early Eighties. The SLAF was poorly equipped to fight a counter-insurgency and needed some Israeli help in a modernisation campaign that saw the induction of some light fixed wing aircraft like the Italian SF.260 and Bell 212 helicopters.³ These aircraft were used in fire-support missions, foremost amongst which was an attack on an LTTE ammunition dump in Jaffna in 1986. This was followed by attacks against LTTE bases in China Bay and an integrated assault on Jaffna town with commandos supported by helicopters. It can be said that by 1986, a restructured and reorganised SLAF, with its modest firepower, contributed in no small measure to an imminent Sri Lankan

victory against the LTTE. This was when India decided to step in, correctly assessing that it was only a matter of time before another external player would intervene to assist the Sri Lankan armed forces in defeating the LTTE and undermining its influence in the region.

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OP PAWAN-IPKF OPERATIONS

For almost three years from June 4, 1987, when

Operation Poomalai (humanitarian air drop over Jaffna)⁴ was executed, to March 24, 1990, when the IPKF withdrew from Sri Lanka, the IAF played a significant role in continuous support of the country's largest expeditionary operation in its history. It was also the first integrated experience in fighting a guerrilla force that was trained to fight along both conventional and unconventional lines from within an unconventional environment viz., jungle terrain and the built up urban environment of Jaffna. Following an accord between the Indian and Sri Lankan

^{3.} Tom Cooper, with Sam Wickramsinghe, "India Subcontinent Data Base, Sri Lanka Since 1971," October 29, 2003 from www.ACIG.org, accessed on December 12, 2007.

^{4.} Operation Poomalai-The Jaffna Food Drop, www.Bharat Rakshak.com, accessed December 27, 2000.

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governments, IPKF operations were undertaken against the LTTE in Sri Lanka from 1987 to 1990. The accord was originally designed for peace-keeping, with the expectation that the LTTE would lay down arms and the Sri Lankan forces would observe the ceasefire. However, the

operations quickly took on the shape of peace-enforcement and then war due to political infighting and instability over various issues. In the ensuing conflict, the original objectives were redefined—the IPKF aimed for forcible disarmament of the militants and the LTTE aimed for an all out war against the IPKF in which the IPKF was faced with guerrilla tactics and suicide attacks in an unfriendly environment, with inhospitable terrain, belligerent locals and apathetic Sri Lankan defence forces. In the course of the war, limited success against the LTTE was obtained at considerable loss to the Indian Army, which later led to the withdrawal of the IPKF in 1990.

Because the IPKF mission was originally a peace-keeping mission, the initial task for the air force was only strategic and tactical airlift.⁵ These were achieved in the initial phase without any opposition due to the nature of the accord. However, once fighting broke out, airborne operations and casualty evacuation (casevae) became the prime roles. The first air action took place on June 4, 1987, when five An-32 transport aircraft, escorted by four Mirage 2000 fighters, air-dropped some 24 tonnes of relief supplies over selected zones in the Jaffna peninsula that was cut off in the bitter fighting between advancing Sri Lankan security forces and the LTTE. The operation was conducted as a humanitarian gesture in response to an SOS from the common citizens of Jaffna and growing international concern. Thereafter, within hours of the signing of the accord on July 29, 1997, some 24 An 12 and An-32 tactical medium lift transport aircraft flew into Palaly airfield near Jaffna town in the north of the island. These, with the bulk of two Indian Army battalions, constituted the initial "peace-keeping force."

Operation Pawan was launched in first week of October 1987 to disarm the

^{5.} S.S. Deshpande, "Employment of Offensive Air Power Against Insurgencies," Trishul, Autumn 2004, pp.19-27.

LTTE forcefully. However, the rules of engagement for the IPKF were extremely stringent with severe restrictions placed on the use of artillery, heavy weaponry and offensive air support. This was done to ensure minimum civilian casualties and damage to property. Seeing the belligerence of the LTTE, the rules of engagement were relaxed and helicopter gunships were pressed into action with Cheetah helicopters as scouts. When peace-keeping changed to full-fledged combat, the initial offensive by a single Indian brigade followed five different axes leading into Jaffna town. A bold attempt was made to capture the LTTE leadership by inducting para-commandos into the Jaffna University area by Mi-8 helicopters on the night of

October 11/12, 1987, but this costly operation was aborted, with heavy casualties and damage to helicopters.⁶ The prime operational base for the overstretched IPKF was Palaly airfield, where dozens of Mi-8 and Chetak helicopters, and An 32 and HS 748 transport aircraft were based, all of which had to be protected against LTTE raiders. Additional troops and equipment from various cantonments in India as well as from Trincomalee and Batticaloa in Sri Lanka

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were flown in using IL-76, An-12, An-32, HS 748, and civil Boeing 737 aircraft. Additional Mi-8 helicopter units arrived from air bases in India, supplemented by Cheetah helicopters for reconnaissance and casevac. The most formidable additions were the Mi-25 helicopter gunships. It is estimated that during the 20 days from October 11 to 31, 1987 some 2,200 tactical transport and 800 assault helicopter sorties were flown to fly in troops, weapons, vehicles, stores and various other equipment, and fly out the mounting casualties to military hospitals. During the second half of October 1987, the IAF flew more transport and helicopter sorties in support of the ground forces than at any similar period of time in the history of the country's armed forces. Mi-25 gunships were employed to interdict the movement of militants from the Jaffna peninsula to the neighbouring islands and mainland of Sri

^{6. &}quot;Descent Into Danger-The Jaffna University Helidrop," www.bharatrakshak. com/IAF/History/ 1987IPKF/Chapter3.html

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Lanka, as the LTTE attempted to bring in reinforcements of personnel and logistics and, later on, to exfiltrate its cadres from Jaffna. Additionally, Mi-25s were used in the lagoon areas to destroy militant boats and vehicles.7

The first use of Mi-25s for close air support was on October 29, 1987, when Mi-25s attacked LTTE entrenchments 32 km east of Jaffna with rocket and cannon fire. This action enabled army battalions to overwhelm the last resistance and affect a link-up. In another action, Mi-8 helicopters flew para commandos in to areas on the western part of the peninsula and on to islands to engage LTTE strongholds. Mi-25s patrolling the key roads destroyed a number of LTTE vehicles. It is evident that in the entire IPKF campaign, the army was suitably supported by the air force in all possible roles by the transport aircraft and helicopters. Though the air environment was conducive for all air transport operations involving para drops, air landed operations, special heliborne operations (SHBO) and casevac, they were nonetheless fraught with danger from enemy fire below 2,000 feet altitude. In the later part of conflict, suitable reconnaissance sorties were flown with available intelligence inputs to gather more information on the enemy hideouts before carrying out any of these operations. The Cheetah helicopters were used in the scout role to direct the gunships accurately onto the known hideouts. Interdiction of supply and communication lines was effectively carried out in this manner. The roles of SHBO and casevac were supported by gunships to minimise the ground threat. Search and strike operations on opportunity targets were carried out frequently in different sectors of the conflict. The army cordons were tightened with patrolling sorties by the gunships, thus, forcing the enemy to operate only by night. During the 32 months of operations some 70,000 sorties8 were flown out with no loss to enemy action or accident, a matter of great professional satisfaction for the IAF. Also taking an active part in the operation were the

^{7.} Ibid.

^{8.} Pushpindar Singh, "Indian Peacekeepers in Sri Lanka," World Air Power Journal, www.bharatrakshak.com/IAF?History/1987IPKF/Pushpindar01.html

Indian Army's Chetak and Cheetah light utility helicopters and the Indian Navy's Chetak helicopters and Alize turbo-prop fighters.

KEY LESSONS FROM OPERATION PAWAN

The advantages of air power were exploited during the IPKF operations in conditions of total air superiority. However, the concept of operations was different from classical conventional operations. There was no requirement of counter-air operations and the role of fighters was minimal throughout. At the same time, transport and helicopter operations were operating under severe limitations common to small wars, with fleeting enemy in

hostile surroundings.

Challenges involved difficult terrain, unfriendly locals and urban areas, with restrictive rules of engagement that prohibited

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attacks that might hurt civilians or damage buildings. The mobile and fleeting nature of targets meant ineffective fire unless area targets like enemy camps or headquarters (HQ) were discovered. Meanwhile, there were significant limitations in the ability to gather intelligence, conduct night reconnaissance and conduct night attack, in terms of tactics and equipment. Political constraints early in the conflict greatly restricted effective use of air power. The rules of engagement also prevented any forcible disarmament in the initial stages of the accord. The policy was of nil collateral damage and no damage to civil property. The irony was that the enemy was deeply entrenched in the local population and their dwellings. Thick jungles and equally thick urban centres were the prime locations of the enemy. This complicated navigation, reconnaissance, target identification and acquisition. Lack of force landing fields was major concern for the helicopter operations. Helicopters were compelled to fly low for target acquisition, thus, inviting small arms fire. Consequently, reconnaissance mission altitudes had to be increased, which in turn led to decreased mission effectiveness.

Accurate intelligence has always been the key to successful airborne assault, special heliborne operations and targeting against fleeting targets. The IPKF operations were marred by lack of intelligence on the enemy disposition, due to the

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huge local support enjoyed by the LTTE. The mistrust between the IPKF and the Sri Lankan forces added to that effect. Even though the LTTE did not have equipment capable of intercepting air-to-air and air-toground communication, they always managed army's to intercept the communications, thus, always being

informed in advance. This led to many SHBO and gunship missions falling short of achieving their aim. All reconnaissance sorties were visual and no photo recce by day or night recce with IRLS equipment was carried out despite having the capability. Moving on to aircraft and equipment, helicopters were ill-equipped in navigation and targeting aids. There was no armour protection for the Mi-8 and Cheetah helicopters, nor were they equipped for night operations. Target acquisition was by visual means, undermining the rate of success. There was no provision or thought given to fitment of searchlights on helicopters, which completely prohibited any night search and patrolling. Finally, there were no precision weapons or any standoff capability with the helicopters. A study of the environment and the limitations of air power under which the operations were conducted in Sri Lanka bring out several lessons.

Joint planning at all levels of war is imperative. The use of fighter aircraft for photo reconnaissance missions at regular intervals could have resulted in a major show of force in addition to increased intelligence inputs. Inadequate intelligence led to the under-estimation of opposition at Jaffna University and turned out to be the main reason for the failure of the operation despite the heroics of the para commandos, 30 Sikh LI and pilots of the 4 Mi-8 helicopters from 125 HU. However, in today's environment, the advent of unmanned aerial vehicles (UAVs), satellite reconnaissance, precision weapons and guidance systems, advanced munitions such as fuel air explosives (FAEs), night attack capabilities and so on would definitely add lethal punch to such small wars in the future. A major requirement is that of continuous surveillance over the area of operations. In such conflicts, a dedicated UAV could cover the required area in repeated cycles giving an updated

picture. Night reconnaissance and targeting capability would have restricted the LTTE's freedom of movement around the clock, thus, completely paralysing them. Known hideouts in thick jungles could have been effectively destroyed with FAEs. Inaccessible targets could have been attacked with precision weapons on confirmed intelligence. Notwithstanding the advantages that modern technology could have provided during IPKF operations, the ever present limitations of political will would have remained a major factor in air power employment. Further, the kind of terrain, targets and the environment prevalent during the IPKF operations illustrate the challenges of small wars. No amount of modernity would suffice to target an enemy that is deeply entrenched within a sympathetic civilian population. The rules of engagement will always seek to limit damage to civilians and property, which are the inherent by-products of use of air power in such an environment.

THE NINETIES AND BEYOND

The departure of the IPKF from Sri Lanka saw an emboldened LTTE spreading its influence southwards into Vavuniya and Trincomalee regions. In January 1991, the LTTE launched a simultaneous attack against all SLA bases in Northern Sri Lanka and captured Elephant Pass, cutting off Palay from the rest of Sri Lanka. The SLAF with its outdated inventory of MiG-17s, MiG-15s, FT-7s from China and SF-260s Bell-212/206 and Kamov-26 helicopters could hardly influence the course of the land battle against the

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LTTE. Operation Thunderbolt launched by the SLAF in January 1991 failed to cause any significant impact on the LTTE. In 1993, the depleted SLAF acquired four Pucara counter-insurgency aircraft from Argentina along with Mi-17s from Ukraine. This marked the beginning of an attempt by Sir Lanka to strengthen its air force and play a more active role in the war against the LTTE. The spring of 1995 saw the introduction of SA-7 MANPADS (man portable air defence systems) into

^{9.} Tom Cooper, "Sri Lanka Since 1971, Rearming the SLAF," p.6, www.acig.org, October 29, 2003.

the conflict with the LTTE downing two Avro HS-748 aircraft on the same day at Palay airfield. It is believed that these missiles were supplied to the LTTE by a Pakistani terrorist organisation run by the Inter-Services Intelligence (ISI) called Harkat-ul-Ansar. This escalation forced the Sri Lankan government to take emergency measures and acquire Mi-24 attack helicopters from Ukraine. They also acquired their first lot of IAI Kfir-C2 fighters from Israel. Fierce fighting during 1995 saw the Sri Lankan armed forces making little headway despite large brigade size attacks in the Killinochi, Vavuniya and Mullaittavu sectors, supported by artillery and attack helicopters. Pucaras and SI-260s launched hundreds of rockets in close air support (CAS) missions to save SLA troops from being overrun by the LTTE. After fierce fighting through the autumn, the SLA launched Op Riviresa to capture Jaffna and established a safe corridor south of Jaffna. By December 1995, Mi-24s were introduced into the fight and the LTTE struck back by downing a Y-8 transport aircraft and an AN-32 with 63 troops on board. Despite having lost two Avros earlier in the year, the SLAF were not able to sanitise their airfields or equip their aircraft with appropriate countermeasures like infrared (IR) flares. As a result, 4 transport aircraft with crew and 132 soldiers were lost with no comparable attrition caused to the LTTE.

The rest of the Nineties saw the SLAF being blooded into an operationally effective force with induction of more Mi-24s and Kfir jets. Typical missions flown during the period 1996-2000 included strikes against LTTE bases and supply nodes. Close air support training improved significantly with pilots and technicians being sent overseas for training. Local production of bombs and rockets also commenced. The induction of Super Scout reconnaissance drones in 1998 provided a significant improvement in recce capabilities that could be used for targeting. From 1997-2000, fierce fighting for control of Jaffna saw the SLAF support the army's drive up north with Mi-24s and Kfir jets. These were supplemented by newly acquired MiG-27s from Ukraine and other aircraft, and by the summer of 2001 the SLAF order of battle (ORBAT) comprised the following squadrons(Table 1).10 Most of the air bases are indicated on Map below.

^{10.} Cooper, Ibid., p.11.

Table 1

| Unit | Location | Aircraft |
|------------------------------|-----------------------|--------------------------|
| 1 Flying Training Wing | Anuradhapura AB | PT-6/CJ-6 Cessna, SF.206 |
| 2 Heavy Transport Squadron | Ratmalana AB | An-32, C-130, HS-748, |
| | | Cessna 421 |
| 4 VIP Helicopter Squadron | Katunayake AB | Bell 206 &214 |
| 5 Jet Squadron | Katunayake AB | F-7 BS, FT-7, Mig-27/23 |
| 6 Helicopter Squadron | Vavuniya | Mi-17/Mi-17 I |
| 7 Helicopter Squadron | Minneriya AB | Bell 206/212 |
| 8 Light Transport Squadron | Ratmalana AB | Beech 200, Y-12 |
| 9 Attack Helicopter Squadron | Minneriya/Hingarukoda | Mi-24/35 |
| 10 Fighter Squadron | Katunayake AB | Kfir-TC.2, Kfir C.7 |
| 11 UAV Flight | Vavuniya AB | Scout UAVs |
| 14 Squadron | Katunayake AB | K-8 |

MAP 2: SRI LANKA AIR BASES¹¹



^{11.} Tom Cooper, www.acig.org/artman/publish/article_336.shtml

ESCALATION OF THE AIR WAR

After a hastily brokered peace agreement/ceasefire in 2000 broke down, the SLA and SLAF were in action again, this time with better equipment and tactics. Night vision devices were said to have been used effectively by both attack helicopters and fighter aircraft to attack LTTE buses carrying leadership at night. This marked a critical point in the air war, with targeting of LTTE leadership based on actionable intelligence. Though the offensive against Jaffna ended in failure, MiG-27s continued to strafe LTTE positions with some success. response to a punitive strike by MiG-27s and Kfir jets against a reported LTTE build up in Wanni and concerned about the growing effectiveness of the SLAF and their depleting air defence capability, the LTTE showed tremendous tactical

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brilliance by deciding to try and neutralise the SLAF on the ground. In pursuance of this strategy, on July 24, 2001,12 they launched a daring commando raid on Katunayake airfield near Colombo. Despite having over 90 sentry points and 500 men guarding it, LTTE commandos managed to breach all layers of defence and inflict significant damage to aircraft of various types. Though all the members of the LTTE squad were killed, they managed to destroy

three Kfir C-2 fighters, two K-8 jet trainers, one MiG-27M, one Mi-24V, two Mi-17s and one Bell-412. Additionally, they also destroyed two Sri Lanka Airline commercial jets and damaged several other Airbus aircraft belonging to the national carrier. The sheer magnitude of the strike surprised Colombo and forced them to negotiate a ceasefire in November 2002 that was brokered by the Norwegians. Notwithstanding the ceasefire, the fragile peace started showed signs of cracking in December 2005, with both sides having built up significant military capability during the three years of the ceasefire. Increasing international pressure on the LTTE after it was declared a terrorist organisation,

^{12.} Cooper, Ibid., p.14.

made it difficult for the LTTE to upgrade its inventory of weapons as it was able to do during the Eighties and Nineties. The only value addition that manifested itself was the unleashing of the Tamil Eelam Air Force (TAF) with a few slow moving Zlin-143 light aircraft of Czech origin and the creation of a few airstrips for operations. On the other hand, the Sri Lankan armed forces embarked on a modernisation spree that saw them better prepared to take on the LTTE this time around. The acquisition of Searcher class of UAVs to complement the existing Scout UAVs meant that the Sri Lankan armed forces could hope for better real-time intelligence that could aid targeting from the air. Eelam War-4, as the present undeclared war is called by the LTTE, is proving to be extremely critical as it could see the LTTE pushed to the brink of defeat by the resurgent Sri Lankan armed forces, backed by effective utilisation of air power that is targeting the LTTE's centres of gravity.

AIR WAR—EELAM-4

The Eelam-4 war assumes significance for a number of reasons. Firstly, Karuna's breakaway LTTE group¹³ in the east revealed the first signs of fissure in the LTTE and provided the Sri Lankan security forces with a distant window of opportunity to exploit, especially from an intelligence point of view. It also exposed chinks in the LTTE leadership and, for the first time, Prabhakaran appeared vulnerable, particularly after the death of Anton Balasingham, the suave political face of the LTTE. Secondly, the Sri Lankan security forces have changed their targeting model with respect to the LTTE. They have realised that Prabhakaran and the top LTTE leadership present the most valuable targets. This is where air power has been used extremely effectively over the last two years by the SLAF with tangible pay-offs. As a corollary to the previous point, the SLAF has also been targeting critical military capabilities of the LTTE that relate to its ability to wage a prolonged war. Interdiction of Sea Tiger camps and the LTTE's naval capability points to a concerted attempt to choke the LTTE by interdicting supply routes. SLAF aircraft have even engaged LTTE boats within an hour of

^{13.} Karuna was one of Prabhakaran's key military aides and controlled LTTE cadres in the Eastern province. He is supposed to have fallen out with Prabhakaran on the manner in which the struggle for Eelam was being orchestrated.

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being alerted. The third interesting feature of Eelam War-4 is the psychological impact of the use of air power by a non-state actor. The daring Tamil Eelam Air Force (TAF) strikes by the LTTE's air arm against Katunayake air base on the outskirts of Colombo on March 26, 2007,

and the combined strike by commandos and aircraft of the TAF against Anuradhapura air base indicate the growing importance given by both sides to the use of air power in an unconventional conflict.14 The other interested doctrinal issue that has emerged from Eelam War-4 is the issue of the contribution of air power in conflict escalation and its immediate potential for rapid deescalation and conflict resolution, if used judiciously.

AIR POWER WITH NON-STATE ACTORS

Till very recently, air power assets with non-state actors mainly comprised a variety of ground-based air defence weapons like anti-aircraft guns and MANPADS of the Stinger and SAM-7 class. In recent years, the LTTE has made remarkable progress in its attempts to put together an air wing of its own. Apart from training aircrew in Europe, it acquired a few light aircraft with limited armament carrying capability, supposedly of Czech origin, and built a few airstrips in Northern Sri Lanka in the area northwest of Mullaittivu. More than any long-term impact, the TAF was meant to be used as a psychological weapon against Colombo. In what was supposed to have been a coordinated commando/air strike on Katunayake air base on the night of March 26, 2007, two unidentified TAF aircraft bombed a brightly lit hangar facility of the SLAF, inflicting significant but unconfirmed damage to equipment and aircraft. Surprise was the key to the attack and why the LTTE commando raid did not materialise is not known. It is also believed that locally manufactured and fused 250 kg bombs were fitted on crude bomb racks and dropped with the help of the global positioning system (GPS) for reasonable accuracy. In a second coordinated strike on October 22, 2007, a suicide commando group of the Black

^{14.} B. Raman, "LTTE's Anuradhapura Raid," Indian Defence Review, October-December 2007, p.107.

Tigers, in conjunction with two aircraft of the TAF carried out a precision attack on the Anuradhapura air base, destroying a large number of aircraft that are said to have included three helicopters (Mi-24/17), two fixed wing aircraft, three drones/UAVs and an expensive Beechcraft surveillance plane. The raid was executed with daring, unbelievable courage¹⁵ and precision, sending shocks through the world community at the appearance of such tactics of desperation amongst non-state actors. The attack was planned well with the commandoes neutralising a radar and an anti-aircraft position before calling in the air strike. The series of air attacks by the TAF galvanised the SLAF into action and what followed was a series of strikes by Mi-24s, Kfir fighter jets and MiG-27s against the Sea Tigers, LTTE camps, the LTTE airstrip complex at Irramadu, and most importantly, the LTTE leadership, more of which would be discussed in the following section.

TARGETING LTTE LEADERSHIP

The persistent efforts at targeting the Al-Qaeda leadership by the coalition forces led by the US over the last six years led the SLAF to explore possibilities of doing the same with the LTTE leadership. While the Al-Qaeda leadership is highly mobile and has safe havens in multiple countries, the LTTE leadership is now confined to the Jaffna peninsula and Northern Sri Lanka. Additionally, Prabhakaran is known to prefer bunker-based refuges and is said to move around with a fairly large entourage, making him relatively vulnerable to air strikes, something that the SLAF has taken advantage of. The air strike by SLAF jets at Thiruvairu, a suburb of Killinochi on November 2, 2007, saw the elimination of the LTTE political commissar, S.P. Thamilselvan. ¹⁶ Considering that Killinochi is considered the capital of the LTTE's controlled Northern province of Wanni, the SLAF has exploited the coercive and deterrent capability of air power without any ground action. This scenario was recreated on November 26 and 28, 2007, when the SLAF hit two "high value" targets in Jeyanthi Nagar in Killonchi. The targets comprised bunkers in which the LTTE

^{15.} Raman, Ibid., p.109.

^{16.} Ed Johnson, "Sri Lanka Plans More Air Strikes, November 5, 2007, Bloomberg.com

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supreme Velupillai Prabhakaran was said to have been injured by falling debris. The intensity of bombing even caused the LTTE to cordon off the area and close the approach road to Jeyanthi Nagar. The extent of injury to Prabhakaran is not as important as the fact that Prabhakaran is

now extremely vulnerable in his limited area of operation.¹⁷ More recently, on January 23, 2008, SLAF fighter jets bombed an important LTTE base called X-ray base that was supposedly located in a thick forested area in the vicinity of the make-shift LTTE runway at Iranamadu, also in Killinochi district.¹⁸ This area is also said to be frequented by Prabhakaran. The mission was reported to have been launched after the area had been kept under constant surveillance by multiple sensors and validated by real-time intelligence prior to the launch of the mission. Three important factors need to be highlighted in this air campaign by the SLAF. These are:

- Accurate and actionable human intelligence (HUMINT) is indispensable and critical for targeting elusive terrorists. The in-fighting within the LTTE, leadership, growing disillusionment amongst the local Tamil populace with Prabhakaran and his ruthless recruitment drive, and successful infiltration of Tamil strongholds by Sri Lanka's intelligence agencies are factors that have improved intelligence for targeting.
- Weapon effectiveness and delivery techniques by Kfirs and MiG-27s have improved significantly. There is even a possibility that the SLAF has acquired limited precision capability in the form of strap-on laser guidance kits coupled with appropriate airborne/ground-based laser designation capability by special forces who are trained to infiltrate into the vicinity of the target area, exfiltrate to pass on target information, and infiltrate into the target area to aid in real-time targeting. Indigenously developed/modified bunker buster bombs are likely to have been used by the SLAF in recent attacks.

^{17.} D.B.S Jeyaraj, "Examining a Post-Prabhakaran Scenario," The Hindu, December 25, 2007. 18. B. Murlidhar Reddy, "LTTE 'hub' in Kilinochi Bombs, *The Hindu*, January 24, 2008.

■ There is also a distinct synergy in operations among the three Services. A typical example is the fighter strike on a key Sea Tiger facility at Mullaittivu on September 29, 2007. This attack was preceded by a naval operation in which three LTTE boats were sunk off the Trincomalee coast while attempting to evacuate LTTE cadres who were trapped and encircled by the Sri Lankan Army. Relentless pressure is something that is being applied by all forms of combat power on a weakened enemy. Terrorising the terrorists seems to be one of the methodologies being adopted by the Sri Lankan armed forces to good effect. On January 6, 2008, the head of the LTTE's military intelligence "Col Charles" or Shanmuganathan Ravishankar was killed in a claymore attack on

his van by the Sri Lankan Army's deep penetration unit in Pallamadu in Mannar. Thus, in a span of two months, two key aides of Prabhakaran have been killed and Prabhakaran himself has been injured in surgical attacks by Sri Lankan security forces

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Political will to use air power extensively has resulted in significant gains for the Sri Lankan government. The bottom line is that the LTTE is now on the back foot despite its daring air raids; air power has played a critical role in this reversal.

KEY TAKE AWAYS

As the ethnic conflict in Sri Lanka reaches new levels of sophistication, the official abrogation of the four-year ceasefire by the Sri Lankan government in early January 2008, means that the stage is set for a final thrust by the Sri Lankan armed forces to try and defeat the LTTE. History tells us that most of the times when air power has been used intelligently in an "unconventional war" between a state and an "unconventional enemy," the conflict has escalated, only to deescalate equally quickly. Linebacker II in Vietnam after the Tet Offensive allowed the US to carry out a calibrated withdrawal from Vietnam. Air power

^{19. &}quot;Sri Lanka Air Force Bombs Sea Tiger Training Facility in North-East," September 29, 2007, Colombo Page Newsdesk, Sri Lanka.

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broke Milosevic's will in Kosovo, as did the use of air power hasten the defeat of well entrenched intruders in Kargil. However, the success achieved by the SLAF in targeting the LTTE leadership has been astounding to say the least. Integration of coordinated intelligence, extremely short sensor to shooter time cycles and accurate weapon delivery have seen the use of offensive air power in urban and jungle terrain reap rich dividends notwithstanding the collateral damage. Despite the

severe depletion of critical SLAF assets after the twin LTTE strikes on Katunayake and Anuradhapura airfields, the author opines that the LTTE is now fighting for survival and a few aircraft and sporadic attacks are not going to achieve Prabhakaran's goal for Eelam. The writing is on the wall because the LTTE leadership is boxed into small areas of Wanni, Mullaittivu and Jaffna, making them fairly easy targets for air strikes, especially with increased availability of accurate HUMINT and assistance from the Sri Lankan Army's deep penetration commando units. Some lessons to be drawn from the last six months of fighting in Sri Lanka are:

- Notwithstanding the daring attacks by the TAF on Katunayake and Anuradhapura, the overall impact of the offensive use of air power by a nonstate actor has been detrimental to its overall objective.
- It has, instead, acted as a catalyst for galvanising the Sri Lankan government and security forces into offering a befitting riposte.
- Considering the failure of the US to eliminate Osama bin Laden and Zawahiri, the success of the SLAF in targeting the LTTE leadership is likely to have a telling impact on the final outcome of the conflict. The importance of leadership as a critical centre of gravity of a non-state actor has been amply validated in Sri Lanka and needs to be taken cognisance of by India, especially in its fight to contain the spread of terror networks and Naxalism.

Whether the Indian government can ever take a call on using air power offensively against insurgent leadership within its own geographical boundaries is purely a function of domestic political compulsions and national will when it comes to combating terrorism and other forms of

The importance of leadership as a critical centre of gravity of a non-state actor has been amply validated in Sri Lanka

"unconventional and irregular warfare." It is also extremely critical for the Sri Lankan government not to get carried away by the effectiveness of air power, and use it only as an effective tool for conflict termination. The key to this maturity would lie in a realisation that the ethnic conflict can only be resolved through negotiations and not through indiscriminate use of military force. The current policy of "terrorising the terrorist" has to be accompanied by a concerted attempt at winning the hearts and minds of the Tamil minority.