

# The Indian Air Force in Wars

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This article is a review of the part played by the Indian Air Force (IAF) in, and the background to, conflicts across the sub-continent (mainly post-independence). It is written from an Indian viewpoint. The early history of the IAF started with its formation in 1932 and continued through to its contribution to the Second World War supporting Slim's 14th Army. On Indian independence the Air Force was restructured and supported land operations in the aftermath. Lack of an accurate intelligence picture preceding the Sino-Indian War 1962 led to significant logistics problems for the Indian Army and subsequently to a large proportion of IAF effort being directed to air transport at the cost of the deployment of combat air power. The War for Kashmir 1965 saw the use of Mystere and Vampire aircraft in anti-armour and – infantry sorties, with air superiority being sought by dominating the skies rather than attacking airfields. India and Pakistan again went to war in 1971 with India initially operating to limited objectives set prior to the opening of hostilities. The IAF flew more combat sorties compared to their opponents but both air forces lost similar numbers of aircraft. In 1999, in Kashmir, the IAF provided high-altitude helicopter and tactical airlift logistics and communication support, with Canberra, Mig and Mirage providing recce and close air support. The IAF is modernising with 40% of its combat force being 4th generation aircraft and has set its sights on becoming a strategic force.

## Introduction

The Indian Air Force was “mothered” by the RAF and many of the first commanding officers of the newly raised squadrons were British. The first three chiefs were British; and the linkages remain deep and professionally sound. The first war in which the then fledgling Indian Air Force (IAF) was to be employed was the Second World War in support of the Burma Army during its famous retreat from South East Asia in early 1942. While established on 8th October 1932, its first squadron, No. 1 AC Squadron (IAF), had reached its full strength only in 1939 by which time it was employed in “Watch and Ward” duties along with RAF squadrons in NWFP (North West Frontier Province, now in Pakistan). But, with the Japanese rapidly advancing in Southeast Asia, No. 1 Squadron equipped with Lysander aircraft was moved from Kohat (in NWFP) right across India to Tongou airfield on Burma’s eastern border with Thailand on 2nd February, 1942 in company with No-28 Squadron (RAF).

The Japanese promptly bombed the base the same day. Getting his aircraft locally modified during the night to carry two under-wing 250lb bombs each, the young squadron commander led the squadron to bomb the Japanese base of Mae-Haungsaun from where the Japanese had launched their strike the previous day and destroyed a hangar and damaged the flying control. This “counter-air” operation (with slow recce aircraft) marks the beginning of the operational history of IAF in wars, and the tussle within the service about its primary role. Two years from that date the squadron was back in Imphal under the command of Squadron Leader Arjan Singh (now Marshal of the IAF) and stayed there during the siege, providing offensive air support to the 14th Army which was defending India against Japanese invasion. In March 1945 the title of Royal was added to the Air Force. Lord Mountbatten, Supreme Commander South East Asia Command, flew into besieged Imphal to pin the DFC on Arjan Singh in person.<sup>1</sup>

In the final years of the war in the East, IAF had been built up to nine squadrons and at one time all of them were deployed in Burma alongside Slim’s XIVth Army. With victory in the East also came the demobilization of the Air Force soon to be followed by Indian independence and partition where the RIAF was reduced from nine squadrons to six plus a half squadron equipped with transport aircraft. The RIAF lost all its permanent stations to Pakistan along with all maintenance and equipment depots. Thus began the raising of IAF (the title of Royal being dropped when India became a Republic on 26<sup>th</sup> January, 1950) to 10-squadron force. This was being undertaken concurrently with the war launched by Pakistan into Jammu & Kashmir on 22<sup>nd</sup> October gaining rapid success which forced the Maharaja and political leaders of the State to seek accession to India.<sup>2</sup>

Based on the principles laid down in the Transfer of Power to India (and Pakistan), the accession of Jammu & Kashmir was approved by the Cabinet on 26<sup>th</sup> October and with the approval of Lord Mountbatten, the Governor General, the Indian Army was launched into Kashmir by air lift in IAF Dakotas followed by requisitioned transport aircraft from the civil

airlines to rapidly reinforce the troops. This was the first operation of IAF after independence conducted while it was still engaged in airlifting refugees from both sides of the border to safer places. Considering that there was no land route into Kashmir and the enemy forces were on the outskirts of Srinagar, without this rapid and "just in time" airlift by the IAF, the map of the subcontinent would well have been different. Through the war IAF transport aircraft continued to support the land operations, of special mention being the first ever flight to Leh by crossing the Himalayas higher than the Dakota's service ceiling, without oxygen and pressurization, to land troops on a strip cleared along the river bed. Dakotas landed troops and arms at Punch, a football-size ground hurriedly prepared. In fact two Dakotas carrying mountain guns even delivered them to the Punch garrison at night without any airfield lighting! The handful of Tempest kept up pressure from the air supporting the Indian Army at crucial stages and even dropped ammunition for the garrison at Skardu besieged by Pakistan Army in mid-1948. The war was almost won when the government decided to go to the UN for a peaceful settlement of the dispute; and this actually perpetuated the dispute!

### **Sino-Indian War 1962**

Relations between the PRC and India had begun to deteriorate after 1959 when on one side Chinese military had killed a dozen Indian policemen manning the border in the High Himalayas, and the Tibetan revolt which led to the Dalai Lama fleeing to India. As of now there are nearly 150,000 Tibetan refugees living in India most of them in the Himalayan regions alongside the Dalai Lama. Indian defence minister Krishna Menon, a brilliant man who strongly believed that China was not a threat and whose personalized style of functioning often cut through military command chains, had left the higher defence organization in disarray when the Chinese struck on 20<sup>th</sup> October, 1962.<sup>3</sup> The Indian Army had assumed responsibility for the borders only the previous year.

There were clear failures of assessment of intelligence about the Chinese capabilities and intentions beyond generalised conclusions based on simplistic extrapolations. What perhaps tilted the final balance in defence decision making at the top was that not only did Prime Minister Nehru did not expect the Chinese to launch a major offensive, but he seems to have a great belief that the Indian army was well prepared and could handle any situation. An objective study of Indian foreign and defence policy of that period by an Israeli scholar concluded that "Nehru was oblivious to the relative weakness of the Indian Army, to the inadequacies of its logistics, numbers, and training, and the impact of all these factors on its ability to carry out India's Forward Policy in the face of massive Chinese military reaction."<sup>4</sup> He seems to have not included the Air Force in the calculations one way or the other; and it is not clear if he consulted the air chief at any time. The Defence Minister who should have briefed him correctly perhaps did not. This was a different Nehru from that who directed the military strategy so effectively in the Defence Committee of the Cabinet during the 1947-48 war. Nehru's "faith that even if he was underestimating the Chinese threat, the Indian Army could successfully cope with any resulting scenario" only tended to work against looking at alternatives in case the Chinese did not act as they had in the past.<sup>5</sup>

The most critical factor adverse to Indian Army operations was of logistics requirements. There were really no roads beyond the few leading to a couple of hill stations built by the British. Building roads in the Himalayan Mountains would take time and the construction work had started only after 1959. The army was thus dependent on air supply only; and air supply had its own problems. "The paucity of road communications on the Indian side of the border was such that the deployment, maintenance and even the very survival of ground forces was dependent upon air supply. This was especially true of Ladakh, as right up to August 1962, Leh was still to be connected by a road."<sup>6</sup> Meanwhile the Chinese were pushing their claim line further into Indian territory. The nature of the challenge may be grasped by the fact that in June 1962 the Army required a total of 44,000 tons to be airlifted by the end of the year in Ladakh, while total capacity was less than half (21,600 tons) of this requirement. The situation in the eastern sector was worse.

The IAF put in a Herculean effort to supply the army by air in spite of shortages of aircraft and aerial delivery equipment. The classical example that stands out is the airlift of three AMX light tanks from Chandigarh to Chushul airfield in Ladakh which was under heavy attack by the Chinese army. The urgency of the task did not allow time for dismantling the tank's turret to bring the weight down to permissible levels. The An-12 aircrew decided to reduce the fuel to the barest minimum (which would not permit any diversion) and the tanks were manhandled into the aircraft and ferried to Chushul and immediately went into action. Chushul was saved.

On the other hand the hazards of aerial dropping aside, dropping zones were few and far between, and any minor error in air drop in the Himalayan regions (in west and east) would result in significant loss of dropped supplies. A handful of light transport squadrons and a few helicopters in service performed far beyond their capabilities. The worst handicap for the army was the deficit in force levels and reinforcements that did not possess winter clothing. The rapidly moved up troops, (to heights of 10,000 to 18,000 ft) were not acclimatized and hence were fighting under severe adverse physical limitations. Given the institutional as well cultural weaknesses to analyse and assess the enemy's capabilities and intentions beyond the "bean count" this created a serious deficiency in our ability to make an objective assessment so vital to military operational planning. This inherited weakness came from the infirmities that had developed over the previous decade at the higher inter-service levels and even above that at the higher defence management institutions.

The most adverse factor that contributed to the defeat of Indian Army in 1962 was the non-use of combat air power of the IAF. This was no doubt due to the dissipation of a coherent functioning of the higher defence organization due to the personalized way of functioning of Krishna Menon as the defence minister. Looking back, one can identify multiple reasons for this serious lapse which might have made the critical difference since the Chinese Air Force, though reported to possess over 2,600 combat aircraft, would have had serious problems of operating from airfields in Tibet (at an average altitude of 10,000 ft) and would have been handicapped in payload and fuel supplies. The information about airfields in Tibet was even

more sketchy and vague even on the number of airfields let alone the deployment of Chinese air force on them. The only reference available in the official history is to the use of the air force to bomb and strafe Tibetan forces in the early 1950's and to 102 air violations in the Ladakh sector 52 of which took place during a six month period in early 1962.

The most likely causes of not employing combat air power can be traced to multiple factors. Firstly, at the political level there were serious concerns about the Chinese likelihood of bombing Indian cities. It needs to be noted that most of the political leaders were conscious of the city bombing of the Second World War and the havoc it had created among people; and more so the Japanese fleet having bombed Indian cities (though only with a handful 250lb bombs) from Madras to Calcutta on India's east coast in early 1942 which had led to the British governor ordering the evacuation of Madras city. Secondly, Indian army leadership was deeply worried that the use of IAF combat squadrons for close air support in the high Himalayas would not be effective particularly since the army organization for close air support was non-existent at that time. Thirdly, the Army leadership was concerned that the Chinese air force may retaliate to IAF being employed in a combat role and could disrupt the air drop campaign which was considered more important. The IAF apparently had not thought through the potential of interdiction and did not recommend close air support, the only mission the army was interested in. Lastly, it appears that the US embassy also advised that combat air power should not be used on the grounds of its being "escalatory." We lost the war, especially near dramatically in the eastern sector where the Chinese finally declared a unilateral ceasefire and withdrew even from the territory they still claim.

### **The War for Kashmir 1965**

Pakistani leadership, especially its then foreign minister, ZA Bhutto, had been keen to take advantage of India's preoccupation with the Sino-Indian War, which resulted in an Indian defeat, to try to grab Kashmir. By any logic the timing looked right: Nehru was sick and died in May 1964 to be replaced by Lal Buhadar Shastri, known for his strong leaning toward non-violence. The nation was demoralised with the trauma of the defeat, the Indian military was in a state of near-disorganisation because of the major expansion and reorganisation having to be generated mostly from existing resources, and the expected military equipment from the US had not materialised. Such a situation would not present itself again and Kashmir could not be captured militarily once Indian military expansion had stabilised. Finding little support from the army leadership and President Ayub, Bhutto started in 1964 to prepare for an irregular war in Kashmir with a properly trained and organised militia given the name of Force Gibraltar. China's change of position on Kashmir in favour of Pakistan further encouraged Bhutto. However, in order to clear up two uncertainties, the war was planned in three phases in 1965. Apparently, Pakistani strategy was to test: one, whether India would cross the international border to launch a counter-attack or opt for arbitration (India opted for the latter), and, two, whether the US would take stern action against Pakistan for using its US-supplied weapons (meant for defence against Communist bloc offensive as part of CENTO, SEATO and bilateral defence agreements) against India since the US President had also assured India that the

conditions of the massive arms aid was that US weapons would not be used against India.

The first phase began in March 1965 with skirmishes in the area of the Rann of Kutch with contesting claims on small villages and border posts with Pakistan army attacks in divisional strength against a battalion level Indian force stretched across nearly 150-km border. The large tract of the Rann of Kutch located in India (east of India-Pakistan border toward its south) gets flooded around early-mid May every year thus limiting the size of land forces that India could deploy in response to the Pakistani attacks. After holding out, India accepted the British proposal for arbitration and a cease-fire came into being.

But meanwhile Pakistan, curiously under the control of Mr Bhutto and the foreign ministry, had started planning (after 1962) and continued to train and build up Force Gibraltar which was planned to be infiltrated into the Indian side of the cease-fire line in Jammu and Kashmir (J&K). By the beginning of August 1965 the infiltration of trained militia had started in batches of around 1,000 men each with the aim of carrying out sabotage, terrorism and inciting the local population to rise in a revolt against the government of the state. In reality there was no such revolt and in fact it was the people who started to capture these infiltrators and reporting their movements to the police. By mid-August a total of 8,000 jihadi infiltrators (out of the 30,000 trained) had crossed into the state. These guerrilla fighters were also being supplied by the Pakistan Air Force with its C-130 Hercules aircraft. According to the official history of the Pakistan Air Force, its C-in-C, Air Marshal Nur Khan, himself flew in at least one such mission dropping supplies at night in Bandipur area in the valley not far from Srinagar!<sup>7</sup> Unfortunately, the IAF had no fighters or radar stationed in J&K in accordance with the restrictions imposed by the UN resolutions.<sup>8</sup> The Indian Army quickly moved to block the infiltration routes on the cease-fire line by the third week of August and the Pakistani jihadis were progressively rounded up or killed. This triggered the third phase of the war - a surprise armour offensive code named 'Grand Slam'.

Based on an appreciation, Pakistan's GHQ (the Army Headquarters) had expressed its unhappiness with the plan for Operation Gibraltar. The Chief of the General Staff had put up the conclusion of the general staff to the C-in-C, General M Musa that India was bound to react strongly and that the Pakistan Army was not in a position to hold its advance. Musa agreed with this and put up the file to the president, Field Marshal M Ayub Khan who noted that he would not let the Gibraltar plan be implemented. The public euphoria after Rann of Kutch affair changed the thinking. Pakistan planned the war and invasion meticulously; PAF War Plan No. 6/65 was issued on 29<sup>th</sup> June, 1965, before Force Gibraltar was launched. The actual Pakistani offensive across the international border began in the early hours of 1<sup>st</sup> September with one Infantry Division, two regiments of Patton tanks and all the firepower of the Corps Artillery aiming to take Akhnur, 40-km away, where a crucial bridge over River Chenab was the central line of communication into Kashmir. The Indian Army, in the words of its commander, had a truncated infantry brigade in the area and the Pakistani advance reached Chhamb by the evening.

It is at this stage that the IAF was called in. The Air Force flew 26 sorties – 14 Mystere and 12 Vampire --- and played havoc among Pakistani armour and infantry at Chhamb “in the open in close formation and very vulnerable to air attack” according to Brigadier Amjad Ali Khan Chaudhry, Pakistani 4 Corps Commander Artillery.<sup>9</sup> PAF had two F-86 and one F-104 airborne over Chhamb. IAF lost three Vampires to F-86s and one to ground fire the pilot ejecting to safety. In the swift and fierce action, ten tanks, 2 ack-ack guns and 30-40 vehicles were destroyed. The loss of a quarter of its tank force had an enormous impact on morale and fighting capabilities. General Musa told Chaudhry that “there was no point of taking Akhnur.”<sup>10</sup> Musa acknowledged later that “Taking Akhnur had become a difficult proposition after India used its Air Force in the Chhamb-Jaurian sector.”<sup>11</sup> PAF doubled its air defence CAPs over the area. On 3<sup>rd</sup> September an IAF Gnat shot down an F-86 Sabre and the PAF went on the defensive even further.

With Pakistan mobilising for a larger response, the Government issued instructions to the Armed Forces that they could choose the time and place of any counter-attack required. On 3<sup>rd</sup> September the Indian government laid down the war aims as follows which clearly confirm the intention to exercise restraint achieving minimum goals:<sup>12</sup>

1. To defend against Pakistan’s attempts to grab Kashmir by force and to make it abundantly clear that Pakistan would never be allowed to wrest Kashmir from India;
2. To destroy the offensive power of Pakistan’s armed forces;
3. To occupy only the minimum Pakistani territory necessary to achieve these purposes and which would be vacated after the satisfactory conclusion of the war.

The Indian Army launched its two-pronged counter attack on 6<sup>th</sup> September, 1965 to relieve pressure in the Chhamb sector and to threaten the Lahore sector. The IAF planned to strike at the PAF only when it was attacked and was tasked to undertake offensive support to the army and carry out fighter sweeps in an area around 30-km deep into Pakistan. It was ordered by the government not to take any offensive action in the East. PAF attacked in what was expected to be its major air strike against three main IAF airfields in the West. It was very successful in catching the IAF on the ground at Pathankot and destroyed 11 combat aircraft. On the morning of the 7<sup>th</sup> September it managed to destroy another 9 aircraft in the airfields in the East. The IAF’s concept of air operations in the context of the war aims of the government was to gain and maintain air superiority; but the method was through dominating the skies rather than seeking to attack airfields. At the same time, air interdiction, yielded enormous dividends, due to trains carrying ammunition, stores and fuel were destroyed in air attacks. This resulted in Pakistan Army Patton tanks having a very limited number of rounds and led to 18 tanks being captured intact on 12<sup>th</sup> September alone.

Contrary to many accounts the IAF had only 25 combat squadrons in September 1965 (although a force level of 35 combat squadrons had been authorised in 1963). Of these, ten squadrons had remained in the East in case China started something. Hence the force ratio

in the West between Pakistan and India was 1.5:1 in India's favour which was compensated substantially by the technological superiority of US-supplied Pakistani arms, compared to the IAF still relying on aircraft like the Vampires acquired in 1949. The overall exchange ratio in air to air warfare losses between PAF and IAF during the war was nearly 3:1. The IAF had flown a total of 3,937 sorties in the Western sector and lost 59 aircraft both in the air *and on the ground* in both sectors thus resulting in an attrition rate of 1.4986 per hundred sorties. PAF, according to its official history had flown a total of 2,364 sorties.<sup>13</sup> It was estimated to have lost 43 aircraft resulting in an attrition rate of 1.8189 aircraft per hundred sorties. Looking at the losses in the air alone, the IAF attrition (with 24 aircraft lost in air to air combat and ground fire) comes to 0.6096% as compared to PAF attrition of 1.7766% (with 42 aircraft lost in air).

### **The War in 1971**

The India-Pakistan war in 1971 grew out of an obviously destructive and anti-Pakistan set of circumstances like the unwillingness to call the National Assembly after what was clearly the first fair and national elections which led to increasing political dissent in East Pakistan reeling under a series of grievances and gross discrimination over the previous quarter century and Pakistan army's military repression of East Pakistan while arresting the political leaders. One of the objective studies by a Pakistani Lt. General Kamal Matinuddin, who had earlier headed Pakistan's premier strategic studies think tank says it all in the title of the book he wrote: "Tragedy of Errors."<sup>14</sup> The longer the Martial Law Administrator General Yahya Khan (under the strong pressure of ZA Bhutto who held the majority position in West Pakistan) ignored the demands by Mujib ur Rehman (the undisputed leader of East Pakistan's Awami Party which held clear majority in the National Assembly after the 1970 elections) and the political leaders from East Pakistan to call the National Assembly and form an elected government, the greater was the rise of political dissent in East Pakistan against the leadership in West Pakistan.

It is in this milieu that Pakistan deployed the army to apply pressure and very soon the army action became extremely repressive particularly targeting the intellectual and students and professors at Dhaka University. This in turn blew up into a full-fledged insurgency which the Pakistani army tried to control with ever increasing and indiscriminate violence which many Western observers described as "genocide" during the ensuing weeks and months leading to reportedly 3 million civilians being killed. Over ten million Bengalis of diverse religions fled to India as refugees. The Commander of the army in East Pakistan even planned an invasion of India in April 1971 which was turned down by Yahya Khan.

It is in this context that Pakistan launched its pre-emptive air strike on 3<sup>rd</sup> December, 1971 and a regular full-scale war started on both east and west. As the situation in the east kept deteriorating, Pakistan mobilised its forces in the west. In October 1971, India laid down the following limited objectives for its possible military operations which it did, with some to spare:<sup>15</sup>

1. To assist the Mukti Bahini in liberating a part of Bangladesh, where the refugees could



- be sent to live under their own Bangladesh government.
2. To prevent Pakistan from capturing any Indian territory of consequence in Jammu and Kashmir, Punjab, Rajasthan or Gujarat. This was to be achieved by offensive defence and not merely passive line-holding.
  3. To defend the integrity of India from a Chinese attack in the north.

It is clear that the capture of Dhaka was not one of the aims of the war at its start. The IAF had deployed 15 (out of its 35) combat squadrons on the eastern sector, largely to allow for a possible intervention from China (as in 1965) though it never came.

In East Pakistan the IAF made short shrift of the solitary F-86 squadron within the first day or so. From then onward, with total air superiority, the IAF went in to provide massive close support to the army, used its helicopters to provide "heli-bridges" for the advancing troops across the innumerable water obstacles and rivers in East Pakistan. The original war plan was to undertake limited action and occupy some bridgeheads across the borders while supporting the Mukti Bahini (the Bengali militia fighting now for independence). This was to be used for pressing both sides to arrive at a political solution and move toward a democratically elected government. The unwillingness of West Pakistan and lack of interest by the international community left no option but to carry forward the military advance. At that stage a reduced Para drop by IAF C-119G Packet aircraft as undertaken in East Pakistan which by then had declared independence as sovereign state named Bangladesh.

Ultimately, based on signal intelligence picked up by an IAF unit about the likely meeting the following day in Dhaka in the Governor's residence a formation of four MiG-21FL undertook a strike when the meeting was in progress and achieved direct hits that disrupted the meeting. The Governor along with other members of the government quickly agreed to accept surrender ultimately leading to 94,000 POWs in Indian custody (at the request of the Pakistani army's Eastern Command to save them from the Mukti Bahini's likely reprisals which were likely to lead to massive killings).

On the western front Pakistan planned an all out war in order to improve its negotiating position. During the eight months between the army crack down in the east to the pre-emptive air strike on the evening of 3<sup>rd</sup> December in the West, Pakistan had worked out a bold and ambitious war plan. The Pakistan army was to launch a coordinated offensive by both the Army Reserve North and the Army Reserve South under one command to be held by Lt General Tikka Khan, reputed to be an outstanding commander. The two-pronged thrust was expected to cut through Indian defences south of the Sutlej River and achieve substantive forward movement in the first week. The PAF was fully involved in this plan and would undertake air strikes primarily on Indian forward airfields to try and cut down the air effort it could provide to its army. The official history states that:<sup>16</sup>

*"The overriding priority of the PAF was to give maximum support to General Tikka Khan's*

*proposed offensive into India; every other air force objective was to be subordinated to this requirement. The air chief considered this commitment to be pivotal because the success or failure of the PAF's support would in all likelihood determine the fate of Pakistan's crucial offensive. When the estimated 'cost' of fulfilling this commitment was calculated at his behest by the planning staff in July 1971, it worked out at a loss of 100-120 combat aircraft and pilots over the projected 7-10 day period. (Air chief) Rahim Khan was aware that this would amount to losing one-third of his force but he had the full support of his senior commanders when he directed them in August to prepare their units to pay this price for ensuring the success of the army's offensive." (Emphasis added)*

However in the opening stages when the Pakistan army was probing and trying to find the most suitable thrust lines, the IAF had started extensively destroying Pakistani armour and vehicles in the launch areas of the Tikka Offensive. Consequently the ambitious Tikka Offensive could not even start although he (Lt Gen Tikka Khan) flew down to the GHQ to persuade them to "let him go" without success. IAF had once again thwarted an intended armour offensive which if successful could have had serious implications for the region.

The war also saw a not-so-common phenomenon of a pure fighter aircraft versus tank battle. The PAF had kept asking for months to let them know if any offensive move was planned further south in the Rajasthan sector since it would take a week to prepare Jacobabad, the nearest airfield, for air operations. The army headquarters had kept informing PAF headquarters that no such plans had been made. But 18 Division deployed east of Jacobabad and west of the IAF base at Jaisalmer started an offensive into India at night and encircled a small post at Longewala in Indian territory manned by a company of 23 Punjab regiment. The gallant company kept up fire and noise to mislead the Pakistani tank regiments into believing that the area was heavily defended. By early morning Hunter aircraft from Jaisalmer began to destroy the two regiments of Pakistani tanks and finally only a few got away by retreating at night. Air power had once again proved its potency for air to surface dominance.

The Indian Air Force flew a total of 11,549 (combat and airlift) sorties during the war. It lost a total of 56 aircraft (including three aircraft on the ground due to enemy action) during the war due to combat factors (another 15 were lost due to flying accidents). This works out to an overall attrition rate of 0.48 per cent in respect of combat losses. A total of 6,604 combat sorties were undertaken by the IAF in both sectors, losing 56 aircraft. Taking combat losses into account, this corresponds to an attrition rate of 0.85 per cent during the 14-day war. Compared to this, the Pakistan Air Force carried out a total of 3,027 sorties on combat aircraft.<sup>18</sup> It lost a total of 55 aircraft (44 in the western sector and 11 in East Pakistan) to IAF action besides another 6 (in the western sector), claimed by the IAF to have been shot down, though not confirmed, which are not included in this total. This figure also does not include the 12 aircraft (9 F-86 and 3 RT-33) which were "de-commissioned" on the ground by the PAF itself when the airfields in Dhaka and other places became unusable due to incessant air attacks by the IAF.<sup>19</sup> With a loss of 55 aircraft due to direct IAF combat action, the Pakistan Air Force

attrition rate comes to 3.2 per cent (compared to 0.85% of IAF) during the war.

The Pakistan Air Force, unlike its 1965 aggressiveness, carried out only 9.58 per cent of its total sorties against Indian airfields and radar units during day and night, compared to the 11.21 per cent of its total sorties on similar missions. In practical terms, it did not penetrate Indian air space beyond about 30-50 km. For example, Pathankot was hit 30 times in 14 days, though Adampur – a major airbase – to its south was not even hit once, while Halwara, another major airbase, was attacked only once, with limited effect.

When we look more closely at attrition rates, we find that the PAF with 13 combat squadrons (plus one F-104 and two F-86 squadrons received from Jordan and Iran) undertook a total of 1,279 sorties on offensive missions, with a loss of 33 aircraft leading to an attrition rate of 2.6 per cent. The Indian Air Force loss rate on offensive missions in the western sector was 1.2 per cent. In response, the IAF flew a total of 280 sorties in both sectors on counter-air missions in the first 24 hours after the war started at last light on December 3, compared to 35-odd by the PAF. The sheer weight of attack forced the Pakistan Air Force to go on the defensive immediately, conceding air dominance to the IAF in substantive terms which also reduced the necessity of air effort required for counter-air in the following days. The abiding principle of war – that of concentration of force – and that of concentration of firepower endemic to the optimum employment of air power, were validated once again. Counter-air operations continued over the following days but at a progressively reducing level and were basically intended to keep the PAF off-balance and on the defensive. The most successful IAF counter-air strike was by a Hunter aircraft on the fifth day of the war on December 8, resulting in the total loss of five F-86 aircraft on the ground at Murid airfield in Pakistan. Overall, the Indian Air Force devoted 8.9 per cent of its combat air effort to counter-air operations. The end result was that the PAF devoted a much higher proportion of its air effort and was forced to employ as much as 57.8 per cent of its total air effort for air defence. Air Chief Marshal P.C. Lal, then CAS, has covered the war in Chhamb area in some detail in his book.<sup>20</sup> He says that the army commander "General Candeth confirmed that tactical air support was given to the army in the Chhamb area whenever it was required. There was never any shortage of aircraft, they were always readily available and they did whatever they were asked to do."

### **The Summer of '99**

The 1971 war had a profound impact on the military conflict situation in the subcontinent. Pakistan, in gross contravention to the framework of Transfer of Power under which Pakistan was also created, reverted to its strategy of covert war, but now under the nuclear umbrella.<sup>21</sup> Pakistan decided to acquire nuclear weapons to offset Indian conventional capabilities. India, on the other hand, put all its faith in the 1972 Simla Agreement which stipulated that the Line of Control emerging after the 1971 war "would not be disturbed by the use of force or any other means" making it a de-facto accepted frontier. Within a decade it started its cartographic aggression by claiming rights over Siachen Glacier in violation of the 1949 Agreement on Cease-fire in J&K brokered by the UN which specified that the accepted line demarcated up

to Point NJ9842 would run due northward from this point to the glaciers (that is between the two main glaciers in the region – the Siachen to the east of the crest line of the mountain range, and the Baltoro glacier to its west), and the line was to be demarcated later. Pakistan, after its first test of a nuclear device at Lop Nor with Chinese assistance in 1983, planned to take over Siachen Glacier and adjoining areas up to the Karakoram Pass (not to be confused with the Chinese built highway of the same name far to the west in Gilgit region of Kashmir).<sup>22</sup> The Indian Army, in a pre-emptive move in early 1984 was able to just occupy the high crest marking the watershed before the Pakistan army could get to it the same day.

Here at an altitude of 14,000 to 22,000 ft continues a small war on the world's highest battlefield since then though after successive attempts Pakistan Army failed to dislodge the Indian Army from the high crest and the Indian Army limited its positions to the approximate alignment mandated in the Karachi Agreement. Combat air power was not employed; but IAF helicopters performed – and over the past 27 years continue to perform a Herculean task day after day of supplying the troops and reinforcements to the ridge held by the Indian Army.

Failing in its clandestine repeated attempts to take over a part of Kashmir in the Siachen region, Pakistan devised another approach planned in 1987 but executed in the summer of 1999. This was to clandestinely occupy the peaks in and around the Kargil area in J&K state after the Islamist terrorism propagated first in Punjab's border states (1983-1993) and in J&K since 1988 with the aim to trigger a violent anti-India insurgency failed to produce the desired results largely due to the disillusionment of the people of the state with Pakistan and its expanding use of terror as a foreign policy tool. Occupation of the heights in an area nearly 120x9 kilometres across the agreed upon Line of Control which Pakistan had committed not to disturb in the 1972 Simla Agreement placed the only road from Srinagar to Leh and Ladakh and Siachen under Pakistani army firepower. The Indian Army was completely taken by strategic surprise when the scale and density of intrusion was found in May 1999. The Indian Army from then on demonstrated heroic combat capabilities in dislodging the Pakistani army from their protected bunkers at, and close to the peaks.

The IAF had been pressed into service for logistics and communication duties with its helicopters and tactical airlift into the valley for reinforcement. Given the strong opposition in adverse terrain at altitudes of 12,000-18,000 ft, the IAF was called in after an IAF helicopter was shot down and a Canberra on a recce mission was damaged by hostile shoulder-fired SAMs. IAF MiG-21/27 and Mirage 2000 provided exceptional support to the army in spite of being heavily restricted by government orders not to cross the Line of Control. Mirage 2000 strikes destroyed the supply dumps of the Pakistani troops (belonging to 12th Northern Light Infantry which was finally decimated). The Pakistani army was pushed back on all sectors close to the Line of Control and the final withdrawal across the LOC was brokered by the US president.

## **Conclusion**

Given the above brief background, the central role of the Indian Air Force rests on conventional

deterrence, while at the same time that of being the key component of nuclear deterrence. For a variety of reasons the IAF is in the process of a historical transformation in moving toward a philosophy of air power based on the principle of “air dominance” both in terms of air-to-air dominance (classical air superiority) as well as air-to-surface dominance so as to play a strategic role. It is pertinent to recall that Lord Trenchard had stated that “A strategic force can be defined as a military force capable of assuming command of its own medium by its own resources. Until the advent of the airplane, the army and navy were valid expressions of the nation’s ultimate military power on land and sea, respectively. With the development of aircraft, however, that ceases to hold true.”

Toward that end, over 40% of the IAF’s combat force is already composed of 4<sup>th</sup> generation aircraft and this proportion will increase to almost 80% in another decade. India has already undertaken a joint venture with Russia to design and develop a 5<sup>th</sup> generation fighter. Force multipliers like the AWACS and aerial refuelling is already part of routine employment. India is negotiating with the US for the acquisition of ten C-17 with an option to double this figure. The stretched and mission-specific C-130J Super Hercules has already entered service. Many more advanced weapons and systems are in the pipeline. In short, in keeping with the dominant trends in Asia, the IAF has set its sights to really become a strategic force which can win the nation’s wars jointly, as well as singly in certain circumstances and for out-of-country contingencies.

## Notes

<sup>1</sup> For an account of the IAF in Second World War see SC Gupta, *History of Indian Air Force 1933-45* (Delhi, Combined Inter-Service Historical Section India & Pakistan, 1961). For an account of No. 1 Squadron (IAF) in the war in Burma see Jasjit Singh, *The ICON: Biography of Marshal of the IAF Arjan Singh DFC* (New Delhi: KW Publishers, 2009). See also Jasjit Singh, “Birth of an Independent Air Force” in Jasjit Singh, *Defence From the Skies; Indian Air Force Through 75 Years* (New Delhi: Knowledge World, 2007).

<sup>2</sup> For a detailed account of the Kashmir war see SN Prasad, *Operations in Jammu & Kashmir 1947-48* (New Delhi, History Division, Ministry of Defence, GOI, 1987). A recent account focusing more on the role and operations of IAF may be found in Air Marshal Bharat Kumar, *An Incredible War: IAF in Kashmir War 1947-48*, (New Delhi: Knowledge World, 2007). See also C Dasgupta, *War and Diplomacy in Kashmir 1947-48*, (New Delhi: Sage Publications, 2002); Air Marshal SM Chaturvedi, *History of IAF* (New Delhi: Vikas.). For a Pakistani version see Maj Gen. Akbar Khan, *Raiders in Kashmir* (Delhi, Army Publishers, date not mentioned).

<sup>3</sup> For a detailed account of the war (probably the best from the Indian side) see Major General DK Palit, *War in the High Himalayas: The Indian Army in Crisis, 1962* (New Delhi, Lancer International, 1991); Neville Maxwell, *India’s China War*, (Bombay, Jaico Publishing House, 1970); SN Prasad (ed), *History of the Conflict with China, 1962*, (New Delhi, History Division, Ministry of Defence, Government of India, 1992); for an account of Sino-Indian relations leading to the war see Margret W. Fisher, Leo Rose and Robert A. Huttenback, *Himalayan Battleground: Sino-Indian Rivalry in Ladakh* (London, Pall Mall Press, 1963), and AG Noorani, *India-China Boundary Problem*

1846-1947, *History and Diplomacy* (New Delhi, Oxford University Press, 2011). *The Officials' Report* (New Delhi, Publications Division, Govt of India, 1961) by the officials of China and India on the Sino-Indian boundary dispute is a useful source for reference of the basis of respective claims.

<sup>4</sup> Yaacov Y.I. Vertzberger, *Misperceptions in Foreign Policymaking: The Sino-Indian Conflict 1959-1962*, (Boulder Colorado, Westview Press, 1984), p. 149.

<sup>5</sup> Yaacov Y. I. Vertzberger, p. 197.

<sup>6</sup> SN Prasad (ed), *History of the Conflict with China, 1962*, (New Delhi, History Division, Ministry of Defence, Government of India, 1992), p. 345

<sup>7</sup> *The Story of the Pakistan Air Force* (Shaheen Foundation, 1988), pp. 338-340.

<sup>8</sup> PVS Jagan Mohan and Samir Chopra, *The India-Pakistan Air War of 1965* (New Delhi, Manohar Publishers and Distributors, 2005), pp. 64-65.

<sup>9</sup> Brigadier Amjad Ali Khan Chaudhry, *September '65: Before and After* (Lahore: Ferozsons Ltd., 1970), p. 57.

<sup>10</sup> Chaudhry, *ibid*, p. 56.

<sup>11</sup> General M Musa, *My Version: India Pakistan War 1965*, (Lahore: Wajidalsis, 1983), p. 42. For other accounts by senior Pakistani military persons see Air Marshal Asghar Khan, *The First Round: Indo-Pakistan War 1965*, (New Delhi: Vikas Publishing House, 1979); John Fricker, *The Battle for Pakistan*, (London: Ian Allan Ltd, 1979); Deniz Kux, *The United States and Pakistan 1947-2000: Disenchanted Allies* (Karachi: Oxford University Press, 2001); Maj Gen Shaukat Riza, *The Pakistan Army 1965*, (Dehra Dun: Natraj Publishers, 1977); Air Commodore S. Sajad Haider, *Flight of the Falcon* (Lahore: Vanguard Books, 2009);

<sup>12</sup> RD Pradhan, *Debacle to Revival: YB Chavan as Defence Minister, 1962-65* (New Delhi: Lancer International, 1991), p. 262.

<sup>13</sup> *The Story of Pakistan Air Force*, *op. cit.*

<sup>14</sup> *Tragedy of Errors: East Pakistan Crisis 1968-71* (Lahore: Wajidalsis, 1994); *Report of the Hamoodur Rehman Commission of Inquiry into the 1971 War* (Lahore: Vanguard Books); Maj Gen. Fazal Muqeem Khan, *Pakistan's Crisis of Leadership* (New Delhi: Alpha & Alpha, 1984); Lt. Gen. A.A.K. Niazi, *The Betrayal of Pakistan* (New Delhi: Manohar Publishers, 1998); Lt. Gen. Jahan Dad Khan, *Pakistan Leadership Challenges* (Karachi: Oxford University Press, 1999); Maj. Gen. Shaukat Riza, *The Pakistan Army 1966-71* (Dehra Dun: Natraj Publishers, 1977); *The Story of the Pakistan Air Force* (Shaheen Foundation, 1988) is useful to get clarity on Pakistan's war plans and PAF performance; Indian accounts include among many others, the then air chief, Air Chief Marshal P.C. Lal, *My Years with the IAF* (New Delhi: Lancer International, 1986); Lt. Gen. K.P. Candeth, *The Western Front: The Indo-Pakistan War 1971* (New Delhi: Allied Publishers, 1984); Maj. Gen. D.K. Palit, *The Lightning Campaign* (New Delhi: Palit & Palit, 1972); Lt. Gen. J.F.R. Jacob, *Surrender at Dacca: Birth of a Nation* (New Delhi: Manohar Publishers, 2001); K.C. Praval, *Indian Army After Independence* (New Delhi: Lancer International, 1990). Others include Richard Sisson and Leo E. Rose, *War and Secession: Pakistan, India and the Creation of Bangladesh* (New Delhi: Vistaar Publications, 1990)

<sup>15</sup> S.N. Prasad, ed., *Official History of 1971 War* (New Delhi: Ministry of Defence, Government of India, unpublished placed on the net by *The Times of India*, September, 1992), p. 279, henceforth mentioned as Official History.

<sup>16</sup> *The Story of Pakistan Air Force*, n.14, pp. 447-448.

<sup>17</sup> A former PAF senior officer claims that in spite of the difficulties involved, two F-104 aircraft (probably on December 6) were sent to fly over the area; but they failed to make any contact with IAF aircraft. See Mansoor Shah, *The Gold Bird: Pakistan and its Air Force: Observations of a Pilot* (Karachi: Oxford University Press, 2002) p. 262.

<sup>18</sup> *The Story of Pakistan Air Force*, n.14, p. 469.

<sup>19</sup> Pakistan admitted to the loss of 24 aircraft in the west and 11 in East Pakistan besides the 11 "self-immobilised" by it after IAF attacks. It is obvious that it has not included another 13-odd aircraft destroyed on the ground by IAF action in the west. See *The Story of Pakistan Air Force*, n.17, p. 469.

<sup>20</sup> Air Chief Marshal P.C. Lal, *My Years with the IAF* (New Delhi: Lancer International, 1986), pp. 227-234.

<sup>21</sup> For a detailed exposition of Pakistan military's strategy see Shalini Chawla, *Pakistan Military and its Covert Strategy*, (New Delhi, Knowledge World, 2008). See also Shuja Nawaz, *Crossed Swords: Pakistan, Its Army, and the Wars Within*, (Karachi: Oxford University Press, 2008).

<sup>22</sup> On the first anniversary of its nuclear tests, Dr Samar Mubarakmand (in charge of building the bomb) publicly stated that Pakistan had tested a nuclear device in 1983; see *Gulf Today*, 31 May, 1999.





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