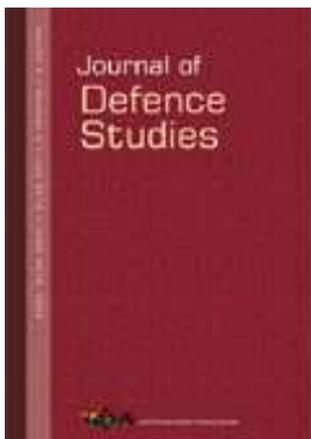


Institute for Defence Studies and Analyses

No.1, Development Enclave, Rao Tula Ram Marg
Delhi Cantonment, New Delhi-110010



Journal of Defence Studies

Publication details, including instructions for authors and subscription information:

<http://www.idsa.in/journalofdefencestudies>

Critical Analysis of Pakistani Air Operations in 1965: Weaknesses and Strengths

Arjun Subramaniam

To cite this article: Arjun Subramaniam (2015): Critical Analysis of Pakistani Air Operations in 1965: Weaknesses and Strengths, Journal of Defence Studies, Vol. 9, No. 3 July-September 2015, pp. 95-113

URL http://idsa.in/jds/9_3_2015_CriticalAnalysisofPakistaniAirOperationsin1965.html

Please Scroll down for Article

Full terms and conditions of use: <http://www.idsa.in/termsfuse>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

Views expressed are those of the author(s) and do not necessarily reflect the views of the IDSA or of the Government of India.

Critical Analysis of Pakistani Air Operations in 1965 Weaknesses and Strengths

*Arjun Subramaniam**

This article tracks the evolution of the Pakistan Air Force (PAF) into a potent fighting force by analysing the broad contours of joint operations and the air war between the Indian Air Force (IAF) and PAF in 1965. Led by aggressive commanders like Asghar Khan and Nur Khan, the PAF seized the initiative in the air on the evening of 6 September 1965 with a coordinated strike from Sargodha, Mauripur and Peshawar against four major Indian airfields, Adampur, Halwara, Pathankot and Jamnagar. The IAF riposte to PAF strikes came early next morning at dawn on 7 September. Over the next ten days, IAF surprised an overconfident PAF with its tenacity and individual combat proficiency. The article concludes by offering a critical analysis of the operational performance of PAF in the conflict and an objective qualitative comparison with the performance of the IAF.

It gives me great pleasure to pay my first visit to a unit of the Royal Pakistan Air Force. There is no doubt that a country without a strong Air Force is at the mercy of any aggressor. Pakistan must build up her Air Force as quickly as possible. It must be an efficient air force, second to none and must take its right place with the army and the navy in securing Pakistan's defence.¹

– Quaid's Historical Address at Risalpur,
13 April 1948

* Air Vice Marshal Arjun Subramaniam is a serving officer in the Indian Air Force and currently posted at the National Defence College, New Delhi.



Spurred on by a perceived weakening of India's military capability in the aftermath of the 1962 debacle and the death of the Indian Prime Minister Jawaharlal Nehru in 1964, Pakistan moved swiftly to erode India's standing in the region and reduce the military and strategic differential that existed between the two countries. Building on his first anti-India hedging moves in 1954, and propelled to a large extent by the anti-India United States (US) Secretary of State, John Foster Dulles, Ayub Khan entered into a direct military pact with the US under the Mutual Defence Assistance Agreement. Soon after, Pakistan joined the South East Asian Treaty Organization (SEATO) and the Baghdad Pact, later called Central Treaty Organization (CENTO).² With this alliance, Pakistan emerged as a South Asian bulwark against the Soviet Union and the Warsaw Pact.³ This ensured the speedy modernisation of Pakistan's Armed Forces with the US equipment, much to the consternation of India, which had failed in its attempt to procure military hardware from the US in the years following the India–China War of 1962. The most potent element of this military build-up was the all-round strengthening of the PAF. This article tracks the evolution of PAF into a potent fighting force before analysing the broad contours of the air war between IAF and PAF in 1965. The article concludes by offering a critical analysis of the performance of PAF during the conflict.

BRIEF HISTORY OF PAF

The early years of PAF were difficult ones for the fledgling service. Though it inherited a number of air bases and training establishments after Partition, and had a denser concentration of airfields across the country as compared to IAF, thanks to the British focus on aerial policing in the North-West Frontier Province (NWFP), these were outweighed by a number of systemic deficiencies. Among these was the sheer asymmetry in forces at independence. While India retained over six squadrons of fighter aircraft and half a squadron of Dakotas, Pakistan had to make do with two fighter squadrons with 16 Tempest fighters and the other half of a squadron of Dakotas, with what the PAF calls 'one or two aircraft'.⁴ The second disadvantage was that the number of qualified pilots who chose to crossover to PAF was proportionally lower as compared to those who remained with IAF. This was because of the pan-Indian composition of the pre-independence Royal Indian Air Force (RIAF) and the lower number of Punjabi Muslim and Pathan officers who joined the air force. This resulted in PAF having to rely on a number of volunteer British

officers to man their two Tempest squadrons. Barring an odd resupply sortie at Skardu by Dakotas, PAF did not really have the appetite to contest the RIAF during the first India–Pakistan War of 1947–48.

The metamorphosis of PAF into a lean and potent force with diverse capabilities began in the mid-1950s with the arrival of the F-86 Sabre Jets and Canberra bombers. Learning from the United States Air Force (USAF) experience in Korea and the initial years of the Vietnam War, PAF pilots picked up the finer nuances of air combat and air–land operations at a time when IAF was in the midst of a wide-ranging expansion itself. The main difference, however, was that PAF benefited from putting all its eggs in the US basket, while India looked to Russia (MiG-21s), the United Kingdom (UK) (Hunters, Gnats, Canberras) and France (Mysteres) for its expansion. Consequently, there was fair standardisation of technology, tactics and procedures in PAF as against an absence of the same in IAF. If there was a force multiplier for PAF during its period of transition, it was in the form of its longest-serving chief (1957–65), Air Marshal Asghar Khan. Khan was a visionary airman who had cut his teeth exactly in a similar manner as many of IAF's stalwarts like Mehar Singh and Arjan Singh had in the cauldron of World War II (WW II). His understanding of air power and willingness to push for an important role for PAF in joint operations paid rich dividends. Asghar Khan initially had the ear of Field Marshal Ayub Khan and ensured that whatever he asked for PAF, in terms of budgetary support and creation of forward bases as a means of blunting India's numerical superiority, was agreed to. The setting up of an aerobatic team and the Fighter Leaders' School in 1958,⁵ followed by a proactive air defence posture that saw an IAF Canberra being shot down over Pakistani territory in 1959 during an intrusive reconnaissance mission, saw PAF at its aggressive best. Complementing him as an ideal operational foil was Air Marshal Nur Khan, another airman from the World War II (WWII) era and a passionate fighter pilot.⁶

DESERT HAWK—THE RANN ENCOUNTER

In April 1965, Pakistan decided to test India's military preparedness in an area which was considerably distant from Kashmir, where plans were brewing to launch Operation Gibraltar later that year. From the manner in which the Pakistan Army had re-equipped and remodelled itself with US assistance for almost a decade prior to the onset of hostilities,⁷ it was keen to test its equipment on the battlefield against an opponent whose modernisation process had just begun. Pakistan had refined its artillery

and armoured tactics significantly,⁸ which it now wanted to validate in a restricted and limited battle environment.

Accordingly, the Pakistan Army initially moved an infantry brigade with armour and artillery to the remote Rann of Kutch area in early April 1965 to grab some territory before the monsoons set in.⁹ Alarmed at the turn of events, an aerial reconnaissance sortie carried out by a Vampire jet of the IAF operating from Jamnagar confirmed the presence of Patton tanks and caused some consternation in Delhi leading to a threat from the Indian Prime Minister Lal Bahadur Shastri that should Pakistan not pull back, India would be forced to contemplate on widespread and immediate military action. This was something that Pakistan did not want before it had all its forces in place for the main plan. It also allowed India to gather adequate international support to pin the tag of aggressor on Pakistan. In fact, on learning that a Vampire had been launched from Jamnagar air base, the Pakistani Air Force Chief, Air Marshal Asghar Khan, is reported to have called his counterpart in India, Air Marshal Arjan Singh (both of them were squadron commanders on the same side in the Burma Campaign of WW II), and suggested that the two air forces stay out of this skirmish.¹⁰ As the conflict escalated, Pakistan raised force levels to almost a division and pushed the Indian brigade on the back foot before international mediation resulted in a ceasefire.

A word here about power equations that existed within the Pakistan military would establish that there was not much difference between inter-service relations in India and Pakistan. General Musa, the Pakistan Army Chief, had a markedly condescending attitude towards PAF chiefs, Air Marshals Asghar Khan and Nur Khan. Sajjad Haider, one of PAF's most illustrious fighter pilots with extensive combat experience in both the 1965 and 1971 wars with India, reckons that Musa was wary of Asghar's 'intrepid and strategic mind' and did not find it necessary to keep him updated with the plans for Operation Desert Hawk.¹¹ As a result, the closest PAF air base at Mauripur (close to Karachi) with F-86 Sabres was too far away from the Rann of Kutch to provide meaningful air support. It was just as well because Haider adds that Pakistan thought that IAF had activated the Bhuj airfield, while the latter thought that PAF would use the airfields at Hyderabad (Sind), Nawabshah or Sukkur.¹² Five decades later, it is clear that both air forces were operating in an intelligence vacuum and lost the opportunity to make an impression in Kutch. Haider goes on to add in an email to P.V.S. Jagan Mohan, an avid Indian air power historian, that IAF lost a golden opportunity to hit Pakistani forces in the Rann by

using Jamnagar airfield as a pivot and moving Canberras and Hunters there to complement the older Vampires. He calls it an 'opportunity lost' for IAF and a pointer to PAF that its adversary was not aggressive enough and not interested in concepts like 'seizing the initiative', which Asghar propounded frequently.¹³ PAF, however, rehearsed air-land procedures by flying simulated ground attack missions on a daily basis by Sabres operating out of Mauripur airfield, with a ground liaison cell located alongside 8 Division in the conflict zone.¹⁴

CAPABILITY COMPARISON

The PAF enjoyed a marginal qualitative superiority over IAF, though it was outnumbered by a fair margin. Acquired in 1960 from the US under the Military Assistance Programme (MAP) was the F-104 Starfighter, a supersonic interceptor with Sidewinder air-to-air missiles and a six-barrelled 20mm cannon, that was believed to be far superior to both the MiG-21 and Gnat air defence fighters of IAF. Though there was only one squadron formed with 14 aircraft, it proved to be quite a deterrent. The mainstay of PAF, however, was the F-86 Sabre jet, a multi-role fighter, which was as effective in ground attack missions as it was in providing top cover as an air defence platform when armed with Sidewinders. One hundred and twenty of them were procured from the US under the MAP, out of which 24 were equipped with Sidewinders before hostilities erupted in 1965.¹⁵ The C-130 Hercules was a superb medium-lift transport aircraft which was used for Special Forces Operations—the stealthy manner in which it dropped almost 200 paratroopers by night around three Indian air bases without any attrition caused to the aircraft is testimony to its capability.

Though the earliest description of the air battle between PAF and IAF in the 1965 war, entitled *Battle for Pakistan*, was written by John Fricker in 1979 and is an interesting account, it is heavily biased in favour of PAF, as the author was provided all the assistance needed in terms of access to records by Pakistan.¹⁶ Nearly 26 years later, two Indian aviation enthusiasts, P.V.S. Jagan Mohan and Samir Chopra, went on to write a highly readable and objective narrative of the air war titled *The India–Pakistan Air War of 1965*. The book offers a well-researched snapshot of numbers and capability on either side. The IAF had a total of 460 combat aircraft, including eight squadrons (132 aircraft) of old and slow Vampire trainer-cum-close air support jets, acquired in 1948, and three squadrons (56 aircraft) of Ouragans of similar vintage, acquired from France in the

early 1950s. This meant that IAF had only about 270 combat-worthy aircraft. The workhorses of the ground attack fleet were the 80-odd Mystere jets, while the sleek and manoeuvrable Hunter jet doubled up as a multi-role aircraft assisting the Gnats in air defence missions.¹⁷ Though IAF had inducted the first squadron of MiG-21 into 28 Squadron in mid-1963 after almost a year of hectic negotiations with the Soviet Union, the numbers available were too few to make any significant impact on its operational capability as war clouds loomed on the horizon.

The bomber force of both IAF and PAF comprised the versatile Canberra, which would come into its own during the various night raids conducted by both sides when day attrition climbed during the initial phase of the war. While IAF had approximately 60 of these aircraft with one squadron exclusively configured for the reconnaissance role, PAF had 32 aircraft of the modified US version.¹⁸ This numerical superiority was to play an important role during the war as IAF Canberras carried out many deep-night strikes as the war progressed and caused a fair amount of disruption. Thus, if you look at an objective force comparison between IAF and PAF on the western front, one arrives at approximately 270 combat-worthy IAF aircraft against about 170 PAF combat aircraft. Air Vice Marshal A.K. Tiwary offers another perspective by indicating that the IAF had a large deployment of squadrons on the eastern front, leaving it with only around 290 aircraft in the west, against his researched Pakistani aircraft strength of 203.¹⁹ These figures broadly indicated a ratio of 1.5:1 in favour of IAF. Though Prasad and Thapliyal have indicated in their official history of the 1965 war that IAF was in awe of PAF, interviews with other veterans of the conflict reveal no such fear or admiration beyond a realisation that the Sabre and Starfighter would be formidable adversaries.²⁰ Though a few young Indian pilots like Flying Officers 'Mike' McMahan and 'Jimmy' Bhatia (both retired as Air Marshals) had flown the Sabre jet in the US and brought back some valuable inputs regarding US tactics and training patterns—as a large number of Pakistani pilots had been trained in the US—there were no institutional initiatives to brainstorm or evolve central fighter and bomber tactics against the existing PAF capabilities.

OPERATION GIBRALTAR

The success of Operation Desert Hawk in the Rann of Kutch convinced Ayub Khan of the tactical, operational and technological superiority of the Pakistan Army. With Air Chief Marshal Asghar Khan handing over

the baton to Nur Khan in April 1965 after assuring the President that the PAF with its recently acquired F-86 and F-104 Starfighter jets was far superior to IAF, Ayub Khan decided to go ahead with Operation Gibraltar, as the plan to subvert and seize Kashmir as it entered the chilly spring of 1965 came to be known. Summer saw an increase in the number of infiltrations and ceasefire violations from across the Line of Control (LoC) and a pattern emerging on the contours of the likely 'takeover of Kashmir Strategy' by Pakistan.²¹

PAF ably supported the infiltration operation with reasonably accurate C-130 drops of arms and supplies around difficult dropping zones (DZs), as it had rightly assessed that since India had honoured the 1949 United Nations (UN) Security Council Resolution on Kashmir in terms of not placing fighter aircraft at Srinagar, IAF could not intercept some of the clandestine missions.²² IAF, however, did not stay completely quiet during these operations, and despite war not being officially declared between India and Pakistan, it innovatively modified Mi-4 helicopters in the gunship role and also employed Alouette light helicopters for casualty evacuation in support of the counter-infiltration operations. The willingness of Lieutenant General (Lt Gen) Harbaksh Singh, India's Western Army Commander, to use all resources at his disposal to thwart the widespread infiltration campaign, forced Pakistan to open another front and risk an all-out war.

AIR-LAND BATTLE OVER CHHAMB

On 1 September 1965, the Indian border town of Chhamb awoke to the rumbling of Patton tanks and a thundering artillery barrage from 105 and 155mm guns. Pakistan's 12 Division had launched Operation Grand Slam with almost three brigades supported by two regiments of armour and an entire artillery brigade comprising all elements, including large number of field and medium artillery guns, gun locating regiments and an air defence regiment.²³ By late morning, 1100 hours to be precise, faced with the ominous prospect of being overrun by the enemy, Brigadier Manmohan Singh, the Indian brigade commander, asked for air support to check the enemy's advance. Why he waited almost five hours after sunrise to do so remains a mystery that can only be explained as a decision dilemma caused by a virtual absence of joint contingency planning and the 'fog of war'. It would be evening before the first IAF aircraft would appear over the tactical battle area (TBA). Many in PAF thought that IAF would respond immediately, since many among its leadership were familiar with

varied concepts of close air support in the NWFP and Burma, but when that did not happen, it allowed them to send their own Sabres over the area to provide protection to the advancing Pakistani armour. The Sabres would go on to shoot down four obsolescent Vampire jets of the IAF that evening—PAF had seized the initiative; it would retain it for the next one week before IAF clawed its way back into the fight.

IAF hit back fiercely on 3 September after inducting the highly manoeuvrable Gnat fighters of 23 Squadron into Pathankot. The squadron shot down a few PAF Sabres as it provided air defence cover to Pathankot and flew escort missions to Mystere close air support missions over Chhamb and Jaurian. The Battle of Chhamb was the first air–land battle fought by both India and Pakistan in the modern era and it was clear initially that PAF had better tactical and communication procedures; many of the Pakistani tank crews and fighter pilots had trained in the US under the MAP and Sajjad Haider indicates that many officers of the Pakistan Army were proficient in directing close air support aircraft onto targets in the TBA.

In an offensive battle however, particularly in the plains, the most effective way of employing air power is not only to continuously influence the contact battle, but to ensure that the defender is not able to build his force ratios to sustain his defensive operations. This is done by interdicting his follow-on forces and reserves, and is possible only if a joint appreciation has been done prior to the battle. Since General Musa had not shared his plans with Air Vice Marshal Nur Khan, who had replaced Asghar Khan as the Chief of Air Staff barely months before the war, PAF had no plans for interdicting any forces that India was bringing in to reinforce the Chhamb brigade. It thus lost a golden opportunity to deplete the Indian Army's combat potential and revealed deep cracks in army–air force synergy. IAF, on the other hand, ventured relatively deep into enemy territory with its Mysteres and Hunters on interdiction missions against railway sidings, trains and armoured concentrations, albeit with limited success given the complete absence of intelligence. One of the major reasons for the inability of the Pakistan Army to drive home the advantage in Chhamb, apart from the tough response from Lt Gen Harbaksh Singh, was poor army–air force coordination. It was not just the Indian's who displayed suboptimal jointness in the Chhamb battle, it was a poor understanding on the part of Ayub and Musa about the effectiveness of air power that allowed India to recoil. Had Ayub allowed PAF the freedom to conduct interdiction and airfield strike missions along

with the army offensive, India would have been completely surprised. Instead, deploying PAF only over the TBA and in air defence roles helped IAF gain vital time to relocate its forces at forward bases in the few days before PAF commenced its counter-air campaign on 6 September.

INDIA'S LAHORE OFFENSIVE

Pakistan's defences in the Lahore sector were based on a major canal, the Ichhogil Canal. Defending the Ichhogil Canal were two divisions of the Pakistan Army—10 Infantry Division mainly occupied well-prepared defences behind the canal around Lahore with some aggressive deployment ahead of the canal, and 11 Division occupied defences to the south of Lahore in the Kasur and Khem Karan sector. Facing them were three divisions of the Indian Army's XI Corps.

From 6–10 September, the two armies fought a series of bruising battles of attrition for control of the Ichhogil Canal and areas surrounding it. While the Indian Army tried its best to establish a foothold across the canal and consolidate its gains before attacking Lahore, the Pakistan Army launched a series of counter-attacks led by its superior armour and mobile artillery, not forgetting some telling attacks through the afternoon on the Indian Army's advancing 15 Division by PAF Sabre jets of 19 Squadron.

Dogra is a small hamlet across the Ichhogil Canal, 8 kilometres (km) from the international border and 14 km from the outskirts of Lahore. With this as an initial objective, 3 Jat Regiment of the Indian Army, under Colonel Desmond E. Hayde, was the first to cross the International Boundary (IB) in the wee hours of the morning of 6 September. Under the cover of an early morning mist, the battalion outflanked a company of the Pakistan Rangers and raced towards the canal, surprising the scanty forward deployment of the Pakistan Army and sending the defenders scurrying back towards Lahore. By mid-day, 3 Jat had secured the bridge over the canal leading to Dograi, despite six Sabres of the PAF having caused havoc amongst the advancing brigade. With all Pakistani troops in the area having withdrawn to the west of the canal, the Indian forces, with one armoured regiment following, were an easy target for the Sabres as they ripped into 3 Jat and 54 Brigade, which had no air defence protection or any aerial cover. Why did IAF not react at first light on 6 September and mount combat air patrols over what was 15 Division's main thrust line is still completely inexplicable to Sajjad Haider.²⁴ Leading the six-aircraft Sabre mission from 19 Squadron PAF, he was surprised that that

there was no IAF combat air patrol waiting for them under radar cover and wrote to Jagan Mohan:

Well after the war we wondered what happened to the IAF at Wagah! But I was sure they will come for us as I stayed over the target area for 17 minutes and had two detached from my six to provide top cover. We knew that there were two Hunter formations in the area in Close Air Support role, but they seemed to have missed 6 fighters holding up the Indian land assault. I would be most interested if you can tell me why?²⁵

IAF held back inexplicably, only to be hit in strength by PAF that evening. In their indictment of India's air-land strategy, Jagan Mohan and Chopra write:

The only briefing that the air force received in relation to the ground offensive was to hit targets of opportunity. The intelligence provided was poor, occasionally, targets were not found after reaching the designated areas. Whatever the reason behind the inaction, the IAF lost out on a critical opportunity to hit hard at the PAF's offensive capability, with little risk of attrition and to influence the outcome of the war.²⁶

As one of the foremost tacticians during the war, Sajjad Haider was surprised that IAF did not launch widespread counter-air attacks on PAF air bases on the morning of 6 September in tandem with the early morning Lahore offensive, instead choosing to launch sporadic raids by Canberra bombers, Mysteres and Hunters against opportunity Pakistan Army targets in the Chander, Chhamb and Kasur sectors, all of which were intercepted and led to needless waste of effort.²⁷

Air Marshal Asghar Khan, former Commander-in-Chief of PAF, ruminates in his book:

If they had intended to attack us first their best time was the early hours in the morning of the 6th. Since they had launched a pre-arranged attack, the omission of the Air Force was deliberate. Our decision to launch the air offensive was taken at about 3 p.m. The attack was to be launched at the Indian airfields simultaneously a few minutes after sunset.²⁸

PAF'S COUNTER-AIR CAMPAIGN

Pakistan seized the initiative in the air on the evening of 6 September with a coordinated strike from Sargodha, Mauripur and Peshawar against

four major Indian airfields, Adampur, Halwara, Pathankot and Jamnagar. While near-simultaneous strikes were planned, only the Pathankot strike managed to surprise the Indians, as the other strikes were delayed due to various reasons and met with opposition over the target airfields.²⁹ While the strikes on Pathankot, Adampur and Halwara were carried out by Sabres, B-57 Canberra bombers from Mauripur hit Jamnagar. Pathankot was hit badly, losing 10 aircraft on the ground comprising nine fighters, including two new MiG-21 fighters, and a transport aircraft.

Alerted by the 1700 hours Pathankot raid and aided by the delays in the other raids, Group Captain John, the aggressive and proactive Station Commander at Halwara (the IAF base near the industrial town of Ludhiana in Punjab), got four Hunters (two each from 7 and 27 Squadrons) airborne in anticipation of a raid³⁰ on his base even as three other Hunters were returning after a ground attack mission over Tarn Taran. Engaged over the TBA by three Sabres, which were actually headed for Adampur, one of the Hunters flew into the ground as he attempted to shake a Sabre of his tail. Low on fuel after this unplanned engagement, the Sabres aborted their strike on Adampur. As the first formation of Hunters landed just before 1800 hours, three Sabres arrived over Halwara and got embroiled with the four Hunters in some of the most classic aerial dogfights seen over the skies of Punjab that evening. Hunters of 7 and 27 Squadrons shot down three Sabres (though PAF claimed that one of the Sabres got back) and lost two of their own (Prakash Pingale and Adi Gandhi); more importantly, they ensured that none of the Sabres managed to inflict much damage at the two airfields.³¹ Three of the four pilots involved in the aerial dogfight that evening, Flight Lieutenants D. Gandhi and N. Rathore and Flying Officer Vinod Neb, were awarded the Vir Chakra. Pingale would go on to get his on 16 September after he shot down a Sabre in a high-altitude aerial engagement near Amritsar. Though PAF had initially seized the initiative, it had not reckoned with the fact that it was not only the Gnat but the Hunter fighter-bomber too that would prove to be more than a match for the Sabre in aerial combat. This, more than anything else, resulted in no more day raids over IAF airfields for the rest of the war. The only major PAF raid in the Kutch sector on 6th evening comprised B-57 bombers that arrived over Jamnagar in darkness and poor weather, and inflicted damage on a few Vampires on the ground. The B-57s also attacked Adampur where they completely destroyed a MiG-21 at the operational readiness platform (ORP) and damaged a second. Halwara, too, was attacked at night. The

IAF was clearly rattled by these strikes and as Air Marshal Asghar Khan writes: 'We had got in the first punch and given the Indian Air Force a bloody nose.'³²

While Asghar Khan was certainly a bold and imaginative commander, he conveniently forgets in his book that one of his 'brain child' operations was the botched-up Special Forces airborne assault operations by C-130s around designated IAF airfields. In a bold but unsustainable action, three C-130s dropped 60 paratroopers each of the elite Special Services Group (SSG) around the airfields of Pathankot, Adampur and Halwara, hoping to either seize the airfields or cause maximum destruction. To PAF's credit, the operation was carried out stealthily and though the C-130s safely dropped their paratroopers, they could not drop them with the kind of precision that is available today. To complete the story, of the 180 paratroopers, 20 were killed, 132 were captured and only 20 made it back to Pakistan.³³

IAF's riposte to PAF strikes came early next morning at dawn on 7 September when large formations of Mysteres from 1 and 8 Squadrons attacked the PAF's main Sargodha air base and a satellite base nearby called Chota Sargodha. These were followed minutes later by Hunters from 27 Squadron. While the Mysteres managed to destroy a few aircraft on the ground, including a B-57 bomber and an F-104 Starfighter, the highlight of the mission was a valiant dogfight waged by Flight Lieutenant Devayya against the far superior F-104 Starfighter. It was only years later that Devayya would be posthumously awarded a Vir Chakra for shooting down Flight Lieutenant Amjad Hussain of PAF close to Sargodha. The IAF Hunter strikes from 27 Squadron and 7 Squadron were relatively ineffective as PAF interceptors were alert by then and forced the Hunters to shed their load prematurely and engage in aerial dogfights with Sabres, one of which wildly claimed five Hunters.³⁴ The next Mystere strike by 1 Squadron of IAF over Sargodha around noon was the most successful one and got the squadron two Vir Chakras for Squadron Leader S. Handa and Flight Lieutenant D.S. Kahai, respectively. At the end of the second full day of the air war, though IAF initially claimed 15 PAF aircraft on the ground, realistic estimates indicate six to eight aircraft on the ground and six to seven fighters shot down in aerial combat. On its part, IAF had lost six to seven aircraft to aerial combat and over 20 aircraft to airfield attacks.

Contrary to tall claims thus far, PAF realised that it could not sustain the kind of attrition it had met with after the encounter of 7 September. Both air forces were now at low key; licking their wounds and deciding

which way to progress the air war. The bottom line was that IAF was larger; its Hunters and Gnats were matching the Sabres and F-104s; and there was no way in which PAF could win a war of attrition against IAF. With IAF MiG-21s also carrying out combat air patrols over Lahore and Kasur, the knockout punch never came—IAF was clawing its way back into the fight.

THE DESERT AIR WAR

The two main opposing air bases in the southern sector were Jamnagar in Gujarat and Mauripur near Karachi in Sind. Jodhpur, on the Indian side, was a large training base and IAF did not consider it necessary to locate any strike or air defence assets there since it was not anticipated that any large-scale ground offensive was planned in the area. While Jamnagar had a large force of Canberra bombers and Vampires, Mauripur air base (now PAF base Masroor) had a squadron each of Canberra bombers and Sabres. Both were used extensively in countering India's offensive in Gadra Road; particularly impactful here too were strafing missions by the Sabres, which effectively blunted the Indian advance. Thus IAF had no fighter resources worth the name in Jodhpur to provide close air support and had to rely on Canberra bombers from Jamnagar to carry out interdiction missions. This severely restricted the Indian offensive to a few miles into Pakistan territory—no sizable gains worth highlighting were made by both sides and here, too, PAF had contributed fairly effectively in limiting Indian gains.³⁵

A tragic incident involving the shooting down of an eight-seater Beechcraft twin-engine executive jet with the chief minister of the Indian state of Gujarat on board by Sabres of PAF has attracted attention in recent years; particularly in forums that are actively involved in the India–Pakistan peace process.³⁶ However, from a military perspective, and with a war raging across the western front and knowing the risks of flying without adequate radar and air defence cover, it is surprising how the sortie was undertaken at all. From a PAF perspective, the two countries were at war and having scrambled two Sabre jets from Mauripur under control of the highly effective Badin air defence ground-controlled interception (GCI) radar, which was later destroyed by IAF Canberras, it was only an ethical issue that remained when Flying Officer Hussain, the Sabre pilot, was faced with a situation and an order to shoot down a civilian aircraft. He has gone on record almost 45 years later, deeply regretting the incident.³⁷ Such are the tragedies brought on by war! However, in the

larger perspective, the aggressive and coercive intent of PAF comes out clearly in this incident.

It is not widely known that a series of aggressive but ill-directed IAF Canberra and Hunter strikes on the night of 6 September and in the early hours of 7 September against PAF airfields in Chittagong, Kurmitola and other bases precipitated a ferocious response from 14 Squadron PAF against Kalaikunda, Central Air Command's pivotal base in Bengal. Shockingly, IAF had such poor intelligence about the location of the only Sabre squadron in East Pakistan that it attacked every base there except Tejgaon, the air base outside Dacca, where 14 Squadron PAF had a detachment of 12 Sabres.³⁸

In the absence of any combat air patrol to oppose enemy strikes, and aircraft being parked in the open at Air Force Station Kalaikunda, IAF lost eight aircraft (four Canberras plus four Vampires) to two Sabre strikes on 7 September. However, PAF's 14 Squadron was bested in an epic aerial battle over Kalaikunda the same morning as a young ace with 14 Squadron of the IAF, Flight Lieutenant Alfred Cooke, flying a Hunter, shot down two Sabres (IAF claims all four Sabres were shot down by the two pilots, while the PAF claims that only two were downed—the truth could well lie in between, as it was for most claims in the war).³⁹ The air war in the east meandered for another two weeks without any major successes on either side.

ATTRITION

PAF lost far fewer aircraft (IAF figures indicate 10, while PAF claims no more than three) on the ground to IAF strikes during the course of the entire air war. IAF lost 36 aircraft on the ground, with a further 17 damaged; it lost 17 aircraft in aerial combat and 11 to ground fire. However, PAF losses in the air during combat and to ground fire were greater than the Indian losses at 18 and 25, respectively. In sortie generation rates too, IAF fared better than its adversary. It flew a total of 3,927 sorties as against 2,015 flown by PAF.⁴⁰ Considering the 1:1.5 ratio in strength, IAF fared better. In the overall context then, if one discounts the losses suffered by IAF on the ground and factors in the higher number of sorties flown, the attrition rate suffered by IAF was significantly lower than the PAF figure.⁴¹ These figures are official Indian ones and have naturally been contested by analysts from Pakistan, but it is not something to lose sleep over!

POTENTIAL VERSUS PERFORMANCE

Fuelled to a great extent by good post-war perception management and continued analysis of aerial engagements by PAF veterans pilots like Sajjad Haider and Kaiser Tufail, there emerged a widespread public perception that PAF performed significantly better than IAF in the 1965 war. It is true that it entered the war with a lean and effective force structure that comprised of three main combat platforms, the Sabre, Starfighter and Canberra. It is also reasonable to assess that the focus, aggression, bravado and bluster of PAF was shaped by two factors. The first factor was the stable leadership for almost eight years in the form of an astute Air Marshal, Asghar Khan, followed by another visionary airman in the form of Nur Khan, both of who managed to create a combat culture within PAF that was distinctly different from that of the Pakistan Army. In a predominantly army-dominated country, Asghar Khan and Nur Khan confidently articulated modern concepts of air power and convinced Ayub Khan that PAF would play a decisive role in any future India–Pakistan conflict. The second critical factor that gave PAF an initial edge over IAF was the ease with which its pilots absorbed American technology, tactics and procedures.

This then leads to the question: did PAF perform to its potential during the war? A closer look at some operational blunders and inconsistencies would put things in the correct perspective. Though Air Marshal Nur Khan was an able deputy to Asghar Khan for years, it is perplexing that he replaced Asghar Khan as the Chief of PAF at a time when war clouds were looming on the horizon. The only reason for this change could have been power politics in Pakistan that saw the Ayub Khan–Musa–Bhutto combine becoming increasingly apprehensive about Asghar Khan's aggressive articulation of war-fighting strategies and criticism at being left out of the various operational planning processes that were underway for the Kutch and Kashmir operations. His absence was sorely felt by PAF when IAF got its act together. In the realm of aerial strategy, PAF was confused whether its primary aim was to take the air battle into enemy territory and destroy IAF's combat potential with a series of swift and surgical strikes on the latter's bases, or whether it was to defend Pakistan's skies and prevent IAF from denting the Pakistan Army's combat capability. As it turned out, after an initial spell of intense offensive action, PAF chose the latter option and went into what IAF has since called a 'combat preservation mode'.

For a smaller air force to decisively impact air–land operations, its operations have to be interwoven closely with army operations. Pakistan showed strategic naivety in assuming that after Operation Desert Hawk (Kutch) and Operation Gibraltar (Kashmir infiltration) its Chhamb offensive would not evoke a widespread response from India. This led to it holding back its offensive air strikes on Indian airfields to 6 September, a good five days after the Chhamb offensive. Had PAF struck IAF on the morning of 1 September and followed it up with a second round the same evening or the next morning, IAF would have been on the backfoot and suffered even more attrition on the ground. All accounts of the Chhamb battle and interviews with IAF veterans who were at Pathankot and Adampur on 1 September indicate that the morale of IAF was at its lowest after the loss of the four Vampires on the evening of 1 September. It was extremely lucky that it did not have to contend with multiple airfield raids on the same day. PAF had lost the initiative as the period of 1–6 September allowed IAF to move forces to Adampur, Pathankot and Halwara. It is quite possible that General Musa thought that the Pakistan Army will bring glory to the nation on its own. A younger Nur Khan did not have the same clout as Asghar Khan to convince Ayub of the knockout punch that could be delivered by PAF.

At the operational level, both air forces were trying out modern concepts of air power for the first time, and the lessons learned by the USAF in Korea seem to have been passed down when the Sabres and Starfighters were inducted into PAF. Its counter-air operations were initially effective against IAF bases mainly because of poor aircraft dispersal procedures—more than half of IAF losses were on the ground. The superior force ratio of IAF allowed it to claw its way back into battle and fight a battle of attrition with PAF. The bravado and bluster of PAF was gradually replaced by merely a cautious confidence when it saw many of its stalwarts being downed in aerial combat by rejuvenated squadrons of IAF. Another operational strategy that merits attention was the difference in perceptions between PAF and IAF when it came to supporting the land battle. Influenced heavily by close air support tactics of the USAF and equipped with good communication interfaces and forward air controllers, Sabres and Canberras of the PAF did slow down the Indian advance in Lahore and Sialkot sectors, but the weight of the attack was simply insufficient to cause a significant dent to the Indian Army's combat potential. As against this strategy, IAF preferred a more intrusive interdiction strategy with its Hunters and Mysteres as it sought

to destroy enemy armour and combat potential before it could come into the TBA. It is inexplicable why PAF did not seek to do the same with India's 1 Armoured Division or 2 Independent Armoured, and chose instead to hold back and concentrate on air defence and close air support.

CONCLUSION

Pakistani air power had the potential to decisively influence the final outcome of the war if had it been used more aggressively. Instead, higher strategic leadership chose to use it primarily in the defensive role after the first wave of offensive strikes. By doing so they violated the most enduring principle of air power which has been to use it offensively and take the battle to the enemy. In the final analysis, a highly professional and capable force performed sub-optimally as the war progressed as it had to contend with meek strategic leadership that had little understanding of air power and its critical role in the air-land battle; an operational air force leadership that underestimated the adversary much as the country at large had done and did not follow through with sustained offensive action; and lastly, a sheer disadvantage of numbers with inadequate war waging reserves and armament reserves to fight a surprisingly resilient adversary.

NOTES

1. Address by Quaid-e Azam, Mohammad Ali Jinnah, to Pakistan Air Force (PAF) personnel at Air Force Station Risalpur, on 13 April 1948, available at http://www.paf.gov.pk/quaid_address.html, accessed on 7 April 2015.
2. Stephen Philip Cohen, *The Idea of Pakistan*, New Delhi: Oxford University Press, 2004, p. 102. The other members of CENTO were Turkey, Iran, and the US. Also see Mohammed Ayub Khan, 'The Pakistan-American Alliance', *Foreign Affairs*, January 1964, available at <http://www.foreignaffairs.com/articles/23567/mohammed-ayub-khan/the-pakistan-american-alliance>, accessed on 19 November 2014.
3. Sumit Ganguly, *The Origins of War in South Asia: Indo-Pakistan Conflicts since 1947*, New Delhi: Vision Books, 1999, p. 57.
4. 'History of the PAF', available at <http://www.paf.gov.pk/history.html>, accessed on 6 April 2015.
5. Jamal A. Khan, 'Mitty Masud Folds his Wings', *Dawn*, 13 October 2003, available at <http://www.dawn.com/news/1065137/dawn-features-october-13-2003>, accessed on 11 April 2015.
6. John Fricker, *Battle for Pakistan*, Surrey: Ian Allen Ltd, 1979, pp. 6–8.

7. Stephen Cohen, *The Pakistan Army*, New Delhi: Himalayan Books, 1984, p. 64.
8. Cohen, *The Idea of Pakistan*, n. 2, p. 102.
9. For a detailed description of force levels and a chronological sequence of events, see S.N. Prasad and U.P. Thapliyal (eds), *The India–Pakistan War of 1965: A History*, Dehradun and Delhi: Natraj Publishers, 2011, pp. 20–30. This book is an official history of the war, brought out by the Ministry of Defence, Government of India (GoI).
10. P.V.S. Jagan Mohan and Samir Chopra, *The India–Pakistan Air War of 1965*. New Delhi: Manohar, 2005, p. 62.
11. In an email exchange between Jagan Mohan and Sajjad Haider on 5 March 2015, the PAF veteran shared some illuminating perspectives on the 1965 war.
12. Ibid.
13. Ibid.
14. Fricker, *Battle for Pakistan*, n. 6, p. 42.
15. Jagan Mohan and Chopra, *The India–Pakistan Air War of 1965*, n. 10, p. 55.
16. The 5:1 superiority of the IAF over the PAF, as indicated by him in his book, is a reflection of the exaggerated pro-PAF bias of the book.
17. Jagan Mohan and Chopra, *The India–Pakistan Air War of 1965*, n. 10, pp. 358–59, Appendix G.
18. This version had a fighter-style tandem cockpit as against the British version with India which had the navigator lying on his belly in the nose. The US version had ejection seats for both the pilot and the navigator; in the IAF Canberra, only the pilot had an ejection facility and the navigator had to bail out.
19. A.K. Tiwary, *Indian Air Force in Wars*, New Delhi, Lancer, 2012, p. 119 (table).
20. Interview with Air Marshal Patney, 2 June 2013. Air Marshals Pingale and Gandhi confirmed to the author, in numerous conversations, that there was no such feeling in IAF squadrons.
21. Harbaksh Singh, *War Despatches: Indo-Pak Conflict of 1965*, New Delhi: Lancer International, 1991, p. 22.
22. Jagan Mohan and Chopra, *The India–Pakistan Air War of 1965*, n. 10, pp. 64–66. Also, see Fricker, *Battle for Pakistan*, n. 6, pp. 49–54.
23. The best commentary on the Chhamb battle from a Pakistani perspective comes from Major Agha Humayun Amin (Retd.), ‘Grand Slam—A Battle of Lost Opportunities’, available at <http://www.defencejournal.com/2000/sept/grand-slam.htm>, accessed on 3 January 2015.
24. Email exchange with Group Captain Manna Murdeshwar, *Indo-Pak War*

- 1965—*Reflections of Pathankot Ops*, 29 September 2014. Also, part of email exchange between Sajjad Haider and P.V.S. Jagan Mohan.
25. Ibid.
 26. Jagan Mohan and Chopra, *The India–Pakistan Air War of 1965*, n. 10, p. 95.
 27. Also see Tiwary, *Indian Air Force in Wars*, n. 19, p. 17.
 28. Asghar Khan, *The First Round Indo-Pakistan War 1965*, Ghaziabad: Vikas Publishing House, 1975, p. 20.
 29. Ibid., pp. 21–23.
 30. Interview with Air Marshal A.R. Ghandhi in December 2013. Ghandhi was one of the Hunter pilots of 7 Squadron involved in the dogfights over Halwara on 6 September 1965.
 31. Jagan Mohan and Chopra, *The India–Pakistan Air War of 1965*, n. 10, pp. 108–14.
 32. Khan, *The First Round Indo-Pakistan War 1965*, n. 28, p. 26.
 33. Jagan Mohan and Chopra, *The India–Pakistan Air War of 1965*, n. 10, pp. 116–17.
 34. For a detailed account of the highly exaggerated dogfight over Sargodha in which Squadron Leader Mohammed Alam, the CO of 11 Squadron PAF, claims to have shot down five IAF Hunters, see Fricker, *Battle for Pakistan*, n. 6, pp. 11–20. Over the years, the claim has been watered down to a more plausible two Hunters, after extensive interviews and corroboration with IAF pilots.
 35. For a detailed chapter on the limited operations in Rajasthan/Sind sector, called Operation Barrel by India, see Prasad and Thapliyal, *The India–Pakistan War of 1965*, n. 9, pp. 223–38.
 36. Shobhan Saxena, ‘War and Grief’, *The Times of India*, 21 August 2011.
 37. Ibid.
 38. Jagan Mohan and Chopra, *The India–Pakistan Air War of 1965*, n. 10, p. 178.
 39. For a detailed description of the dogfight, see Ibid., pp. 180–90. Also, see Prasad and Thapliyal, *The India–Pakistan War of 1965*, n. 9, p. 251.
 40. Tiwary, *Indian Air Force in Wars*, n. 19, p. 127.
 41. Attrition rate is the number of aircraft lost per 100 sorties and is arrived at by multiplying the number of aircraft lost by 100 and dividing the product by the number of sorties flown. Based on reasonably accurate statistics, Jasjit Singh, India’s foremost air power historian and strategist, puts the attrition rates for the IAF and PAF at 1.50 and 1.82, respectively.

