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Swing Wing Heroes of the Himalayas: Story of the MiG-23s and MiG-27s Defending the Northern Borders of India

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Caption: *A pair of MiG-23BNs flying over the Himalayas*
Source: Polly Singh's personal collection

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Background

The Himalayas, Earth's tallest mountain range, hold strategic importance in South Asian history and geopolitics. It has served as a natural boundary between the Indian subcontinent and the Central Asian region and was also part of the Silk Route. During the colonial era, it became a focal point of boundary politics in the 'Great Game'. The complexity and significance of the princely state of Kashmir drastically increased with India's independence and the partition of India in 1947.[1, 2]

Kashmir, a princely state with a Muslim majority and a Hindu ruler, Maharaja Hari Singh, sought to remain independent but had to face the Pakistani tribal militias a few weeks after independence in 1947 as Pakistan sought to annex Jammu and Kashmir.. This led to India's involvement and, eventually, a UN-moderated ceasefire, resulting in divided control. Since then, Pakistan has used the Kashmir 'debacle' to challenge India's sovereignty through various conflicts and guerrilla tactics. After the 1971 war, Pakistan shifted to covert warfare and attempted to claim territory through illegal means, as its political and military leadership realised that the country could not fight India in conventional, symmetric warfare.[3, 4]

The Need for a Tactical Close Air Support Aircraft (TASA)

Close Air Support (CAS) is a type of mission, where designated aircraft are to fly low and close to the battlefield, delivering immediate and precise airstrikes against enemy assets such as tanks, armoured vehicles, and fortified positions that are located in close proximity to one's own friendly ground forces.[5, 6] The aircraft that perform CAS missions thrive over flat, open terrains, where their ability to swoop in, target enemy forces, and deliver devastating payloads makes them invaluable to friendly ground forces engaged in battle. India, with its unique and diverse geography, presents a formidable challenge for operating military aircraft. The country's northern and eastern borders are dominated by the formidable Himalayas, while the western expanses stretch across the flat Indo-Gangetic plains of Punjab, extending to the Thar Desert in Rajasthan and the Kachchh-Saurashtra region. The eastern boundaries are dense with the Sundarban tropical forests, whilst the South features a vast peninsular region, with an archipelago situated across both the Arabian Sea and the Bay of Bengal. Such is the diversity of the Indian climate and landscape that has to be protected by the IAF. While the deserts and flat terrain of the West are well-suited for CAS aircraft to provide ground support, the unforgiving heights of the Himalayas require robust and versatile aircraft and crew capable of operating in near-impossible conditions. Needless to say, Pakistan chose this as a suitable playground to implement its asymmetric warfare strategy against India.

Immediate lessons from the 1971 war against Pakistan suggested that India had to replace its ageing fleet of tactical strike aircraft, such as the Dassault Mystère IV, the HAL HF-24 Marut and the Sukhoi Su-7BMK. So, the search for a new Tactical Air Support Aircraft (TASA) was launched. In lieu of these requirements, the Soviet Mikoyan Gurevich MiG-23BN and the Anglo-French SEPECAT Jaguar were selected as the best-suited replacements for the aforementioned platforms.[7] The first of the RAF-leased Jaguars entered service with the IAF in 1979, and the first airframes built for India entered service in 1981. The IAF originally converted 5 units on the Jaguar, followed by a sixth one reraised with the type in 2008. On 1 January 1981, the first unit, No. 10 Squadron (sqn) 'Winged Daggers', converted from the HF-24 Marut to the MiG-23BN. The next units in line were No. 220 Squadron 'Desert Tigers' (23 August 1981), No. 221 Squadron 'Valiants' (February 1982), and No. 31 Squadron 'Lions' (22 April 1983).[8, 9, 10, 11]

A Battle for Air Superiority

By the late 1970s, the Indian Air Force (IAF) had a significant advantage over the Pakistani Air Force (PAF) in terms of strike capability. During that period, Pakistan was developing a nuclear reactor at Kahuta, known as the Khan Research Laboratories, which would become a high-value target for the IAF in case of a potential war. It was no surprise that the reactor was being used to manufacture nuclear weapons to be used against India if the need arose. The then Chief of Air Staff of the PAF, Air Chief Marshal M Anwar Shamim, told the then dictator General Zia-ul-Haq that Indian aircraft could reach Kahuta in three minutes, whereas the PAF would take eight minutes to respond, allowing the Indians to attack the facility and return even before the PAF could intercept them.[12, 13]

This deficit, along with the impending Soviet invasion of Afghanistan, enabled Pakistan to procure state-of-the-art F-16A Fighting Falcons from the USA in December 1981, with the first aircraft arriving in Pakistan on 15th January, 1983.[14] The purchase occurred at such an odd time that India was caught off guard. The IAF's planned preemptive response by procuring the Mirage 2000H and the Mikoyan MiG-29B (*Izdeliye 9.12*) to stay a step ahead of the PAF had to be reconsidered, as the first aircraft did not arrive until 1985 and 1987 respectively.[15, 16] For the time being, at least, the F-16 was more advanced than India's best interceptor at the time, the MiG-21 Bis.

This caused India to look for an interim aircraft to fill the gap, leading to an approach to the Soviet Union for the purchase of their available interceptor, the MiG-23MF. The MiG-23MF had one significant advantage over the Pakistani F-16s: The MiG-23MF could carry a radar-guided air-to-air missile (R-23R) as well as a thermal infrared homing missile (R-23T), whereas the Pakistani F-16 could only carry an IR Missile (AIM-9L Sidewinder), despite having a radar. Two squadrons were

procured from the USSR and raised as No. 223 Squadron 'First Swing Wing Interceptors' (10 May 1982) and No. 224 Squadron 'Warlords' (4 July 1983).[17, 18]

Hot Skies Over the Himalayas

As tensions simmered in the Siachen region by April 1984, a decision was taken to deploy fighter aircraft to the Leh airfield as a show of deterrent force. It was a murky task, as the atmosphere was cold and rarified, the landing zone was uneven, and the river Indus was flowing right at one end of the runway! No. 221 Squadron was earmarked to carry out this task, and the then Squadron Leader (later Air Marshal) Avinash Deodata Joshi was chosen for this mission. The Valiants, at that time, were posted at Pathankot, with their main role being to fly strike missions over the plains. A landing at Leh, which was situated high up in the Himalayas, slightly more than 3000 m above sea level, was an unforeseen requirement. Moreover, the test pilots themselves doubted the success of this task.[19, 20]

A small detachment of three MiG-23 BNs, led by Squadron Leader (Sqn Ldr) Joshi, was redeployed to Halwara, where modifications were made to the aircraft. The detachment was then moved to Awantipora, where further modifications were carried out. On the morning of May 23, 1984, a four-aircraft formation took off from Awantipora and headed towards Leh. The formation consisted of Sqn Ldr Joshi (flying a/c number SM-245), another MiG-23BN and two other MiG-23MF as escorts. As they approached Leh, the escorts and the second MiG-23BN peeled off, leaving Sqn Ldr Joshi to perform the landing.

Image Caption: *Sqn Ldr A.D. Joshi standing by MiG-23BN SM-245 at Leh.*

Image Credits: ***Air Marshal A.d. Joshi's Personal Collection, retrieved via www.BharatRakshak.com***

The MiG-23BN's KM-1 requires the aircraft to be flying at least over 130 kmph and at an altitude of 30 metres, which is the prescribed minimum parameters for initiating for a safe ejection.[21, 22] Ejecting from an aircraft under ideal circumstances itself is a very dangerous exercise, as it subjects the pilot's body to an extremely high G force of the order of 20 G, which could cause spinal compression and fractures, and may lead to injuries if not executed properly.. Once ejected, the pilot has to parachute down safely, make a proper landing, and be located by Search and Rescue (SAR) parties for extraction. There have been instances where pilots have ejected safely under ideal conditions over flat terrain but experienced rough landings, causing significant damage to their bodies. Now imagine ejecting over a mountainous region, where the terrain is rugged, temperatures plunge to minus degrees Celsius, with raging winds. Even if the pilot did eject safely, the cold weather and harsh wilderness would make rescue almost impossible. Being rescued is one thing, but mere survival under those circumstances is nothing short of a miracle!

Despite all these inherent threats, Sqn Ldr A D Joshi would go on to safely land his aircraft at Leh, displaying exemplary courage and skills in going beyond the limits of both machine and men. The next day, on May 24, 1984, MiG-23MF from No. 223 sqn, flown by its Commanding Officer (CO) and Flight Commander (Flt Cdr), Wing Commander (Wg Cdr) IJS Boparai and Sqn Ldr PS Guram respectively, also landed at Leh.[23] This exercise was more than enough to show the Pakistanis that the IAF was certain to defend its motherland, come what may.

Two Airfields Are Better Than One

By the year 1994, the MiG-23BNs and MiG-23MFs were regularly operating from the Leh airfield. However, as per Standard Operating Procedures (SOP), operational aircraft need to have a diversionary airfield in case the main airfield becomes inoperable due to some reason.. Up until that time, the two diversionary airfields for Leh were Srinagar and Adampur, which were 30 minutes away by flight. However, there was another airfield untested for fighter aircraft deployment, much closer to Leh: the Thoise Advanced Landing Ground. Thoise was used as an Advanced Landing Ground (ALG) to operate transport aircraft up until that time, but no fighters had ever operated out of that airfield.

This factor was taken into cognisance by the then Wing Commander Pradeep Kinra, the Commanding Officer of No. 224 Squadron. He proposed the idea of utilising Thoise for fighter operations. Finally, clearance was provided for such trials, and on October 28, 1995, Wg Cdr Kinra (flying MiG-23MF SK412) and the squadron's Senior Flight Commander at the time, Sqn Ldr Ganesh Chand (flying SK435), took off from Adampur and successfully landed at Thoise. Not only did they achieve a significant milestone for the IAF by making another airfield operational near Siachen, but they also certainly raised some eyebrows across the western border. The activation of Thoise as a

fighter operable base meant that IAF's interceptors and patrol aircraft now had a longer loiter time, which also meant that they could stay for much longer durations on their missions.[24, 25]

In November 1998, the MiG-29B and the MiG-27ML were deployed to be tested from Leh, however, only the MiG-29B could be operated from that altitude. The MiG-27 could not be operated due to technical issues during its operational setup.[26]

Operation Safed Sagar

In 1984, only landings and takeoffs were carried out from Leh, but a more deadly threat emerged by the summer of 1999. The Pakistani Army had deployed its regular units to infiltrate and occupy the empty summer posts of the Indian Army. The Pakistanis were well placed logistically and well dug in, and the Indian Army could not fight them by itself, so air power had to be introduced. By mid-May 1999, as news began to trickle down the command chain, detachments from various squadrons were routed to Srinagar. A six-aircraft detachment from No. 9 Squadron 'Wolfpack' (MiG-27ML) and No. 221 Squadron 'Valiants' (MiG-23BN) was ordered to take part in what would be known as 'Operation Safed Sagar'. On the morning of May 26, 1999, the skies over the Western Himalayas lit up and reverberated with hot lead as the IAF fired its guns, rockets and bombs in anger almost 28 years after they had last done so.[27]

Just as things seemed to be going right, on May 27, 1999, a MiG-27ML, flown by then Flight Lieutenant K Nachiketa Rao, was lost due to an engine flameout. Despite a relight attempt, the engine failed to start, and Nachiketa had to eject. Nachiketa was part of a four-aircraft strike mission, with the other three pilots being Flt Lt Anupam Banerjee, Sqn Ldr Ashwini Mandokhot and Flt Lt Bhupender Khatana.[28, 29] A MiG-21MF from No. 17 Squadron 'Golden Arrows', flown by Squadron Leader Ajay Ahuja, reached the scene to locate the downed pilot. He relayed as much information as he could and tried to vector SAR helicopters to the vicinity. However, fatefully, his luck ran out when his aircraft was hit by a shoulder-launched Anza-II Surface-to-Air Missile, bringing it down. Sqn Ldr Ahuja managed to eject, but unlike Nachiketa, who would be repatriated to India weeks later, was cold-bloodedly shot and killed. He was posthumously awarded the *Vir Chakra* for his gallantry.[30]

With the loss of the three aircraft (including the Mil Mi-17 that was downed the following day), there had to be a reassessment of strategies. The Valiants were at the forefront of devising newer tactics that enabled air operations to be conducted with more accuracy, keeping in mind the changing dynamics on the battlefield. They even went on to undertake daring night bombing missions. The MiG-23BNs and MiG-27s made vital contributions towards softening high-value targets in the areas of Muntho Dhalo, Batalik, Drass, Kargil and Mashkoh.[31, 32]

Conclusion

The MiG-23 and MiG-27, often overshadowed by more prominent aircraft in the Indian Air Force's arsenal, have nonetheless carved a distinguished place in India's military aviation history. From their induction as tactical air support aircraft and the MiG-23MF as a stopgap interceptor aircraft, these 'Floggers' (as NATO designates them) proved their versatility and resilience even when challenged with responsibilities they weren't designed to undertake. They demonstrated that even machines designed for a specific role could be adapted to face the toughest environments with the right leadership, innovation, and determination.

The daring missions undertaken during Siachen operations in 1984, followed by their critical contributions during Operation Safed Sagar, showcased the strategic importance of the MiG-23 and MiG-27. Despite the inherent risks of flying in such treacherous conditions, the pilots of the Indian Air Force overcame all odds, proving that they are more than capable of handling any and all challenges posed against them.

While newer technologies and aircraft have since replaced the MiG-23s and MiG-27s, their legacy endures. Their service in some of the most difficult theatres of war is a testament to the adaptability of the Indian Air Force and the indomitable spirit of its pilots and ground crew. These aircraft went on to play a vital role in securing India's borders and ensuring its sovereignty in times of conflict. Their history will remain etched as a proud chapter in the annals of India's air warfare chronicles.

Notes:

[1] Maxwell, Neville, *India's China War* (London: Jonathan Cape, and New York: Pantheon Books, Random House, 1970), Chapter 1, ISBN-10: 0394470516.

[2] Shankar, Ajai, "Trade Routes in Himalayan India", *UNESCO Silk Roads Programme*, UNESCO, https://en.unesco.org/silkroad/knowledge-bank/trade-routes-himalayan-india. Accessed on October 03, 2024.

[3] Das, Taraknath, "The Kashmir Issue and the United Nations", *Political Science Quarterly*, vol. 65, no. 2, 1950, pp. 264-82, https://doi.org/10.2307/2145524. Accessed on October 03, 2024.

[4] Naseer, N, Khan, M F, and Raza, A, "A comparative view of India and Pakistan's defence capabilities: Historical evolution and future trends", *Asian Journal of Comparative Politics*, 2022, vol. 8(1), pp. 214-227. https://doi.org/10.1177/20578911221124384.

[5] "Top 10 Close Air Support Aircraft", *Hush-Kit*, November 26, 2019, https://hushkit.net/2019/11/26/top-10-close-air-support-aircraft/. Accessed on October 04, 2024.

[6] US Air Force, "Close Air Support (CAS) Fundamentals", U.S. Air Force Doctrine Publication 3-03, October 21, 2020, https://www.doctrine.af.mil/Portals/61/documents/AFDP_3-03/3-03-D04-CLFundamentals.pdf. Accessed on October 04, 2024.

[7] Graham, Ian C C, "The Indo-Soviet MIG Deal and Its International Repercussions", *Asian Survey,* vol. 4, no. 5, 1964, pp. 823–32, https://doi.org/10.2307/3023476. Accessed on October 03, 2024.

[8] "No. 10 Squadron", Bharat Rakshak, https://www.bharat-rakshak.com/indianairforce/database/units/list.php?qunit=10+Sqn. Accessed on October 03, 2024.

[9] "No. 221 Squadron", Bharat Rakshak, https://www.bharat-rakshak.com/indianairforce/database/units/list.php?qunit=221+Sqn#google_vignette.

Accessed on October 03, 2024.

[10] "No. 220 Squadron", Bharat Rakshak, https://www.bharat-rakshak.com/indianairforce/database/units/list.php?qunit=220+Sqn. Accessed on October 03, 2024.

[11] "No. 31 Squadron", Bharat Rakshak, https://www.bharat-rakshak.com/indianairforce/database/units/list.php?qunit=31+Sqn#google_vignette. Accessed on October 03, 2024.

[12] Shamim, M Anwar, *Cutting Edge PAF: A Former Air Chief's Reminiscences of a Developing Air Force*, (Vanguard Books, 2011), ISBN 978-969-402-540-7.

[13] RUDNITSKY, ARTEM, "Understanding Nuclear Pakistan: Global, Regional And Domestic Dimensions", *World Affairs: The Journal of International Issues*, vol. 9, no. 3, 2005, pp. 46–57, https://www.jstor.org/stable/48577748. Accessed on October 04, 2024.

[14] F-16 Users", F-16.net, https://www.f-16.net/f-16_users_article14.html. Accessed on October 04, 2024.

[15] "No. 7 Squadron", Bharat Rakshak, https://www.bharat-rakshak.com/indianairforce/database/units/7+Sqn. Accessed on October 05, 2024.

[16] "No. 28 Squadron", Bharat Rakshak, https://www.bharat-rakshak.com/indianairforce/database/units/28+Sqn. Accessed on October 05, 2024.

[17] "No. 223 Squadron", Bharat Rakshak, https://www.bharat-rakshak.com/indianairforce/database/units/223+Sqn. Accessed on October 04, 2024.

[18] "No. 224 Squadron", Bharat Rakshak, https://www.bharat-rakshak.com/indianairforce/database/units/224+Sqn. Accessed on October 04, 2024.

[19] Nair, Pavan, "The Siachen War: Twenty-Five Years O", *Economic and Political Weekly*, vol. 44, no. 11, 2009, pp. 35–40, http://www.jstor.org/stable/40278612. Accessed on October 03, 2024.

[20] "MiG-23BN in Leh", Bharat Rakshak, December 10, 2017, https://www.bharat-rakshak.com/iaf/history/siachen/mig23bn-leh/. Accessed on October 04, 2024.

[21] Ibid.

[22] "SOV Mikojan-Gurevič KM-1/KM-1M", Armed Conflicts, https://www.armedconflicts.com/SOV-Mikojan-Gurevic-KM-1-KM-1M-t48616. Accessed on October 04, 2024.

[23] "High-Flying Heroes: The Pioneers of Fighter Landings at Leh Airbase", IAF History, February 19, 2022, https://iafhistory.in/2022/02/19/high-flying-heroes-the-pioneers-of-fighter-landings-at-leh-airbase/#:~:text=The%20next%20day%20on%2024,gun%20and%20landed%20at%20Leh. Accessed on October 03, 2024.

[24] Bharat Rakshak, n. 18.

[25] Written on the basis of facts provided by a personal telephonic conversation with Group Captain Pradeep Kinra (Retd) on October 05, 2024.

[26] IAF History, n. 23.

[27] "Order of Battle - Kargil War 1999", Bharat Rakshak, October 15, 2009, https://www.bharat-rakshak.com/iaf/history/kargil/orbat/. Accessed on October 05, 2024

[28] "Engine Flame-Out - Nachiketa's Capture", Bharat Rakshak, October 15, 2009, https://www.bharat-rakshak.com/iaf/history/kargil/engine-flame-out-nachiketa/. Accessed on October 05, 2024.

[29] "Kargil War: 25 Years After Sqn Ldr Ahuja Was Killed, Commander Says 'Wanted to Call Him Back'", *The Tribune India*, May 28, 2024, https://www.tribuneindia.com/news/india/kargil-war-25-years-after-sqn-ldr-ahuja-was-killed-commander-says-wanted-to-call-him-back-625434. Accessed on October 05, 2024.

[30] "Golden Arrows", Bharat Rakshak, July 13, 2015, https://www.bharat-rakshak.com/iaf/history/kargil/golden-arrows/. Accessed on October 04, 2024.

[31] Written on the basis of excerpts and facts from the interview with Air Commodore Ashit Ishwarlal Mehta (Retd).

[32] Based on entries made in the personal log book of Air Commodore Mehta for the months of June and July of 1999.