INDIA'S STRATEGIC AIRLIFT CAPABILITY: IMPLICATIONS FOR PAKISTAN'S SECURITY CALCULUS

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ABSTRACT

Strategic airlift constitutes a core component of modern military logistics and power projection, enabling states to deploy forces rapidly, sustain operations across distant theatres, and shape regional deterrence postures. This paper critically examines India's strategic airlift capabilities, analysing its doctrinal imperatives, fleet composition, operational constraints, and regional ambitions. It argues that while India has made significant strides, its airlift potential is undermined by logistical vulnerabilities, limited indigenous production capacity, and overstretched commitments across a volatile periphery. The paper assesses the implications of these dynamics for Pakistan's defence calculus, positing that Pakistan need not pursue parity in scale but rather strategic sufficiency through mobility optimisation, asymmetric deterrence, and targeted investment in flexible response capabilities. Ultimately, the paper underscores that in a contested South Asian security landscape, the contest over airlift is not merely about platforms, but about posture, adaptability, and strategic coherence.

Keywords: Strategic Airlift, Air Mobility, Power Projection, Rapid Deployment, Operational Reach

TABLE OF CONTENTS

1. Introduction

As with every military power, strategic airlift capability is essential for the projection of force, crisis response, and sustaining operations beyond borders.[1] It provides speed and efficiency in the transportation of personnel, equipment, and supplies, and is vital in time-sensitive situations. In the current volatile and uncertain geopolitical climate, having a well-defined airlift strategy is crucial to maintain strategic agility, operational readiness, and to respond proactively to military and non-combat operations. For countries like India and Pakistan, locked in a complex strategic rivalry, air mobility is not just a logistical function but a measure of strategic depth, readiness, and regional influence.

India, via the acquisition of advanced platforms such as C-17 Globemaster III and C130J Super Hercules, has improved its strategic airlift capabilities substantially in the last couple of years.[2] These assets are part of India's expanding military capabilities to enable Indian power projection to, and sustain operations throughout, the Indian Ocean Region and beyond, fortifying her ambitions as a regional and later on global security provider.[3] Along with partnerships, primarily with the United States, India's emerging airlift capabilities will support its dominant military strategy of rapid deployment, extendable logistical capabilities, and regional influence. However, despite these acquisitions and partnerships, India's strategic airlift capability remains constrained by several critical shortcomings. These include an

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[1] Cezar Vasilescu, *Strategic Airlift Capability: From Theory to Practice* (Regional Department of Defense Resources Management Studies, October 2011), https://www.researchgate.net/publication/256228999_STRATEGIC_AIRLIFT_CAPABILITY_FROM_THEORY_TO_PRACTICE.

[2] "IAF's Strategic Move: Acquiring Additional C-17 Globemaster III Aircraft to Replace Aging Il-76 Fleet," *The Defense News*, February 5, 2025, https://www.thedefensenews.com/news-details/IAFs-Strategic-Move-Acquiring-Additional-C-17-Globemaster-III-Aircraft-to-Replace-Aging-Il-76-Fleet/.

[3] Danvir Singh, "Strategic Airlift Capability for India," *Indian Defence Review*, August 21, 2015, https://indiandefencereview.com/strategic-airlift-capability-for-india/.

insufficient and aging fleet, persistent maintenance and logistical challenges, reliance on foreign suppliers, underdeveloped infrastructure in forward areas, limited integration across military branches, etc.

For Pakistan, this shift presents both strategic concerns and areas for reflection. While Pakistan may not match India in terms of airlift fleet size or diversity, it has built a credible and mission-focused air mobility framework. Pakistan's airlift operations are shaped by real-time security needs — whether it is counterinsurgency in the northwest, support to disaster hit regions, or rapid deployment of troops along key frontlines. The emphasis has been on reliability, operational experience, and efficient use of available resources rather than technological superiority alone.

1.1. Hypothesis

This paper argues that despite India's advancements in strategic airlift capacity, Pakistan's emphasis on reliability, operational efficiency, and contextual force posture provides a viable counterbalance. It explores how Pakistan can leverage these strengths to mitigate India's growing regional airlift advantage.

1.2. Research Questions

This paper investigates two key questions: First, to what extent do India's current strategic airlift capabilities, infrastructural limitations, and inter-service integration challenges constrain its ability to project sustained military power across multiple theatres. Second, how can Pakistan leverage and optimise its existing strategic air mobility and force posture to effectively counterbalance India's expanding airlift capabilities and maintain regional operational parity.

1.3. Methodology

Using a comparative and qualitative approach, this paper draws on journal articles, defence publications, and policy reports to provide a balanced perspective. The goal is not only to assess capabilities on both sides, but also to highlight how Pakistan can strengthen its strategic lift posture through realistic planning and regional understanding.

2. Literature Review

The scholarly discourse on India's strategic airlift capabilities has evolved through various phases, reflecting technological advancements, doctrinal shifts, and regional security dynamics.

In his seminal work, Masood Ur Rehman Khattak delves into India's military modernization, highlighting the acquisition of advanced transport aircraft like the Boeing C-17 Globemaster III and Lockheed Martin C-130J Super Hercules.[4] These additions, according to Khattak, significantly enhance India's ability to project power and conduct rapid deployments, thereby altering the strategic balance in South Asia.[5] He emphasises that such capabilities enable India to operationalise doctrines like "Cold Start," which could undermine Pakistan's conventional deterrence.

Nadir Ali provides a nuanced perspective by examining the geographical positioning of Indian airbases and their proximity to Pakistan's borders. He argues that the strategic placement of these bases facilitates swift air operations, potentially compromising Pakistan's defence posture. Ali suggests that Pakistan's limited

[4] Masood Ur Rehman Khattak, "India's Military Modernisation: Implications for Pakistan," *Strategic Studies* 40, no. 1 (2020): 20–40, https://doi.org/10.53532/ss.039.01.00117.

[5] Khattak, "India's Military Modernisation,"

strategic depth exacerbates its vulnerability to India's enhanced airlift and airstrike capabilities.[6]

Ghazala Yasmin Jalil extends the discussion by exploring India's broader military modernization efforts, including advancements in naval and nuclear capabilities. She posits that India's development of a nuclear triad and blue-water navy contributes to a comprehensive power projection strategy, which, when combined with its airlift capabilities, poses a multifaceted challenge to Pakistan's security.[7]

Syed Sabir Muhammad examines India's indigenisation and modernisation of defence and military technology, emphasising the strategic ramifications for Pakistan. He notes that India's growing capabilities in various domains, including airlift, enhance its military flexibility and responsiveness, potentially altering regional power dynamics.[8] Additionally, Swaim Prakash Singh analyses India's response strategy to China-Pakistan collusively, highlighting the role of strategic airlift in enhancing India's military preparedness. He argues that India's ability to rapidly mobilize forces through airlift capabilities strengthens its deterrence posture and complicates Pakistan's security calculations.[9]

Contemporary analyses, such as those by Saeed Shah and Shivam Patel, assess the operational use of India's strategic airlift assets in recent conflicts. They

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[6] Nadir Ali, "Indian Conventional and Strategic Arms Buildup: Implications for Pakistan," *Modern Diplomacy*, March 18, 2023, https://moderndiplomacy.eu/2023/03/18/indian-conventional-and-strategic-arms-buildup-implications-for-pakistan/.

[7] Ghazala Yasmin Jalil, "India's Development of Sea-based Nuclear Capabilities: Implications for Pakistan," *Strategic Studies* 41, no. 2 (2021): 50–65, https://doi.org/10.53532/ss.038.01.00160.

[8] Syed Sabir Muhammad, "India's Indigenization and Modernization of Defence and Military Technology: Strategic Ramifications for Pakistan," *Global International Relations Review* 3, no. 1 (2018): 1–17, https://www.researchgate.net/publication/353238435.

[9] Swaim Prakash Singh, "India's Response Strategy to China-Pakistan Collusivity," *Centre for Air Power Studies*, October 2023, https://capsindia.org/wp-content/uploads/2023/10/Ch-3-Swaim-Prakash-Singh.pdf.

note that India's ability to rapidly mobilize forces and deliver humanitarian aid underscores the dual-use nature of these capabilities, which can be leveraged for both military and diplomatic purposes.[10]

2.1. Gap in Existing Literature

While much of the literature focuses on the operational aspects of India's strategic airlift capabilities, there is limited research on how these capabilities influence Pakistan's evolving military doctrine. A gap exists in analysing how India's ability to quickly mobilize forces via strategic airlift changes Pakistan's perceptions of deterrence, particularly in terms of its conventional forces. Further research could examine how Pakistan adapts its military strategies, including force posture and readiness, in response to India's capabilities.

3. Air Mobility in Contemporary Conflict: Strategic and Tactical Airlift

Airlift forces, the linchpin of conventional national military strategy, form the backbone of deterrence in the contemporary era.[11] There are an essential component in the military triad of projection capability, and are tasked to deliver combat forces as close to their area of operation as possible in the early stages of the conflict.[12] Therefore, Airlift capability represents "the total capacity expressed in

[10] Saeed Shah and Shivam Patel, "India-Pakistan Conflict Escalates," *Reuters*, May 9, 2025, https://www.reuters.com/world/india/india-pakistan-conflict-escalates-2025-05-09/.

[11] Charles E. Miller, *Airlift Doctrine* (PN, 1988).

[12] Miller, *Airlift Doctrine*.

terms of number of passengers and/or weight/ cubic displacement of cargo that can be carried at any one time to a given destination by available airlift".[13]

There are two distinct types of airlift: strategic and tactical airlift. The former involves transporting material, weapon systems, and armed forces from one theatre of operation to another.[14] On the other hand, tactical airlift focuses on deploying resources and materiel from one location to another within a theatre, with a high degree of precision, for reinforcement or logistical support.[15] Some of the examples of current large-scale strategic airlifters include Airbus A400M Atlas, Beoing C-17 Globemaster III, Lockheed C-5 Galaxy, and Xi'an Y-20. Nevertheless, due to high cost and impracticality associated with transporting such a substantial mechanised force, such as main battle tanks via air, states are now investing in lighter armoured fighting vehicles.[16] To this end, preliminary research is also being carried out into alternative airlift technologies, such as ground effect vehicles and airships.

4. India's Strategic Airlift Doctrine in a Regional Context

India's rationale to acquire strategic airlift capability emanates from its extensive land area and its ambitions to project regional power. India possess vast geographical depth, spanning from Himalayan frontiers down to the southern peninsula. Therefore, New Delhi must maintain the capability to rapidly deploy forces across different terrains, ranging from highland frontiers to island territories.[17] These

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[13] U.S. Department of Defense, *Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: Joint Chiefs of Staff, March 2017), https://www.tradoc.army.mil/wp-content/uploads/2020/10/AD1029823-DOD-Dictionary-of-Military-and-Associated-Terms-2017.pdf.

[14] Vasilescu, *Strategic Airlift Capability*, 2011.

[15] ibid

[16] Gordon Arthur, "MBT 2.0: Heavy Armour Evolution," *Global Defence Technology*, no. 150 (December 2024), https://defence.nridigital.com/global_defence_technology_dec24/mbt_heavy_armour_evolution

[17] Jasjit Singh, "Strategic Reach-Strategic Depth and the Question of the IAF's Strategic Posture," *Air Power Journal* 2, no. 2 (April–June 2007): 11–21, https://capsindia.org/wp-content/uploads/2022/10/Jasjit-Singh.pdf.

extensive logistical needs coupled with Indian aspiration of power projection in the Indian Ocean Region (IOR) and beyond, calls for a heavy-lift aircraft fleet.[18]

Another important factor for India is it 3,488 km long disputed border with China.[19] This border is stretched across high-altitude and logistically difficult regions, such as Ladakh and Arunachal Pradesh. During Sino-Indian Galwan Valley clashes in 2020, latter's vulnerabilities were exposed in reinforcing forward-deployed troops.[20] On the other hand, China possesses significant infrastructure alongside its border, ranging from high-speed rail and road networks, and forward airbases in Tibet. Therefore, India's strategic airlift capability aims to bridge state's mobilisation gap vis-à-vis China, and develop a mechanism to compensate for Beijing's superior surface infrastructure.

On the other hand, Pakistan faces a completely different operational reality. The country lacks strategic depth, primarily along its Eastern border. While this entails substantial danger during a conventional war[21], it also means that Pakistan Army does not require long-range airlift capability to relocate its military assets and troops to far off battlefield lines or distant frontiers. Therefore, in such scenarios, Pakistan's limited spatial expanse allows quicker mobilisation of forces, reducing the need for large-scale air support for internal deployment.[22]

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[18] Aman Nautiyal and S. K. Gadeock, "Strategic Planning and Management of India's Defence and Economic Presence in the Indian Ocean Region," *Journal of Information Systems Engineering & Management* 10, no. 10s (February 2025): 636–48, https://doi.org/10.52783/jisem.v10i10s.1450.

[19] International Crisis Group, *Thin Ice in the Himalayas: Handling the India-China Border Dispute*, Asia Report No. 334, November 14, 2023, https://www.crisisgroup.org/sites/default/files/2023-11/334-thin-ice-himalayas.pdf.

[20] International Crisis Group, *Thin Ice in the Himalayas*, 2023.

[21] Nadir Ali, "Indian Conventional and Strategic Arms Buildup: Implications for Pakistan," *Modern Diplomacy*, March 18, 2023, https://moderndiplomacy.eu/2023/03/18/indian-conventional-and-strategic-arms-buildup-implications-for-pakistan/.

[22] Meenakshi Sood, "Pakistan's (Non-Nuclear) Plan to Counter 'Cold Start'," *The Diplomat*, March 25, 2017, https://thediplomat.com/2017/03/pakistans-non-nuclear-plan-to-counter-cold-start/.

5. Strategic Airlift as a Force Multiplier for the Cold Start Doctrine: Doctrinal Synergy and Operational Vulnerabilities

India's development of strategic airlift capabilities must be viewed within the broader context of its evolving military doctrines. The introduction of the Cold Start Doctrine (CSD) in the early 2000s marked a fundamental shift in India's operational thinking. Designed to reduce mobilisation time and enable swift, limited incursions into Pakistani territory before international pressure could mount, CSD emphasised the reconfiguration of holding formations into entities capable of launching immediate offensive operations. This demanded the ability to rapidly reposition integrated battle groups (IBGs) along the border, a requirement that placed unprecedented emphasis on strategic mobility.[23] The goal was to move quickly, penetrate Pakistani defences, but avoid crossing the nuclear threshold.[24] Despite this, Cold Start remained largely theoretical for over a decade. Two major challenges held it back: delays in force mobilisation and significant logistical hurdles, particularly in swiftly transporting mechanised units and ensuring coordination among widely dispersed formations.

By building strategic airlift into its doctrine, India aimed to achieve two main goals: Temporal dominance and multi-theatre flexibility. This synergy operates at three levels:

- **Rapid Strategic Mobility:** Entire IBGs, or just essential parts like artillery, bridging gear, or armoured units, can be flown from bases in central India to

[23] Sannia Abdullah, "Cold Start in Strategic Calculus," *IPRI Journal* 12, no. 1 (Winter 2012): 1–27, https://ipripak.org/wp-content/uploads/2014/01/art1asanw12.pdf.
[24] Abdullah, "Cold Start in Strategic Calculus."

forward positions in Rajasthan, Punjab, or Jammu within hours instead of days.[25]

- **Vertical Envelopment:** Helicopters like Chinooks and Mi-17s, working with C-130Js, could provide India the ability to launch air assaults and flank attacks. Special Forces and light infantry can target Pakistani command centres or logistics lines.
- **Logistical Continuity in High-Tempo Warfare:** For Cold Start to be politically useful, Indian forces need to keep moving and fighting past the first 72 hours. That means supply lines cannot break down. Airlift reduces reliance on ground convoys, which can easily be attacked or delayed.[26]

However**,** despite these advances, the CSD-airlift nexus introduces a distinct set of vulnerabilities, which stem from the paradoxes of executing limited war under nuclear overhang.

5.1. Strategic Signalling Ambiguity

The mobilisation of large formations via airlift is highly visible—satellite reconnaissance, electronic emissions, and heat signatures are near-impossible to conceal. Such visibility undermines the element of surprise crucial to CSD and risks misinterpretation as full-spectrum mobilisation, triggering Pakistani pre-meditated responses or nuclear signalling.

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[25] Hafeez Ullah Khan and Ijaz Khalid, "Indian Cold Start Doctrine: Pakistan's Policy Response," *Journal of the Research Society of Pakistan* 55, no. 1 (January–June 2018): 325–343, https://pu.edu.pk/images/journal/history/PDF-FILES/24_55_1_18.pdf.

[26] Walter C. Ladwig III, "An Overview and Assessment of the Indian Army's Cold Start Strategy," paper presented at *Cold Start: India's New Strategic Doctrine and its Implications*, Naval Postgraduate School, Monterey, CA, May 29–30, 2008, https://www.walterladwig.com/Articles/Ladwig%2C%20Cold%20Start%20NPS%20Paper.pdf.

5.2. Infrastructure Dependency and Bottlenecks

India's strategic airlift is constrained by fixed logistics nodes, i.e., airbases, forward operating strips, and runways.[27] Pakistan's A2/AD (Anti-Access/Area Denial) capabilities, including long-range artillery, SRBMs, and PAF strike assets, can threaten these logistical hubs.[28] The destruction or degradation of even a few critical nodes (e.g., Phalodi, Jodhpur, or Pathankot) could severely disrupt India's rapid mobilisation timelines.

5.3. Overcentralisation of Lift Assets

C-17s and IL-76s remain limited in number and are tasked across multiple theatres.[29] In a simultaneous escalation with Pakistan and China, India faces the classic "two-front dilemma,"[30] where strategic lift assets may be diluted or prioritised elsewhere. The doctrine's tempo hinges on the assumption of uncontested aerial mobility, an assumption that collapses under sustained interdiction or contested airspace.

5.4. Asymmetrical Counters and Battlefield Transparency

Pakistan, cognisant of regional conventional disparities, has been steadily enhancing its defensive and deterrent capabilities through investments in battlefield transparency (UAVs, satellite ISR), mobile air defence, and evolving retaliatory

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[27] Rajesh Basrur, Ajaya Kumar Das, and Manjeet Singh Pardesi, eds., *India's Military Modernization: Challenges and Prospects* (Oxford: Oxford University Press, 2013), https://academic.oup.com/book/7884.

[28] Samran Ali, "Anti-Access/Area-Denial Strategy for Pakistan Navy: A Work in Progress," *CISS Insight* 9, no. 1 (2022): 33–42, https://journal.ciss.org.pk/index.php/ciss-insight/article/download/201/193/.

[29] Dhiraj Kukreja, "Transporting the IAF into the Future," *SP's Aviation*, no. 10 (2014), https://www.sps-aviation.com/story/?id=1523.

[30] Sushant Singh, "The Challenge of a Two-Front War: India's China-Pakistan Dilemma," *Stimson Center*, April 19, 2021, https://www.stimson.org/2021/the-challenge-of-a-two-front-war-indias-china-pakistan-dilemma/.

doctrines. [31]These efforts reflect a broader aim to maintain strategic balance and deter sudden escalation. In such a scenario, airlifted Indian forces could find themselves operating within contested zones with limited manoeuvre space, particularly if Pakistani units have prepositioned mobile assets or activated area denial strategies in advance.

Therefore, the operational limitations of CSD, including logistical bottlenecks, infrastructure constraints, and the challenges of synchronising joint-force mobilisation, limited its practical implementation. The Indian military recognised that without seamless strategic mobility and integrated ISR capabilities, such a doctrine risked telegraphing intent and offering the adversary time to counter-mobilise. As a result, India transitioned towards a more flexible and layered approach: the Doctrine of Proactive Military Operations. This model, underpinned by the staggered application of military instrument, entails initiating hostilities through selective and rapid use of air power, thereby compelling the adversary into a reactive posture.

6. India's Strategic Airlift Capabilities: Inventory and Operational Experience

India's strategic airlift capability has expanded considerably over the past two decades. While this development is often projected as a marker of its rising military influence in the region, much of it has relied on foreign platforms and partnerships. The Indian Air Force today operates a mix of transport aircraft that range from heavy-lift jets to smaller tactical airlifters, allowing for relatively fast movement of

[31] Rehan Saleem, "Pakistan's New Normal: Dominating Air Power and Nuclear Resolve," *The Think Tank Journal*, May 29, 2025, https://thinktank.pk/2025/05/29/pakistans-new-normal-dominating-air-power-and-nuclear-resolve/.

troops and equipment.[32] But despite the appearance of a robust fleet, several limitations still exist—some acknowledged, others overlooked in public discourse.

The most prominent asset is the American-built C-17 Globemaster III. India purchased 11 of these aircraft in the early 2010s.[33] The C-17 can haul 134 passengers or 170,900 pounds of payload.[34] It can also be configured to carry over 100 paratroopers or para-drop supplies if necessary.[35] They have been described as a game-changer in certain quarters, largely because of their ability to operate from semi-prepared runways. During the 2020 Ladakh standoff, C-17s were used to transport troops and artillery to forward areas in the high Himalayas.[36] While impressive, it is worth noting that such operations also depend heavily on ground logistics, which remain vulnerable in that terrain. India also operates the C-130J Super Hercules, another American platform. These are used mostly for tactical missions and special operations. Their ability to land at high-altitude airfields like Daulat Beg Oldie has been highlighted in the Indian press, but such deployments are relatively few and come with operational risk.[37]

Older Soviet-era aircraft still form a sizeable part of the Indian airlift fleet. The IL-76MDs, known in India as Gajraj, have long served as the backbone of heavy

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[32] Rohan Ramesh, "Linked by Air," *Force Magazine*, accessed June 4, 2025, https://forceindia.net/feature-report/linked-by-air/.

[33] U.S. Air Force, "C-17 Globemaster III," last modified June 18, 2018, https://www.af.mil/About-Us/Fact-Sheets/Display/Article/1529726/c-17-globemaster-iii/.

[34] Rob Russell, "The C-17 Globemaster – True Master of the Globe," *Flightline Weekly*, August 31, 2023, https://www.flightlineweekly.com/post/the-c17-globemaster-true-master-of-the-globe.

[35] Russell, "*The C-17 Globemaster*."

[36] Ashish Dangwal, "4 Years of Galwan Clash: How Indian Navy 'Threatened' Chinese Military on Multiple Fronts to Thwart Hostile PLA," *EurAsian Times*, June 15, 2024, https://www.eurasiantimes.com/4-years-of-galwan-clash-how-indian-navy/.

[37] *India Sentinels*, "In a significant first, Indian Air Force's C-130J Super Hercules makes night landing at Kargil airstrip," January 7, 2024, https://www.indiasentinels.com/air-force/in-a-significant-first-indian-air-forces-c-130j-super-hercules-makes-night-landing-at-kargil-airstrip-6120.

transport, but their availability has declined due to age and maintenance issues.[38] The An-32s are even older but continue to be used extensively, particularly in supplying remote outposts in Ladakh and the Northeast. These platforms, while dependable to a point, reflect the gap between ambition and capacity. Fleet modernisation has been uneven, and dependence on legacy systems persists.[39]

In an effort to fill the medium-lift gap, India signed a deal to procure 56 Airbus C-295s, with the majority to be assembled domestically by Tata.[40] On paper, this looks like a step toward indigenous aerospace capability. However, local assembly is not the same as independent design and production. The C-295s are intended to replace the ageing fleet and offer more flexibility in short-range transport. Still, questions remain about timelines, integration, and whether the new system can match the strategic vision often attached to it.

India has increasingly used its airlift fleet for humanitarian and disaster relief operations.[41] Missions like Operation Rahat (Uttarakhand floods, 2013) and Operation Maitri (Nepal earthquake, 2015) are often cited as examples of operational maturity. During the COVID-19 pandemic, Indian aircraft were also used to deliver medical aid abroad. These instances help shape the image of India as a net security provider, particularly in the Indo-Pacific. But these are politically convenient narratives. In practical terms, India's capacity for sustained, long-range airlift operations remains modest when compared to global benchmarks.

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[38] Atul Chandra, "Heavy Lifters," *Force*, accessed June 4, 2025, https://forceindia.net/cover-story/heavy-lifters/.

[39] Pawan Atri, "IAF to Acquire New Medium Transport Aircraft to Replace Aging Fleet of AN-32s," *Sputnik India*, February 4, 2023, https://sputniknews.in/20230204/iaf-to-acquire-new-medium-transport-aircraft-to-replace-aging-fleet-of-an-32s-753440.html.

[40] Atri, *"IAF to Acquire New Medium Transport Aircraft," Sputnik India*, February 4, 2023.

[41] Shivansh Singh, "Role of Air Power in Humanitarian Assistance and Disaster Relief Operations," *Forum for National Security Studies – Blue Yonder* 1, no. 1 (January–June 2024): 44–57, https://capsindia.org/wp-content/uploads/2024/10/Shivansh-Singh.pdf.

7. Gaps in India's Strategic Airlift Capabilities

While India's strategic airlift capability has evolved and certainly grown in recent years, it is still constrained by a mix of structural, logistical, and industrial limitations. Much of its progress depends on imported platforms and foreign partnerships, which raises questions about sustainability in a high-tempo or multi-front scenario. For regional observers, it is important to distinguish between capability and projection, two things that, in India's case, are not always aligned. Gaps in India's strategic airlift capability are as follows.

First, 11 C-17s and a dwindling fleet of IL-76s are not enough to support large-scale operations across multiple fronts or simultaneous overseas deployments.[42] In high-intensity situations, where fast turnaround and sustained logistics are critical, the shortfall becomes even more pronounced. Availability of aircraft is another concern. Older platforms like the IL-76 and An-32 suffer from low serviceability, often due to outdated systems and difficulty sourcing spare parts. These maintenance issues may not always make headlines, but they directly impact operational readiness.

India's dependence on foreign suppliers is another structural vulnerability. While the diversification of suppliers (from the US and Russia to Airbus) offers some redundancy, India's inability to indigenously manufacture strategic or even heavy tactical transport aircraft leaves it exposed to external political or logistical

[42] Atul Chandra, "Heavy Lifters," Force Magazine, accessed June 4, 2025, https://forceindia.net/cover-story/heavy-lifters/#:~:text=The%20IAF%20will%20soon%20need,(914.4%20m)%20or%20less.

disruptions.[43] The C-295 programme, though significant, addresses only the medium-lift domain[44] and falls short of filling the strategic heavy-lift vacuum left by the absence of an indigenous equivalent to the C-17 or China's Y-20. Given India's ambitions and emerging joint operational doctrines, the absence of a long-term roadmap for an indigenous heavy-lift platform remains a glaring shortfall.

Additionally, India's airfield infrastructure in high-altitude regions, though improving, is still insufficient for the sustained operation of large aircraft in all-weather conditions.[45] Many Advanced Landing Grounds (ALGs) along the Sino-Indian border are either too short or underdeveloped to support heavy airlift during high-tempo operations. Although the Border Roads Organisation (BRO) and the IAF have made progress in reviving and extending airstrips, full logistical networks—warehousing, fuel depots, rapid loading systems—are still a work in progress.[46] This imposes constraints on the tempo and sustainability of airlift missions in forward areas.

Then there is the issue of jointness. India has been talking about integrated theatre commands for a while, but implementation remains uneven. Strategic airlift is still largely viewed through an Air Force lens, rather than as a tri-service asset. Without real-time integration of airlift planning into army and navy operations,

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[43] Strategic Vision Institute, "India's Fighter Jet Dilemma," March 25, 2025, https://thesvi.org/indias-fighter-jet-dilemma/.

[44] Airbus, "Pioneering 'Make in India' in Aerospace with the Airbus C295," November 8, 2024, https://www.airbus.com/en/newsroom/stories/2024-11-pioneering-make-in-india-in-aerospace-with-the-airbus-c295.

[45] Arjun Subramaniam, "Airpower: A Game Changer in an India-China Limited Conflict," *ÆTHER: A Journal of Strategic Airpower & Spacepower*, Vol. 2, No. 4 (Winter 2023), https://www.airuniversity.af.edu/Portals/10/AEtherJournal/Journals/Volume-2_Number-4/Subramaniam.pdf.

[46] Rajeev Chaudhry, "Surging Surface Infrastructure in Border Areas: Necessity as Well as Asset for the Nation," *Centre for Joint Warfare Studies*, April 8, 2024, https://cenjows.in/wp-content/uploads/2024/04/Lt_Gen_Rajeev_Chaudhry_Issue_Brief_April_2024.pdf.

particularly in expeditionary contexts, India risks underutilising its limited resources.[47] The absence of aerial refuelling for transport aircraft adds to the problem. Fighters like the Su-30 can be refuelled in the air, but most transport platforms cannot. This reduces endurance, especially over the Indian Ocean or into Africa, where distances are longer and alternate landing rights are not guaranteed.

8. Pakistan's Countervailing Air Mobility and Security Calculus

India's expanding strategic airlift capabilities inevitably influence the regional security environment and compel Pakistan to continuously reassess its own defence posture. The enhancement of India's rapid deployment and logistical reach increases pressure on Pakistan to maintain operational readiness and strategic flexibility across multiple fronts. It underscores the need for Islamabad to optimise its air mobility and force projection within its resource constraints, focusing on resilience and effective utilisation rather than direct numerical parity. Rather than attempting to mirror India's capabilities, Pakistan's strategic challenge lies in leveraging its strengths in agility, regional knowledge, and integrated force application to sustain deterrence and protect national interests in a complex security landscape.

Pakistan's development of its air mobility and strategic deterrence capacities has not followed a textbook model. It has largely evolved in response to specific regional demands, recurring crises, and the persistent asymmetry in conventional military power with India. Therefore, the Pakistan Air Force (PAF) has pursued a doctrine

[47] Swaim Prakash Singh, "Integrated Theatre Command: Perspective from the Field," *Air Power Journal*, Vol. 17, No. 1 (January–March 2022), https://capsindia.org/wp-content/uploads/2022/07/APJ-Jan-March-2022-Swaim-Prakash-Singh.pdf.

centred on strategic denial, rapid deployment, and hybrid integration of aerial assets, prioritising quality, adaptability, and speed over quantity.

8.1. Strategic Airlift and Operational Flexibility

Central to Pakistan's airlift capabilities is the venerable C-130 Hercules fleet, which has undergone significant modernisation to extend its operational relevance.[48] These upgrades include enhanced avionics for night operations, precision navigation systems, and modular configurations for varied roles including casualty evacuation, Special Forces insertion, and logistics under fire.[49] These aircraft have proven indispensable in rugged and inaccessible regions such as Gilgit-Baltistan, Balochistan, and the tribal districts, where road-based mobility is severely restricted. Complementing the Hercules are the CASA CN-235 tactical airlifter, which provides shorter takeoff and landing capabilities for forward-deployed units. Its utility in bridging the operational gap between strategic lift and helicopter-based mobility makes them vital for time-sensitive deployments and sustained operations near conflict zones or disaster-affected areas.[50]

8.2. Aerial Refuelling and Strategic Adaptation

The IL-78MP Midas aerial refuelling aircraft occupy a critical niche in Pakistan's air mobility ecosystem.[51] Beyond extending the operational radius of frontline combat aircraft like the JF-17, F-16, and Mirage III/V, these platforms serve

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[48] S. Khalil, "Story of Versatility & Innovation – Second to None," May 29, 2024, https://secondtonone.com.pk/2024/05/29/story-of-versatility-innovation/.

[49] Khalil, "Story of Versatility & Innovation – Second to None."

[50] S. Khalil, "No 52 Sqn of PAF Markhors: New Beginnings," *Second To None*, September 22, 2023, https://secondtonone.com.pk/2023/09/22/no-52-sqn-of-paf-markhors-new-beginnings/.

[51] Vasundhara, "Pakistani Air Force Receives First IL-78 Midas Air-to-Air Refueller," *Airforce Technology*, December 22, 2009, https://www.airforce-technology.com/news/news73175-html/.

as logistical nodes capable of transporting personnel and high-value cargo. This dual-use functionality enhances strategic flexibility, enabling the PAF to synchronise offensive and support operations during high-tempo operations. The ability to refuel mid-air also provides a force multiplier effect, allowing for dispersed basing strategies and increasing the survivability and unpredictability of air operations in a contested environment.

8.3. Operational Experience and Institutional Maturity

The PAF's air mobility competencies are underpinned by extensive operational experience gained through both combat and humanitarian missions. The post-9/11 counterinsurgency campaigns in the tribal belt demanded unprecedented levels of logistical coordination, rapid troop movement, and supply chain resilience in mountainous and hostile terrain. Similarly, national emergencies such as the 2005 Kashmir earthquake and 2010 super floods tested and refined the country's airborne logistics and disaster response capabilities.[52] Moreover, the ongoing logistical demands of maintaining forward bases along the Line of Control (LoC) and the Siachen Glacier underscores the strategic necessity of a robust and reliable airlift capability. These experiences have not only hardened operational procedures but also inculcated a culture of adaptability, interoperability, and decentralised execution within Pakistan's air and joint forces.

[52] Zahra Niazi, *Pakistan Air Force: Service to the Nation during Disasters*, CASS, September 7, 2022, https://casstt.com/9020-2/.

9. Recommendations for Pakistan

India’s expansion of strategic airlift capabilities signals a shift towards a more flexible and responsive military posture. For Pakistan, this means revisiting assumptions about how quickly forces can be mobilised and where the windows for action lie. But rather than viewing this solely as a challenge, it is an opportunity to refine Pakistan’s own rapid response and joint operational capacities.

Pakistan’s defence strategy does not rest on matching India’s platforms one-for-one. Instead, it relies on denial and deterrence, supported by strong intelligence and surveillance assets and a well-prepared air force. Going forward, Pakistan could invest more in technologies that improve situational awareness and speed up decision-making. Strengthening coordination between ground, air, and intelligence units will also be critical. The goal should be to remain agile and capable of responding to a wide range of contingencies, from limited engagements to full-scale crises. In this context, the following recommendations are proposed for Pakistan.

9.1. Develop a Network-Centric Air Mobility Command and Control System

Pakistan should invest in a secure, real-time data-link network integrating airborne assets, ground logistics, and command centres to enable dynamic tasking and rapid reallocation of airlift resources. This would allow adaptive responses to Indian airlift deployments, maximising efficiency and survivability under contested environments.

9.2. Develop Advanced Electronic Warfare Suites Targeting Indian Airlift Command and Control Networks

Investment in multi-spectrum electronic warfare (EW) systems capable of jamming and spoofing Indian GPS, SATCOM, and datalink channels is critical. Disrupting India's airlift C2 and ISR networks during mobilization phases can create operational disarray and delay their force deployment timelines.

9.3. Establish Hardened, Camouflaged Forward Operating Airstrips with Rapid Runway Restoration Capability

Pakistan should develop a network of camouflaged, fortified forward airstrips equipped with modular rapid runway repair kits and protective electronic countermeasures. Coupled with mobile air defence units, this approach ensures continuity of airlift operations despite precision strikes on primary bases.

9.4. Invest in Multi-Domain Logistics Synchronization Using AI-Enabled Predictive Analysis

Leverage artificial intelligence and machine learning to predict Indian airlift patterns, optimise Pakistan's own logistic flows, and anticipate vulnerabilities in supply lines, allowing pre-emptive repositioning of forces and materiel.

9.5. Modernize Tactical Airlift with Medium Transport Aircraft Optimised for Austere Environments

Pakistan should prioritise acquiring or upgrading medium-lift transport platforms with enhanced Short Takeoff and Landing (STOL) capabilities and reinforced landing gear. These aircraft must be optimised for high-altitude, rough, and unimproved airstrips typical of Pakistan's border regions, enabling rapid force projection without reliance on vulnerable major airbases.

9.6. Expand and Integrate Multi-Role Aerial Refuelling Assets to Extend Operational Range

Pakistan must enhance its air-to-air refuelling infrastructure by developing versatile tanker capabilities—potentially through multi-role platforms equipped with probe-and-drogue systems—to enable sustained sortie generation for both transport and combat aircraft, thus significantly extending operational reach and tactical flexibility.

10. Conclusion

Strategic airlift is a critical pillar of contemporary military power projection, enabling rapid deployment, force mobility, and logistical sustainability across multiple theatres of operation. For countries like India, with regional ambitions and geographically dispersed security imperatives, the pursuit of advanced airlift capabilities reflects a deliberate effort to close infrastructural gaps, enhance operational reach, and project influence beyond national borders.

However, as this paper has demonstrated, India's strategic airlift evolution, while noteworthy, remains constrained by critical operational and structural deficiencies: an ageing and numerically insufficient fleet, logistical fragility in forward areas, over-

reliance on foreign platforms, and a lack of true indigenous capacity for heavy air mobility. These factors dilute the credibility of India's long-range power projection, particularly in scenarios demanding sustained, multi-front engagement.

For Pakistan, matching India's fleet in scale or technology is neither feasible nor necessary. Instead, Pakistan's comparative advantage lies in agility, operational realism, and an economy of force model grounded in real-time threat environments. Moreover, Pakistan's compact geography, coupled with a focused defensive doctrine, enables faster internal troop mobilisation — a strategic asset that offsets the absence of heavy-lift platforms.

In conclusion, while India's pursuit of strategic airlift underscores its regional aspirations, its current limitations offer Pakistan both a cautionary tale and a strategic breathing space. By enhancing its own niche capabilities and integrating air mobility with broader deterrence strategies, Pakistan can maintain credible regional parity — not through imitation, but through innovation, adaptability, and an acute understanding of its unique operational context.

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