

INDIAN AIR POWER: ITS IMPACT IN INDIA'S STRATEGIC NEIGHBOURHOOD

MANMOHAN BAHADUR

The other feature, which often goes unremarked, can have subtle but far-reaching effects in both policy and scholarship. This is, for want of a better term, the virtual nature of air power.

...Karl P Mueller¹

PREAMBLE

Prime Minister Modi, while addressing people in Kargil in August 2014, said that Pakistan must desist from waging a proxy war against India. As expected, it drew a rebuttal from Islamabad to which the Indian Ministry of External Affairs (MEA) spokesman responded that vis-à-vis terrorism, "...our tool kit is not restricted." Analysts, predictably, looked askance at Indian air power remedies thanks to the overdose of TV visuals of Precision Guided Munitions (PGMs) being broadcast so very frequently. But does it translate to simply an air power issue?

To be sure, this is not a piece on the attributes of air power – they are a given and have been well publicised ever since man took to the skies. It is also not a sales pitch by a believer in the phenomenal capabilities of

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1. Karl P Mueller, *Air Power*, p. 7. Available at http://www.rand.org/content/dam/rand/pubs/reprints/2010/RAND_RP1412.pdf. Accessed September 4, 2014.

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air power. But it certainly *is* an expansion on their importance in India's outreach to befriend countries, spread goodwill and possibly expand its influence as well. It is a given in history, and Paul Kennedy has written about it in his magnum opus *The Rise and Fall of Great Powers*, that history is witness to the fact that as nations improve the lot of their people, they have to go offshore in search of raw materials and this venture brings them in conflict with each

other. Aren't we seeing this now around India – China's so-called Malacca Dilemma, claims for oil in the South China Sea, oil in West Asia and the competing claims and counter-claims of the nations in that region? Opening up of the Arctic due to the melting of the ice cap has resulted in a rush to establish a foothold there to lay claim to its natural resources – actually the list is endless. This is where India is at present and with the induction of the MMRCa (Medium Multi-Role Combat Aircraft) being the most discussed topic in the media, it is only appropriate to take stock of the significance of air power for India in its strategic neighbourhood.

Before the strategic neighbourhood is talked about, it is worth remembering that there is an ongoing debate in India on whether the country has a strategic culture to start with. Arguments have been put forth for both proponents and each side has points to support its arguments but what is sure is that since independence, India has taken positive steps towards acquiring an attitude, based not on cultural factors, but on *realpolitik* security considerations.² It is a good change from what Brahma Chellany, the noted geo-strategist wrote, that historically, "India has always wanted to be a state that is liked, not a state that is respected internationally."³ And the examples

2. C Uday Bhasker, "Concept Note" in NS Sisodia and C Uday Bhasker, eds., *Emerging India: Security and Foreign Policy Imperatives* (New Delhi: Promilla & Co Publishers, 2005), p. xvi. "And by all accounts, the May 1998 nuclear tests signaled that India's strategic culture was acquiring more definitive contours wherein the commitment to certain normative values has not negated the accommodation of *realpolitik* security compulsions."
3. Brahma Chellany, "Befriending Japan, Balancing China: Modi's Foreign Policy," *The Hindustan Times*, August 29, 2014, New Delhi, available at <http://www.hindustantimes.com/comment/analysis/befriending-japan-balancing-china-modi-s-foreign-policy/article1-1257624.aspx>. Accessed on September 30, 2014.

of India becoming hard-nosed are many as it hedges its outreach, friendships and engagements with China, the US and Russia. Considered along with the Central Asian Republics, Japan, forays for oil exploration in the seas bordering Vietnam, the voting pattern in the UN Human Rights Commission's vote on Sri Lanka in 2014 (where it voted in favour of Sri Lanka), and its abstention in the UN vote on Crimea, a pragmatic Indian foreign policy becomes apparent.

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There is now a self-confident India as compared to the one earlier, which had to see if its actions would offend a power, as it was constrained by Cold War rivalry.⁴ This is not the case any longer, and, hence, it can *ab initio* exercise power to its advantage. There is "Indo-optimism rather than Indo-pessimism" that existed in the Cold War days, as writer C Raja Mohan has put it.⁵ India can now be at the controls of the airship that defines power equations in the region, or at least be an indispensable element of the equation.

The doyen of Indian strategic thought, the late K Subrahmanyam had once said, "Today the world has changed and India has changed." And he added, "our thinking has to change." Nowhere is it more applicable than in the rigid adherence to Service loyalties amongst our Service personnel, while other militaries are doing all they can to get in jointness. It is good to be pro-one's own Service, but not at the expense of the joint good. Jointness demands that the Indian Navy be strengthened, for that's where India's future threats lie, both concerning security as well as trade and commerce. It is also clear that, at present and for the foreseeable future, one would mandatorily need boots on the ground to control territory. But what is also true is that air power has a pivotal, and may be primary, role in guarding India's national interests and projecting power in its strategic neighbourhood – and if it comes to a crunch, in war-fighting, both over land and on the high seas.

4. C Raja Mohan, "Rethinking India's Grand Strategy," in Sisodia and Bhasker, eds., n.2, p. 35.

5. Ibid., p. 38.

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INDIA'S STRATEGIC NEIGHBOURHOOD

It is vital to define strategic neighbourhood, but to do that, an examination of the historic evolution of the word 'strategy' would be necessary as it will drive arguments to arrive at the definition. If strategy is a process of problem solving, then it has existed since the start of time. The 'clan leader', or whoever was at the helm, would be thinking of ways to get food for his flock or how to save it from the rampages of other tribes and those

wrought by nature. So, over time and many generations, the idea of strategy became a bank of information from which a leader could draw – and the strategist was the person who advised the leader on what was to be done. As Lawrence Freedman has put it in his book *Strategy: A History*, "Strategy became a commodity, a distinctive product concerning a complex situation."⁶ So, when one conjoins the term 'strategic' with 'neighbourhood,' to one's proximate countries, one is talking of a certain minimum span of time to be taken into context while formulating a future course of action.

Is it only physical proximity that constitutes a strategic neighbourhood or are there other factors involved too? It would be naïve to think that a country like Australia has just New Zealand as its strategic neighbour and vice versa. A good definition of 'strategic neighbourhood' would be "a geographical area that is *vital* for a nation for *the conduct of affairs of the state*." This brings in two terms, each having a deep import: first, what constitutes 'vital'; and second, what are 'affairs of the state.' 'Vital' would be something, the absence of which would result in a shortfall in something meaningful and/or result in a meaningful loss; 'affairs of the state' encompass tasks that a duly authorised government is obliged to perform as part of its duty towards the well-being of its citizens. But would one like to consider whether, in these times of globalisation, can one actually define neighbourhood in the traditional sense? It's a cliché that the world is now

6. Lawrence Freedman, *Strategy: A History* (New York: Oxford University Press, 2013), p. 72.

a global village, which actually now extends into cyber and space, so where does one stop? Is there a concept of strategic consideration in these times of globalisation? For the record, the Indian Ministry of Defence (MoD) has done so in its annual reports year after year. In the 2002-03 annual report, it defined India's area of strategic interest as "...from the Persian Gulf in the west to the Straits of Malacca in the east and from the Central Asian Republics in the north to near the equator in the south..."⁷

This has expanded over the years and the latest 2012-13 report, says that "India's size and strategic location....links its security environment with the extended neighbourhood, particularly with neighbouring countries and the regions of West, Central Asia, South-East Asia, East Asia and the Indian Ocean."⁸

So, having seen the official position, this essay will examine the significance of air power for India in the context of its strategic neighbourhood in three segments. Firstly, what sort of influence would India like to have? Its stated national policy is that it does not covet any other nation's territory but it must be remembered that the powder has to be kept dry for all eventualities. Second, what does air power bring to the table, such that it has become the tool or weapon of first choice of the politician for deterrence, as a foreign policy instrument, for regional influence and for the internal security of the nation; this would also include the limitations of air power in India's context. Lastly a summation of the points discussed in this article.

But first a clarification would be in order. It is well appreciated that the air power of a nation is not just its air force but comprises all aviation assets that the nation possesses. However, it is also true that almost everywhere, the air force is a predominant part of air power. So, in this essay, the terms

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7. Ministry of Defence, Government of India Annual Report 2002-03, p. 2, Available at <http://mod.nic.in/writereaddata/MOD-English2003.pdf>. Accessed July 30, 2014.

8. Ministry of Defence, Government of India Annual Report 2012-13, p. 2, Available at http://mod.gov.in/writereaddata/AR_2013/Eng/ch1.pdf. Accessed July 31, 2014.

The capability of air power to deliver such expectations is inherent in its characteristics. Thus, reach, mobility, flexibility and response, all enable a nation to convey its will in times of need.

Indian air power and Indian Air Force, or IAF, are used interchangeably.

SPAN OF INFLUENCE

Firstly, what sort of influence would India like to have? Peaceful coexistence is the bedrock of India's dealings with other nations. Keeping that as a foundation, what the French General, Le comte de Guibert said in the 18th century, needs to be remembered:

To declaim against war....is to beat the air with vain sounds, for ambitious, unjust or powerful rulers will certainly not be restrained by such means. But what may result, and what must necessarily result, is to extinguish little by little the military spirit, to make the government less interested in this important branch of administration, and some day to deliver up one's own nation, softened and disarmed -- or, what amounts to the same thing, badly armed and not knowing how to use arms -- to the yoke of warlike nations which may be less civilized but which have more judgment and prudence.

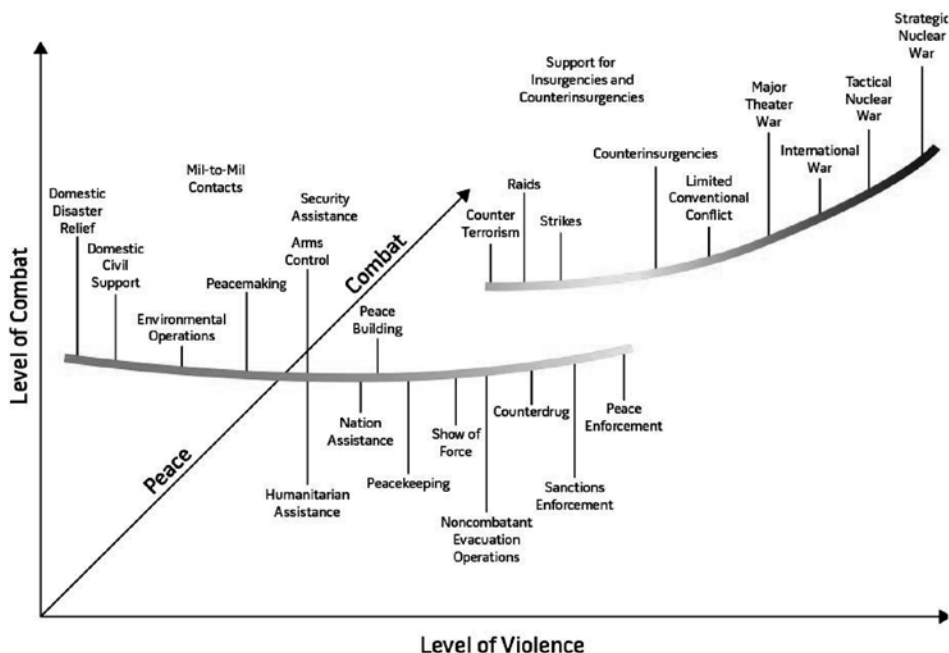
– Le comte de Guibert (1743-90).⁹

There is a deep meaning in what he said, and it is perhaps apt for many in India who question the wisdom of defence spending. In simple terms, it means that a nation should not be naïve and that it must maintain its capabilities and be ready to counter war-like situations. The route to enhancing capabilities is by harnessing technology. But, what is the effect of technology? "The essence of technology is not technological," wrote Christopher Coker, a professor of international relations at the London School of Economics, adding that technology "is one way by which we project our own power—the bow extends our range, the computer amplifies

9. Quoted by in Sisodia and Bhasker, eds., n.2, p. xiv.

our knowledge,”¹⁰ basically emphasising that technology enables military power to fundamentally affect society in many ways. Air power is technology intensive and has become the weapon of choice of the politician due its many unique attributes, foremost amongst them being the capability to escalate and deescalate a situation quickly. With its capability to influence the environment, air power operates in almost the entire ‘conflict’ spectrum as shown in Fig 1.¹¹

Fig. 1: Spectrum of Conflict¹²



The capability of air power to deliver such expectations is inherent in its characteristics. Thus, reach, mobility, flexibility and response, all enable a nation to convey its will in times of need. Its impermanence does not make

10. Christopher Coker, *The Future of War: The Re-enchantment of War in the Twenty-first Century* (Bodmin, Cornwall: Blackwell Publishing Ltd., 2004), p. 18.

11. <http://ndupress.ndu.edu/Media/News/NewsArticleView/tabid/7849/Article/11242/jfq-75-determining-hostile-intent-in-cyberspace.aspx>

12. <http://ndupress.ndu.edu/Media/News/NewsArticleView/tabid/7849/Article/11242/jfq-75-determining-hostile-intent-in-cyberspace.aspx>

it look like an intrusive force and, scalability enables rapid ramping up or disengagement. What started as a contract by the US Army to the Wright Brothers in 1908, “..that it may be quickly and easily assembled and taken apart and packed for transportation in army wagons,”¹³ has now grown to a capability that has multifarious avatars. So, the crux of what would be analysed is “what capabilities does Indian air power afford the political establishment in the discharge of its duties?”

EFFECT OF GEOGRAPHY

The politics of a nation is influenced a great deal by the effect of geography. It was more so in yesteryears where physical geographical features aided or acted as impediments to a nation's efforts to further its vital interests, but with technological advancements, the influence has been ameliorated to a certain extent. What had been the influence of geography on India's thinking and actions before the arrival of technological innovations in the 19th century? Historically, India has not been too outward looking a nation, when compared to some others. The Indian subcontinent can be considered to be an island as a whole.¹⁴ This “island” is surrounded by the seas and oceans in the southern quadrant while to the west, it is isolated by mountains that rise from the Arabian Sea and run through Pakistan's Baluchistan province, stretching northward and rising higher to northwest Pakistan. There, the mountain chain slopes east, meeting up with the Pamir and Karakoram ranges. These finally become the Himalayas, which extend southeastwards to some 2,000 miles to Myanmar's Rakhine mountains and from there south to the Bay of Bengal.

13. B. D. Callander, “The Evolution of Air Mobility,” (1998). Available at <http://www.airforcemag.com/magazinearchive/pages/1998/february%201998/0298mobility.aspx>

14. <http://www.stratfor.com/sample/analysis/geopolitics-india-shifting-self-contained-world>

Fig. 2: India as in Island¹⁵

Thus, the Indian subcontinent is surrounded by comparatively empty regions, and the catch word is ‘comparatively,’ with not enough resources to support a large population. Thus, there was no incentive as such for the Indian civilisation and thought to undertake a large scale expansion, beyond its cocooned landmass. Externally, down the ages, the threats to India have come from the passes along the Afghan-Pakistan border and from the sea; the Mughals came from the northwest while the British, French and the Portuguese sailed in from the seas. Given the isolation of the subcontinent, any further Indian expansion is limited to the naval sphere. A strong navy would be a barrier to any outside power that might attempt to penetrate the subcontinent from the sea. This could be a possible area of conflict as countries of the region go offshore to get resources and raw materials for their development. However, since the friction of terrain (both land and to a lesser extent, of water too) does not affect air power, it comes in handy to address the designs that some may have.

15. Ibid.

Earlier, as brought out above, the land around India did not support life and so there was no expansion; but today, is the same argument valid? There is oil and minerals in the Central Asian Republics. There is gas in Myanmar and its jungles are not that impenetrable. China has integrated the vastness of Tibet across our northern borders and our interests lie in the fact that the Sutlej, Indus and Brahmaputra originate in Tibet. In the south, the open vastness of the Indian Ocean beyond Sri Lanka beckons India due to geo-political reasons, with the busy Sea Lines of Communications (SLOCs) that pass through it. A tier further outward, in the west, there are the traditional sources of oil and a huge diaspora in the Gulf that is so important economically, not the least due large foreign exchange remittances (\$23 billion of the \$ 69 billion received in 2012). Africa beckons due to its natural resources and the fact that many countries there look up to India for a leadership role for the not so developed countries. Towards the east, the Association of Southeast Asian Nations (ASEAN) countries are of interest due to trade and as a counter to Chinese expansionism; there is a cultural pull too, and bilateral relations are flourishing with Vietnam, South Korea, Japan and other countries of the region.

So, with such a geographical environment, what can, or what does, air power do? It enables things to be done in an area from 'without,' with the intervening land and sea not being impediments. Dominance of the air is a given, the only point is that it has to be applied in the strategic environment and when it comes to disaster situations or war, tactically.¹⁶ It gives the politician the ability to *implement* his ideas, to put his thoughts in action, at a place far removed in space and without serious constraint of time. This distillate will help evaluate what role air power would play for the commander – and the politician is *the* commander in democratic India.

HISTORICAL USE OF AIR POWER BY INDIA

It would be good if one goes back in time and starts with the invaluable role of Indian air power in the consolidation of the Indian nation and work up from there, as it will lead us to what it will do in the future. At birth, the political boundaries were drawn by Lord Radcliffe, leading to problems that still beg

16. Jasjit Singh, "Aerospace Challenges for India" in Sisodia and Bhasker, eds., n.2, p. 91.

a solution. India's strategic neighbourhood stopped at its borders. Had it not been for the airlift of troops by the fledgling IAF to Srinagar on October 27, 1947, the map of India would have been different, as would have been the history of the subcontinent. Then again, the landing on May 24, 1948, by Air Cmde Mehar Singh at Leh opened the Ladakh Valley to the Indian Army while the siege of Poonch was broken by a year-long air bridge established through a small airstrip due to some daredevil flying by young transport pilots flying Dakotas.¹⁷ On the other hand, inadequate or rather, non-availability of airlift capability proved to be the undoing of the siege of Skardu which could not be held and fell to the Pakistani raiders on August 14, 1948, after the defenders led by Lt Col JS Thapa had held on for six long months.¹⁸ That's where some people doubt whether we have a strategic culture. In fact, in a seminar held at the Centre for Air Power Studies, a very renowned ex-foreign secretary said that if India had the strategic sense to think ahead, we should have continued with the gains in Jammu and Kashmir (J&K) and recovered the complete territory instead of going to the United Nations – can you imagine, he said, that “we would then have had a direct access to Afghanistan and the Central Asian Republics (then USSR), and had Pakistan in a pincer!” What the foreign secretary said is true, but those were chaotic days with means of communication being very poor and the counter argument to his persuasion was that strategic culture is nothing but a ‘thought’ generated due to a stimulus, and that the body of thought goes way back, even before Kautilya's time. Coming back to the role of air power in the consolidation of the Indian Union, the northeast

17. http://indianairforce.nic.in/show_page.php?pg_id=68.

18. Col Tej Kumar Tikoo, *1947-48 Indo-Pak War: Fall of Gilgit and Siege and Fall of Skardu* (New Delhi: Vivekananda International Foundation, July 2013). Read the amazing story of tenacity, grit and leadership at <http://www.vifindia.org/sites/default/files/1947-48-indo-pak-war-fall-of-gilgit-and-siege-and-fall-of-skardu.pdf>. Accessed August 18, 2014.

The US military has a global presence due its airlift capability, and sea power too, for sure. The Chinese have realised the importance of air power after the 1991 Gulf War and are assiduously moving towards modernisation of their air assets.

of the country has been a daunting challenge due its unexplored territory and since 1947 to the present day, Indian air power has been carrying out air maintenance and supplying the civil population with rations in its task of consolidation of India's borders by assimilating the outlying population – a very costly way of doing so, but nonetheless, an imperative task. These are all India-centric examples, so during those early years, was Indian air power just inward looking? Far from it (as will be covered later) because as Indian foreign policy started

spreading its wings, air power was on the front line doing what it was asked to do.

FOREIGN POLICY

The Clausewitzian dictum that “war is a continuation of policy by other means” can be put into effect by a state only if it has the military means to back its decisions. So, foreign policy steps taken to safeguard national interest require that the state has military muscle to exercise its will – it is a different matter that it may or may not be employed. Geo-economics is an important component of foreign policy and colonial empires were established on the basis of military power. The US military has a global presence due its airlift capability, and sea power too, for sure. The Chinese have realised the importance of air power after the 1991 Gulf War and are assiduously moving towards modernisation of their air assets; this is indicated by the growing number of People's Liberation Army, Air Force (PLAAF) officers occupying higher positions in their top military body, the Central Military Commission.¹⁹

19. Oriana Skylar Mastro and Michael S. Chase, “China's Air Force: Ready for Take Off?” *The Diplomat*, available at <http://thediplomat.com/2012/11/chinas-air-force-ready-for-take-off/>. Accessed January 17, 2015 and US DoD, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2014*, available at http://www.defense.gov/pubs/2014_DoD_China_Report.pdf. Accessed on January 17, 2015.

Indian air power, with its latest assets, now has the capability to give Indian foreign policy a diplomatic forward posture by its reach, much beyond its borders. How would it achieve that? Just as the economic strength of a nation has influence over a government's foreign policy so does military power have a 'long distance' influence over others. As Lawrence Freedman has written, "Strategy is about getting more out of a situation than the starting balance of power would suggest." After all, what is China doing now? Its military modernisation programme has cast an intangible influence on its neighbours, forcing them to take counter steps. Though it is downsizing and modernising its army, it is the modernisation of its navy and the air force that is bothering its neighbours more than anything else. Coupled with the enhanced capability of its second artillery in terms of range and accuracy, one gets an idea of the 'virtual' forward presence being exercised on its adversaries; the development of its anti-ship ballistic missile, the DF21D for its A2/AD (Air Defence) strategy to counter American sea power has exercised the US military fraternity and made it come up with its Air-Sea Battle (ASB) concept. China does not find a mention in the ASB document by name but the 'forward posture' due to the capability of the DF 21D runs as a thread in the ASB concept. In India's case, the capability of intervention in a foreign land to further its diplomatic interests by helping a friendly regime in trouble was clearly demonstrated in 1988 when elements of the 50 (I) Para Brigade were airlifted by Il-76s from Agra to Male in the Maldives and the coup against President Gayoom thwarted. Going back earlier to 1971, when the Janatha Vimukthi Peramuna (JVP) insurrection threatened the stability of the then Ceylonese government, the Indian government deployed six Alouette III helicopters and some fighter pilots to Ceylon – the former for the airlift task and the latter to train pilots for firing from the Jet Provost aircraft that the Royal Ceylonese Air Force had. Retracing a further decade back, in 1960, on the request of the United Nations, the Indian government sent six Canberra B-57 bombers to the Congo for reconnaissance and armament tasks. India had just emerged from its bondage through a non-violent struggle and had an image of a champion of decolonisation and peace. The dispatch

of the Canberra bombers, and, indeed, Indian Army troops, was towards fulfillment of that larger political and foreign policy aim. Returning to the present, the reputed *India Today* magazine has reported that in 2010, the IAF was ready to go to the aid of the government in Bangladesh when there were reports of a threat to the life of the leadership there. In fact, this was just a continuation of the policy to aid friends as seen as early as in November 1950 when the king of Nepal was evacuated from Kathmandu by a Dakota of the IAF as a fallout of the Rana's revolt. After the revolt died down, the king was restored to the throne; in this act lies the genesis of the Indo-Nepal Treaty which was then concluded and has since guided relations between the two countries.²⁰

A little earlier, the dispatch of Indian air power in Congo in 1960 has been mentioned. One must not forget that beginning 1993, when two anti-tank guided missiles equipped Alouettes were sent to Somalia, India has been a substantial air power contributor to the cause of international peace. Between 2003 and 2010, 17 Mi17s and 8 Mi-25/35s of the IAF were deployed in Congo and Sudan – no other country had given so many assets, including night capable attack helicopters. They were withdrawn in 2010 due to internal requirements but having now got its inventory back full strength, this writer feels that India can recommence its contribution. So, the IAF has been an important cog in the foreign policy machinery of the country, enabling the government of the day to meet international commitments, and safeguard India's interests by adopting a posture that has an element of deterrence.

DETERRENCE POSTURE

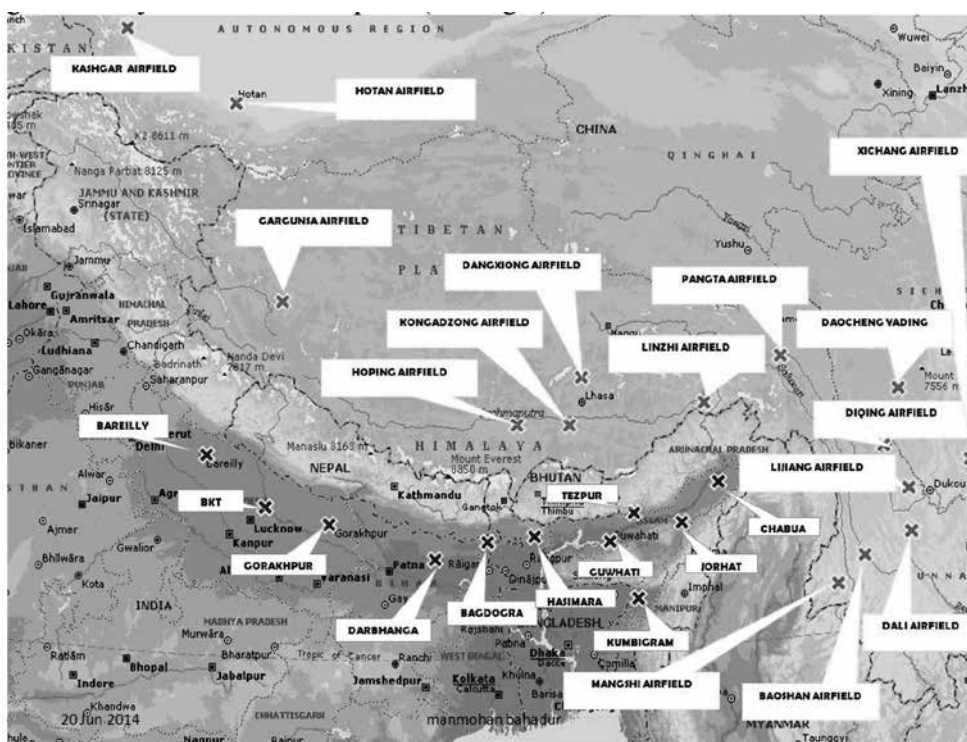
In the northern border with China, India has the disadvantage of terrain for its ground forces. As is well known, while it is a steep ascent from the Indian side to altitudes in excess of 17,000 ft in narrow valleys, the Chinese have the advantage of an easily negotiable flat terrain of the Tibet plateau. They have a good road network and now have the railway coming up to

20. Jasjit Singh, "Air Power in the Foreign Policy of Nations," in Jasjit Singh, ed., *Aerospace Power and India's Defence* (New Delhi: Knowledge World, 2007), p. 52.

Lhasa; in the next step, the rail connection is planned to be brought up to Bhutan and Nepal by the Chinese. So, the defence posture adopted by India is air power led because, as the late Air Cmde Jasjit Singh wrote, "Air forces are far more capable of generating strategic effect than the land forces. Modern air power does not have to fly over the well defended target or even close to it and yet destroy or at least neutralise it from beyond visual range. Technological capabilities have made long range precision strike a reality."²¹ Our posture in the northern borders would be air power driven, with a *virtual* forward presence being created by positioning offensive air assets all along the string of airfields that are in the Himalayan foothills – here India has the advantage of all airfields being at extremely low altitude, enabling superior performance and load carrying capability for the IAF as compared to the Chinese whose airfields are at altitudes around 12,000 to 14,000 ft that entail severely degraded performance. If one sees the location of the Indian airfields, one finds that they are all mutually self-supportive unlike the Chinese ones, as the *inter-se* distances show. So, the conventional deterrent for China is Indian air power, and India has positioned Sukhoi-30s all along to convey such a resolve. Panagarh is being developed as a major transport base, with the six new Flight Refuelling Aircraft (FRA) being based there as well as the six new C-130Js that would come in a few years time. It is worth remembering that the new mountain strike corps of the army would also be based at Panagarh. So, with new helicopter units being based at Bagdogra, Barrackpore and Kumbhigram, the new Chinook heavy lift unit coming up at Dinjan and the existing two transport aircraft squadrons at Jorhat, the picture of a crouching IAF ready to uncoil is complete (see Fig 3).

21. Jasjit Singh, "Poised for Precision," *FORCE*, February 2011, p. 24.

Fig. 3²²



War may or may not take place, but the impression of a forward posture of Indian air power makes a psychological deterrent impact in the neighbourhood. The positioning of air power assets to take up the challenge and convey its intentions of carrying the battle across the border indicates the posture that the country is willing to adopt. The landing on Daulat Beg Oldie by a C-130 and development of Nyoma as an airfield to take on fighter aircraft conveys intent.²³

Here it would be appropriate to quote an example from the past to convey the point, and the shooting down of the Atlantique of the Pakistan Navy in Kutch on August 10, 1999, comes to mind. The incursion was not

22. Figure courtesy Gp Capt RS Chatwal of Centre for Air Power Studies, New Delhi 110010.

23. "IAF Planning Fighter Plane Base in Nyoma in Ladakh: NAK Browne." Available at http://articles.economictimes.indiatimes.com/2013-10-04/news/42718282_1_nyoma-nak-browne-advanced-landing-ground. Accessed January 17, 2015.

a one-off affair and was happening quite frequently till one day it was taken on by a MiG 21. From then on, the incursions stopped. The routine interceptions of civil airliners that deviate from instructions given by Air Traffic Control (ATC) also convey a message about the seriousness with which a nation takes an air violation. A perverse example is the shooting down of the Malaysian MH17, after which all aviation has started avoiding that air space. A similar thing happened in the Kamachatka Peninsula with the Korean Flight 007, which was brought down by the Soviets on September 1, 1983. In life, some people just don't learn and take a wrong view of overtures of peace and display of restraint. 'Kargil' had happened in mid-1999 and some may know that another mini one was attempted north of the Srinagar Valley in July 2002. While India's activation under Op Parakram was ongoing, Pakistani intruders had occupied Point 3260 in the Machil-Neelam-Gurez sector. An uphill attack by the army would have caused a large number of casualties. The IAF was called in and two well directed Laser Guided Bombs (LGBs) from a pair of Mirage 2000s knocked them off.²⁴ Subsequent radio intercepts showed that they had not expected the Indian establishment to go kinetic and utilise the IAF.²⁵ In the event, the message got across nice and clear.

INDIAN AIR POWER IN HADR

But is it just offensive or kinetic action that conveys the forward posture? Far from it, as the inherent capability of Indian air power to come to the rescue and help of its own nationals and those of its friendly countries is something that can be banked upon. Thus, in the super cyclone that struck Bangladesh in July 1991, the IAF was pressed into action at the request of the Bangladesh government. The tsunami of December 26, 2004, saw the IAF being cranked to the hilt: 30 transport aircraft and 16 helicopters flew round the clock to help the island territories and two IL78 aerial

24. Arjun Subramaniam, "From Kargil to Parakram: A Lesson in Forceful Persuasion," *The Hindu*, July 27, 2012. Available at <http://www.thehindu.com/opinion/op-ed/from-kargil-to-parakram-a-lesson-in-forceful-persuasion/article3687855.ece> Accessed January 17, 2015.

25. Incident narrated at the Centre for Air Power Studies on July 9, 2014, by Lt Gen Prakash Menon (Retd) military adviser to the National Security Adviser (NSA), Government of India.

The massive scale on which the IAF has mounted relief sorties within the country also conveys the resident capability and expertise that is available for the calling.

refuelling tankers were stripped of their fuselage fuel tanks overnight and the aircraft pressed into relief sorties in the cargo role. In addition, 6 Mi-8 helicopters were sent to help Sri Lanka in its relief effort. The Uttarakhand tragedy of 2013 had at any one given time, 54 helicopters of all types, of which 45 were from the IAF; it was perhaps the biggest helicopter evacuation in history, with 23,892 pilgrims brought out in a week's time.

The massive scale on which the IAF has mounted relief sorties within the country also conveys the resident capability and expertise that is available for the calling. When one talks of airlift, the example generally quoted is that of the Berlin airlift which has become synonymous with the resolve of society to fight for freedom. While its statistics are staggering, with the airlift of 2.3 million tonnes of load between June 26, 1948, and September 30, 1949 (one and a half years), a modern day airlift of similar proportions has not been heralded as much. Following Iraq's invasion of Kuwait in 1991, the Government of India decided to air evacuate Indian nationals from there via Amman. In what has found a mention in the *Guinness Book* for the most people evacuated by a civil airliner, Air India flew home 111,000 (at another place, the figure is 176,000) Indians in 488 flights from Amman to Mumbai, a distance of 4,118 km, in just two months between August 13, and October 11, 1991.²⁶ Translated to tonnage, it works out to almost 10 million tonnes, leaving the Berlin airlift way behind! It's true that the circumstances, the type of aircraft and the threat levels were vastly different, but it brings to fore the capability of the civil element of India's air power to come to the aid of its citizens. And what needs to be kept in perspective is that it was just Air India that was involved; the Indian civil airline fleet has grown manifold and in time of need, all the aircraft can be

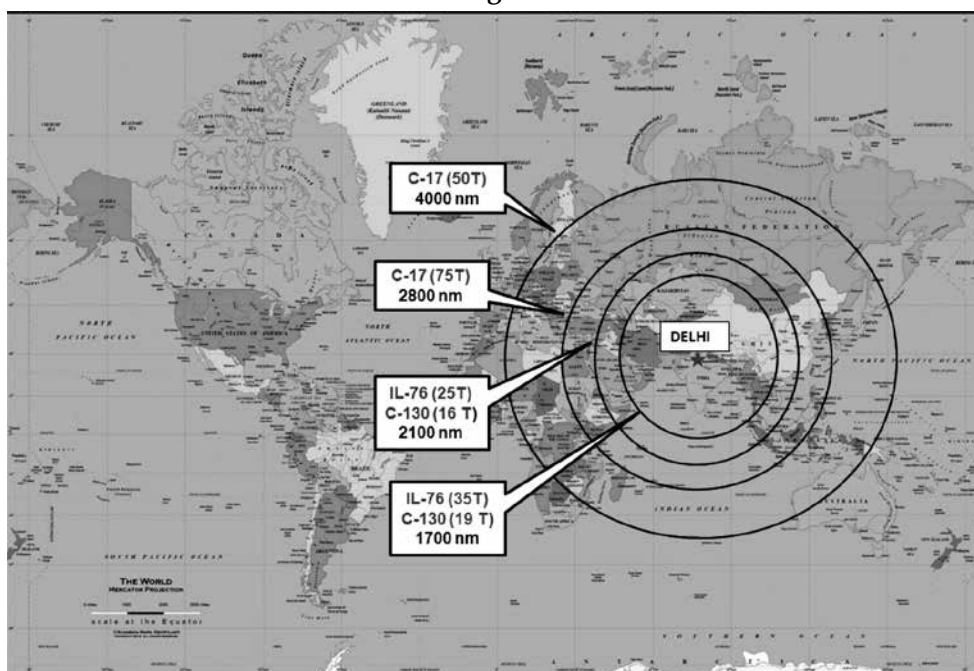
26. *Indian Foreign Affairs Journal*, vol. 7, no. 1, Available at <http://www.associationdiplomats.org/publications/ifaj/Vol7/7.1/ORAL%20HISTORY.pdf> and www.pib.nic.in/newsite/efeatures.aspx?relid=69345. Both accessed August 12, 2014.

requisitioned – we are seeing a miniscule view of this in the chartering of civil flights by the army to and from Leh and Thoise on a daily basis. The home secretary has the powers to requisition, literally commandeer, on an immediate basis any civil airliner to move police forces within the country. The IAF was on standby to move people out of Syria and earlier from Libya. In fact, one Il-76 was positioned in Alexandria during the Libyan crisis. In the case of moving of relief supplies to quake hit Kazakhstan, the IAF had its Il-76 in New Delhi hours before the supplies could fetch-up from the civil sources in Delhi. To move our casualties from Kabul in the various bomb blasts that have hit our installations, the IAF transport fleet was in the forefront; the only problem is the presence of Pakistan whose overflight clearance has to be obtained, taking up valuable time. The case of the hijacking of Indian Airlines' IC-814 to Kandahar in December 1999 and the release of jailed terrorists in lieu of passengers will always rankle our countrymen. But if it were to happen again, would we be able to do something different? The answer is YES, and this will be covered as the future is discussed below.

THE FUTURE

How will air power figure in the Indian scheme of safeguarding its national interests? Today, the IAF has new long range assets in its inventory. The transport fleet has the C-17 and C-130 while the Airbus 330 Multi-Role Tanker Transport will be inducted soon. Fig. 4 shows the unrefuelled radius of action of these aircraft, taking Delhi as the launch base. The C-17 will be able to put in between 50-70 tonnes and the C-130 around 16 to 20 tonnes.

Fig. 4



The Airbus 330 MRTT, when inducted, would transport 45 tonnes. And why forget the Il-76, which will continue to be in service for at least a decade plus; let's say, it can airlift 25-35 tonnes on an average. So, the Human Assistance and Disaster Relief (HADR) capability within these arcs is enormous and something that India can offer with remarkable ease. Actually, this writer is of the opinion that upfront, India can offer itself as a regional humanitarian aid provider, because, it must be remembered, the helicopter fleet with India is also substantial. Eighty Mi-17 V5s have already entered service and 59 more brand new ones are coming to replace the Mi-8s. Fifteen Chinooks will bring in heavy lift capability that is needed in any HADR situation. A C-17 can transport one Chinook so one can visualise the aid that can go into a disaster area really quickly. The National Disaster Relief Force, with its specialist equipment and personnel, has cut its teeth in many disaster areas, including at Fukushima and Uttarakhand – its combination with IAF airlift assets can bring succour to the needy once the government orders it. By doing so, India would have advanced its aim of

better relations with all and engendered a commitment among nations to come to each other's aid.

The airlift capability when combined with offensive assets, the Su-30 being the premier one, projects Indian power pretty far. The MMRCA, when operationalised, would also be in the scheme of things. Adequate signalling has already been done – some may know about the almost 10-hour non-stop strike mission by the Su-30s from Bhuj to Port Blair followed by weapons delivery at Trak Island in the island chain and return to Bhuj.²⁷ This signalled a message, that if in peace-time this is what is being practised, the missions in war would be even more far-reaching. A question had been posed earlier whether another Kandahar could have a different ending. Well, the assets are now available to avoid our western neighbour – the politician would get, in the author's view, an affirmative answer from the IAF when asked whether a rescue mission can be mounted, albeit a very challenging one – this is from a deployment point of view. But yes, it would depend on a whole lot of other employment of force issues as also political assurances that would have to be obtained, as Iran would have to play ball; but that's where the success of our diplomacy would be put to test. It may be recollected that Entebbe would not have been possible without fuel having been given to the Israeli aircraft by Kenya.²⁸ Kandahar is just quoted as an example, but the bigger issue is whether the country has the air power capability to take on such missions – and the answer is 'Yes'. The politicians would then have to decide, taking many other issues into consideration, diplomatic support/repercussions being a major one. The word is 'prudent' – would it be prudent to launch such a mission, for if it goes the Op Eagle Claw (the operation to free American hostages from Iran) way, there would be much more face to lose than what the Americans lost in Iran. But in such cases, risks have to be taken depending on the actualities

27. Air Chief Marshal NAK Browne, Chief of the Air Staff of Indian Air Force narrated this in a talk at the Institute of Defence Studies and Analyses, New Delhi, on September 23, 2013.

28. Lt Col Joshua Shani, the captain of the lead C-130 said in an interview that after landing at Entebbe, ".....we had a little problem: We needed fuel to fly back home. We came on a one-way ticket! We had planned for a number of options for refuelling, and I learned from the command-and-control aircraft flying above us that the option to refuel in Nairobi, Kenya, was open." Full interview of "Rescue at Entebbe," at http://www.idfblog.com/blog/2012/07/05/rescue-at-entebbe-an-interview-with-the-chief-pilot/#.U_Bxio6x0dV.twitter

on the ground and the expeditionary nature of the mission – the military's job is to have options ready for the political executive.

A decade from now, with naval carrier-borne air power fully operational around two Carrier-Borne Groups (CBGs), the semblance of an expeditionary capability would start taking shape. To be sure, that is not the stated position of the Government of India, but the axiom or truism that this essay started with was that "air power gives a forward posture to the power projection capability of a nation" and in the bargain, could influence the happenings in the neighbourhood; suffice to say that deterrence, compellence, coercion, dissuasion, persuasion *et al* get covered in the narrative. So, defence and diplomacy get a boost with air power in the vanguard.

But one aspect of 'neighbourhood' that is so intimately connected with anything worthwhile happening on land, sea and air nowadays has not been discussed till now. Shouldn't space also be considered a 'strategic neighbour' and one that has become so vital, for both military and non-military operations of everyday life? Air and space go together and must be included in the span of the definition of a nation's strategic neighbourhood.

Space is a military and economic centre of gravity, and, hence, it is a must to develop and safeguard our resources. There is a saying from the maritime and mercantilist era that the "flag follows trade."²⁹ So, Paul Kennedy's observation that was made at the beginning of this essay that history is witness to conflicts due to countries going offshore for economic interests, is equally valid for space. When it comes to space, it would *not* be theoretically wrong to say that all countries can be considered to be adversaries. The best of friends, even if located on the other side of the globe can, if the relations go awry, interfere with a nation's military and civil daily life – such has become the dependence on space. Without singling out China, one can say that it would be naïve to not expect our adversaries to make plans and develop means to interfere with, or harm, our assets. Avoiding, and if that's not possible, mitigating surprises would be the job of the Space Command which has been proposed

29. Bob Preston and John Baker, "Space Challenges" in Zalmay Khalilzad and Jeremy Shapiro, eds., *United States Air and Space Power in the 21st Century* (Santa Monica, CA: RAND, 2002), p. 172. Available at http://www.rand.org/content/dam/rand/pubs/monograph_reports/MR1314/MR1314.pdf. Accessed August, 18, 2014.

with the IAF as lead Service. This is one 'neighbourhood' that is work in progress and can be neglected only at the nation's peril. The formation of the Space Command had better happen sooner than later because it is one requirement which is as strategic as it gets.

At the strategic level, there is one serious limitation too of Indian air power; Indian air power lacks the bulwark of an indigenous industry to support its assets. That is a subject by itself and can be addressed in detail only through a separate paper. Suffice to say that India does not have the 'strategic depth' that comes from a home grown defence industry and many limitations flow out from there; focussed action to remove this millstone that imperils India's strategic autonomy is hopefully underway with a new government at the helm in Delhi.

SUMMATION

In conclusion, air power accords a forward posture to the policies of a government and the Indian state used the IAF to consolidate its boundaries during the five tumultuous years after gaining independence. Indian foreign policy has been supported by the nation's air power in guarding national interests and in coming to the aid of friends and neighbours. The latest acquisitions of transport aircraft and helicopters have given India a capability that can make it assume the role of a regional humanitarian aid provider and, when coupled with the potent offensive assets in its inventory, the outlines of an expeditionary capability start emerging. Space is a neighbour that needs to be given a strategic tag in order to get the attention it deserves. Indian air power has one big limitation, and that is the lack of an indigenous defence industry; it is a handicap that needs to be addressed quickly and would require sustained effort and focus from a dedicated team. And, finally, while one keeps talking of the requirement of bipartisan support for the political problems facing us, it is time for people in uniform and in the civil services to accord a capability it's due, rising above partisan and Service specific considerations. That's the only way India would be able to extract the maximum from the capabilities of its substantial and potent air power in furtherance of national aims and ambitions.