

TRANSFORMATION OF THE IAF: TOWARDS ACHIEVING A GREATER ROLE IN NATIONAL SECURITY DYNAMICS

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Military transformation in a complex democratic political system cannot be pursued in isolation; in fact, it would essentially depend upon the entire eco-system comprising various elements, including threat perception, national outlook towards defence, geopolitical scenario, national strategic culture, institutional strengths, economic status, technological capabilities, as well as the national education system. Moreover, unlike Pakistan and China, where military leadership plays a dominant role in the national decision-making process, the Indian military is considered a tool available to the national leadership to secure its core values and safeguard its national interests, including maintaining sovereignty and national integrity. Thus, transformation of the Indian Air Force (IAF) calls for a well coordinated and concerted political-bureaucratic-military initiative. Nevertheless, to be a flag bearer of the process of transformation, the IAF has to sincerely initiate and catalyse the process of quantum change; and that necessitates clear understanding of national security dimensions, including the institutional framework, challenges, threat perceptions and capability requirements. Identification of the drivers and barriers of transformation is also necessary to

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chalk out the likely roadmap. For harnessing effective changes in an efficient manner, the IAF needs to simultaneously pursue all the three transformational approaches – bottom-up, top-down as well as lateral. The top-down approach demands convincing the external stakeholders, especially the political-bureaucratic machinery, to put in place appropriate institutional mechanisms and facilitate a suitable eco-system that strengthens the transformation of aerospace capabilities; whereas the bottom-up approach would necessarily address the internal

organisational dynamics of the IAF so that it is equipped to envision, initiate, propagate, catalyse, and absorb the process of transformation. The lateral approach entails *jointness* and an integrated approach with the other stakeholders of India's national defence be it sister Services, the scientific community, industry, Ordnance Factory Board (OFB)/Defence Public Sector Units (DPSUs) or other private sector entities. This research paper is an attempt to explore the broader macro level initiatives that would facilitate transformation of the IAF into a formidable force capable of meeting future challenges. Suggestions articulated are recommendatory in nature and are by no means prescriptive or comprehensive.

TRANSFORMATION OF HIGHER DEFENCE ORGANISATION AND MANAGEMENT

The success of any military initiative is the product of an integrated effort involving the political leadership, bureaucrats, military professionals, scientific community; and a high level of coordination amongst all the sub-systems of the defence establishments. Political control over the Indian military is well known; and the situation is unlikely to change in the foreseeable future. However, to maximise the potential of the armed forces, formal documents like the national security doctrine, objectives, strategy and policy; and national

defence objectives, strategy and policy are necessary. By and large, India has been observing an overly cautious approach towards issues pertaining to national security and defence, and thereby exhibiting reluctance in bringing such issues into the public domain. Nevertheless, lately, the Ministry of Defence (MoD) has taken steps to address this limitation and published a technology oriented public version of the LTIPP (Long-Term Integrated Perspective Plan) 2012-27¹ titled "Technology Perspective and Capability Roadmap 2013" (TPCR), an articulation of a futuristic technological view of the Indian military for industry and for other stakeholders as well. But credible fructification of long-term aspirations mentioned in the TPCR

is questionable since these plans are being made in the absence of an effective institutional mechanism, the necessary defence policy guidelines and the commitment of the required funding to the defence budget.² Additionally, as per the TPCR 2013, "...specific programmes or technologies could be discussed by industry in greater detail with the respective Services. This document has been prepared in a Service-neutral format since a large number of the technologies required are common between the three Services, wherein the exact specifications of the equipment for single Service requirements in a joint as well as individual scenario may vary even though the technology may be common. Also, many of the capabilities sought have overlapping requirements between the three Services."³ However, the existing Higher

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1. The LTIPP, based on foreseeable strategic trends, attempts to identify the shape and size of the Indian military over the next fifteen years. Having been approved by the Defence Acquisition Council, the LTIPP would act as a guiding principle for the formulation of five-year and annual defence plans.
2. The present system of annual budgeting gives no commitment of funds beyond a financial year. Consonance between futuristic plans and budgets would be a more practical approach.
3. *Technology Perspective Capability Road Map 2013* (New Delhi: HQ IDS, 2013) accessed at <https://mod.gov.in/writereaddata/TPCR13.pdf>, on August 13, 2013.

Defence Organisation (HDO) and management barely facilitate such inter-Service and Service-industry interactions.

Effective realisation of the LTIPP and TPCR are crucial for transformation of the IAF and this begs for extensive reforms in the HDO. Mention of reforms in the HDO, invokes thoughts about the highly debated issue of the CDS (Chief of Defence Staff). Despite discussions for more than six decades, the nation has not been able to reach any consensus on this strategic matter. Though the CDS is a vital issue concerning the HDO, instead of focussing the debate around an isolated appointment, the deliberations have been restricted to other macro level issues involving formulation of effective and efficient structures and frameworks, since in a democratic set-up, institutions, policies and procedures are on a higher pedestal as compared to an individual post which inherently has a high probability of personage and personal whims.

The HDO of successful democracies comprises primarily three levels. The first level reflects the political control over the military; the second level integrates political, bureaucratic and military wisdom to drive defence planning and policy; and the third level boosts the combined military potential of the armed forces. In India, at the highest level, the Defence Committee of the Cabinet (DCC) was established in 1947 but it did not last beyond a decade and presently the Cabinet Committee on Security (CSS) looks after all the issues concerning national security, including defence. Today, India has ten other Cabinet committees, including the Cabinet Committee on Accommodation and Cabinet Committee on Unique Identification Authority of India Related Issues but the Cabinet Committee on Defence has not yet found favour with the politico-military leadership.

The second level of the HDO generally comprises councils and boards exercising governmental authority on policy formulation, planning and resource allocation. The British initiated this system way back in the 17th century with the establishment of the Board of Admiralty in 1628. Since then, the system of boards and councils has been consistently well placed and has considerably progressed further. India also followed the British pattern of the democratic system at the time of independence,

but there has not been any significant achievement with respect to the establishment of defence councils and boards. In 1947, India established the Defence Minister's Committee (DMC), however, during the era of Krishna Menon (the then defence minister), this committee suffered a severe setback and was virtually made non-functional, essentially owing to his typical style of functioning. Unfortunately, in the absence of any legislative compulsions, this committee too was never revived. Seemingly, India is the only major country that has failed to successfully adopt the system of effective boards and councils, thus, losing out on maximising on the military efficiency. As a matter of fact, experts have pointedly brought out that "it is absurd to keep talking about modernising our Services without modernising this essential aspect of the higher command structure"⁴. Though non-establishment of boards and councils is largely attributable to the political and bureaucratic leadership, nevertheless, inadvertently, the military leadership also contributed to this strategic deficiency. To fill the critical gap in the HDO, in 1955, Jawaharlal Nehru, the then prime minister of India, had made announcements in the Parliament with respect to the adoption of defence councils and boards on the British pattern. The composition of the proposed Air Force Board (and other two Service boards) to be constituted under the Defence Council, was planned on the following pattern:

- Defence Minister – Chairman
- Minister of State
- Under Secretary of State
- Chief of the Air Staff
- Vice Chief of the Air Staff
- Deputy Chief of the Air Staff
- Air Member for Personnel
- Air Member for Supply and Organisation
- Chief Scientist (Royal Air Force), etc

4. Lt Gen Eric A Vas (Retd), *Truly an Extraordinary Fellow*, accessed at <http://www.rediff.com/cms/print.jsp?docpath=/news/2004/may/27spec1.htm>, on August 12, 2013.

But the army leadership, particularly Gen Thimayya, opposed the establishment of such boards on the plea that the Principal Staff Officers (PSOs) could not sit at the same table and hold a different opinion.⁵ There is no denial that military institutions are highly disciplined organisations, with unquestioned execution of orders and are inherently designed to be largely closed and insulated from civil systems; but transformation needs new ideas which cannot flourish without an atmosphere that in essence promotes debates, discussions and difference of opinion on professional matters during the decision-making process.

At the third level, India has the Chiefs of Staff Committee (COSC) for the management of national defence at the strategic and tactical levels. The COSC — the only functional committee in the HDO surviving since independence — provides collective military advice to the Cabinet and direction to the armed forces. But the absence of councils, boards and committees for professional policy guidance at the second level severely constricts the functioning of the COSC.

Despite the obvious inheritance of the British system of governance and HDO, wherein substantial weightage was accorded to military matters and military leadership, India lacks a rational and credible system of councils and boards. There seems to be a deliberate political effort to disregard the essential requirement of a robust national defence mechanism. The Indian political and bureaucratic leadership, being disillusioned by the devastation of the two World Wars and deeply impressed with the success of Gandhi's strategy of non-violence, was optimistically aspiring for a world order that would effectively resolve all conflicts peacefully. Nehru even described Gandhi as an exponent of the "indirect approach" — a concept well articulated by the British military strategist Basil Liddell Hart.⁶ Thus, in a strong desire to remain peaceful and move India away from war-like scenarios, the national leadership deliberately neglected the military and HDO. The armed forces, as brought out by Adm Arun Prakash, former chairman, Chiefs of Staff

5. Jasjit Singh, "India's Higher Defence Organisation: An Introductory Essay" in R Venkataraman, *India's Higher Defence: Organisation and Management* (New Delhi: KW Publishers, 2011), p. xvi.

6. Sunil Khilnani, "Introduction" in Jawaharlal Nehru, *The Discovery of India* (New Delhi: Penguin, 2010), p. xxiv.

Committee, and the chief of the Naval Staff, have been kept completely isolated from India's strategic programmes, and "Service HQ staffs have never been involved, nor the Service Chiefs ever consulted, either before or after seminal events such as India's 1974 Peaceful Nuclear Explosion (PNE), the discovery of the Sino-Pak nuclear nexus, and, of course, the Pokhran II tests".⁷ This is a glaring example of the exclusion of the military leadership from the national security structure.

While deliberately pursuing this policy, the national leadership overlooked the fact that the nation cannot wish away a war only by reducing its military strength and preparedness. India, a peace aspiring nation, ignored the fact that for maintaining lasting peace, credible deterrence is a more viable option than adopting a policy that deliberately disregards a robust military defence on the assumption that an adversary would also do the same and would naturally prefer peace over war. India faced severe consequences for not strengthening its defences in the form of five wars, several other adventures by neighbours and a number of '*near war situations*'.

Despite repeated recommendations by several committees including the Kargil Review Committee (KRC) and Group of Ministers Report of the KRC of 2001, the nation has continued to follow the *minimalist* approach towards defence, and due to preoccupation with other priorities, the political leadership has largely remained unsuccessful in initiating corrective steps. It is high time that all the three levels of the HDO are suitably transformed.

MACRO LEVEL REFORMS IN HDO

At the highest level, India needs a Cabinet Committee with the prime minister as the chairman, and the defence minister, minister for external affairs and finance minister as political members, exclusively focussed on defence matters. With the Service chiefs as permanent members, non-political members should include the National Security Advisor (NSA) and Scientific Advisor to the Raksha Mantri (SA to RM). The committee may be named the Cabinet Committee on Defence (CCD) or Cabinet Committee

7. Adm Arun Prakash, "9 Minutes to Midnight: Opacity about Their Deterrents is Leading to a Nuclear Arms Race between India-Pak" *Force*, July 2012, p. 4.

For effective functioning, the COSC – the apex body to advise the political leadership on military issues — needs empowerment in terms of availability of real-time intelligence assessment and greater delegation of power. The Joint Intelligence Committee (JIC), which was transferred from the COSC to the Cabinet Secretariat in the 1960s, may be brought back to its original structure.

on Military Affairs (CCMA). The primary responsibility of the committee would be to provide strategic direction for long and medium term planning in consonance with the national strategy.

At the second level, for medium and short term planning, the establishment of a Defence Council (DC) on the British pattern is desirable. The DC is proposed with the following composition:

- Defence Minister - Chairman
- Defence Secretary - Secretary
- Service Chiefs - Members (Military)
- Vice Chiefs - Members (Military)
- SA to RM - Non-Military Member
- Secretary Finance (MoD) - Member

Other relevant secretaries and additional secretaries of the MoD, and PSOs of Service HQ may be called on an as required basis. The DC would be mainly responsible for implementation of defence policy guidelines provided by the CCMA or CCD. The DC would play a seminal role in matters like approval of the LTIPP, finalisation of five-year defence plans, linking of the annual defence plan to the Defence Services Estimate, promoting defence Research and Development (R&D), periodical monitoring of various important projects concerning infrastructure modernisation, acquisition and weaponisation.

At the third level, empowerment of the COSC – the only functional committee of the original HDO envisaged in 1947—is a necessity. For effective functioning, the COSC – the apex body to advise the political leadership on military issues — needs empowerment in terms of availability of real-time intelligence assessment and greater delegation of power. The Joint Intelligence Committee (JIC), which was transferred from the COSC to the Cabinet Secretariat in the 1960s, may be brought back to its original

structure. Amongst other initiatives, establishment of three Service Boards – the Admiralty Board, Army Board and Air Force Board – would provide the impetus to the mechanism of administering and monitoring single Service performance. The Air Force Board, with Executive Committees under the chief of the Air Staff, would enable formulation of the required policies for efficient functioning of the IAF in line with the aims specified by the DC.⁸ The CDS, as and when appointed, should obviously be a permanent member at all the three levels.

Nonetheless, establishment of new frameworks without associated enablers and fixation of accountability would not give the desired results. The aforementioned transformation in the HDO would not be effective without adequate legislative mandates and rational military and bureaucratic integration. The HDO conceived after independence could not continue for long and fell into disuse essentially because of personality issues and the personal desires of the politico-bureaucratic leadership (and not because of any planned and well thought out policy decisions). Thus, an appropriate legislative initiative is essential to make the organisational changes strong enough to stand the test of time. For institutionalising effective defence reorganisation, even the United States, which is economically and democratically a much advanced country, had to resort to the Defence Reorganisation Act (commonly known as the Goldwater-Nichols Act of 1986). Secondly, there is also a need to integrate the military and bureaucratic leadership through practical initiatives. Presently, the MoD is a separate entity almost exclusively staffed with civil servants. The primary mandate of the MoD is to frame policy directions on defence and security related matters; communicate the same to the Service HQ, inter-Service organisations, production establishments and R&D organisations; and ensure effective implementation of the approved policies within the allocated budgets. Thus, policy-making and execution are by different agencies with the onus of policy-making on civil servants who largely work in isolation from the military. The desired military-bureaucratic synchronisation cannot

8. For further details, see R Venkataraman, *India's Higher Defence: Organisation and Management*, (New Delhi: KW Publishers, 2011).

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be achieved by just renaming Service HQ as Integrated Headquarters of the MoD; in fact, the MoD and Service HQ are to be operationally and structurally transformed into one single entity.

Two essential steps towards achieving this desired integration are establishment of a specialised cadre of civilian defence officers; and cross-postings of officers between Services HQ and the MoD. Establishment of a specialised cadre of civilian defence officers is vital for creating a pool of bureaucrats adequately informed about the nuances of defence related matters, including the work culture and ethos

of the Services and diplomatic necessities. In the present system of the civil services, there is a specialised cadre of Group 'A' Service for handling issues like Defence Accounts (known as 'Indian Defence Accounts Service') and Defence Estate (known as 'Indian Defence Estate Service') but surprisingly there is no special cadre for occupying higher positions in the MoD and allied defence establishments. This lacuna may be addressed through the establishment of a special cadre for defence and related appointments and that may be known as IDS (Indian Defence Service). IDS officers are to be well versed in defence and diplomacy in almost equal terms. To initiate this cadre, experienced civil and military officers with exposure and experience in the MoD and/or Ministry of External Affairs (MEA) can be inducted. Recently, in 2012, the UPSC (Union Public Service Commission) initiated a scheme wherein young military and paramilitary officers could join the Indian Police Service (IPS) cadre.⁹ Similar schemes could be pursued for establishing the proposed IDS cadre. And once the foundation is laid, regular recruitments may commence along with other civil services cadres – Indian Administrative Service (IAS), IPS and Indian Foreign Service (IFS). The long

9. Advertisement titled "Indian Police Service Limited Competitive Examination, 2012", dated March 10, 2012 accessed at http://www.upsc.gov.in/exams/notifications/2012/ips/ips_eng.pdf, on May 19, 2013.

pending recommendation of curtailing the all purpose character of the IAS and replacing it with specialist cadres may be acted upon at the earliest.¹⁰ Systemic cross-postings and institutional linkages are also essential for establishing cohesion and understanding each other's strengths, limitations, expectations, work culture and ethos.

ORGANIC TRANSFORMATION OF THE IAF

The above mentioned macro level recommendations for transformation of the HDO and management are significant for treading the path of transformation, nevertheless, instead of awaiting the external transformation to materialise first, it would be more prudent and practical for the IAF to simultaneously initiate internal transformation so that it can make best use of the available resources and is better prepared to catalyse and absorb external changes in the dynamic environment. To be a long-reach, high endurance, all-weather, precision, air dominance, networked and space-enabled force, capable of handling the full spectrum of war, crises, threats and peace-time requirements, the IAF needs to change the mindset and move away from a 'threat-based approach' to a 'capability-based approach'.

Globally, employment of offensive air power in the contemporary battle space is increasingly becoming more complex, especially due to the blurring of the distinction between combatants and non-combatants. The USAF (United States Air Force) has termed its concept of transformational pursuit as DOTMLPF – that reflects its desire to improve Doctrine, Organisation, Training, Material, Leadership, Personnel, and Facilities in a coordinated manner.¹¹ For India, air power employment in an offensive role is an even greater challenge since the nation follows the basic precepts of military power projection – *necessity, humanity, and proportionality* — in letter and spirit. The inordinately slow defence acquisition set-up, unplanned deficit in the force levels, low technological base, ongoing economic slowdown,

10. The need for creating specialists in the IAS cadres was also felt by the first Administrative Reforms Commission way back in 1966; but the recommendations made therein are yet to be implemented.

11. *United States Air Force Unmanned Aircraft Systems Flight Plan 2009-2047* (Washington DC: USAF, 2009).

coupled with high inflation and devaluation of the rupee clearly indicate trends that would continue to limit the availability of air power assets in the next two decades. The air assets would be hardly sufficient to meet the likely operational peace-time and war-time demands across the full spectrum, over all the distant and diverse theatres. Thus, there ought to be greater emphasis on effective and efficient employment of the available air power and prudence demands that the IAF should develop air power capabilities that make the force more flexible and adaptable. Additionally, transformation calls for '*professional mastery*' at all levels, individual as well as collective.

Before dwelling upon '*professional mastery*', appreciating the subtle difference between a '*profession*' and an '*occupation*' is important. An '*occupation*' is a habitual employment defined in economic terms and market value, striving for a balance between the organisational requirements of the employer and the economic needs of the employees. The primary motive of the organisation and the employee is to meet their respective self-interests at an agreed financial implication. On the other hand, the term '*profession*' is based on ethical principles, special trust and mutual confidence with theoretical underpinnings that far outweigh any potential for economic gains.¹² Moreover, a profession tends to evolve and get institutionalised with a purpose transcending individual self-interests in favour of a presumed higher good. A military force – in the profession of arms – is the embodiment of this evolution, and the IAF is no different.

The IAF, being a system of systems, every sub-system has to strive for professional excellence. The IAF, aspiring to have a tangible influence on the national security calculus, needs to ensure that all its components — right down to every single air warrior at the bottom of the pyramid — are proficient to handle their respective tasks, duties and responsibilities, be they operations, technical or administrative. However, in the current age—signified with information overload, increasingly high rate of technological change, expanding spectrum of conflict with increasing

12. Sanu Kainikara, *Working Paper 33: Professional Mastery and Air Power Education* (Canberra: Air Power Development Centre, 2011), p. 3.

non-traditional threats, growing expectations that demand a leader to be a proficient *specialist* as well as *generalist* — it is humanly impossible to have in-depth knowledge of all the dimensions of national security and defence. Limited knowledge is an issue the military leadership must face boldly. For example, Adm Arun Prakash, gracefully accepted his ignorance about the nuclear issues and went further to state that “...after 39 years in uniform, the system had ill-prepared me for the most critical responsibility that I was to ever shoulder; but equally galling was the realisation that the time I devoted, as Chairman COSC, to the nuclear deterrent would be at the cost to India’s maritime security – my primary commitment as Naval Chief.”¹³ Lack of knowledge and robustness in strategic thinking leads to diminished awareness among the military leadership of the wider context of national strategy and security thinking; and the corollary is their exclusion from the strategic decision-making process. The IAF training and education are to be structured in such a manner that while every single *air warrior* aspires for technical and professional mastery, the senior leadership possesses the requisite knowledge, experience and wisdom that enables comprehensive understanding of the wider perspective of national grand strategy, national security and defence related issues. Military training is normally built around a competency-based system in which trainees are indoctrinated in their attitudes to be disciplined and trained to follow the Standard Operating Procedures (SOPs) to accomplish given tasks. This kind of ‘task oriented’ training is very effective in developing technical mastery at the operator level. But as the level rises, education gains prominence and at the highest level, it is paramount.¹⁴

13. Prakash, n. 7, p. 4.

14. Appreciating the distinction between education and training, and understanding their impact on transformation of the IAF is imperative. Training is a repetitive process of acquiring predefined knowledge with an aim to improve skills through instructions and practice. On the contrary, education is an intellectually stimulating process that develops wisdom, widens the horizon of the individual and generates capability to understand ideas and big picture. While ‘training’ is aimed at equipping a person in performing a particular task in a well defined manner as well as moulding of attitudes through formalised drills; education aims at developing an understanding of the guiding principles, theory and concept of a particular subject in the correct perspective of a wider background. Essentially, training tells ‘how to complete a task’ while education gives wisdom of ‘how to think’ and ‘what to do’.

IAF and National Grand Strategy

Ideally, the IAF should aspire to reach the highest level of professional mastery and play a leading role in the formulation and execution of the national grand strategy. However, the journey to reach the highest level is long, uphill and arduous, involving multiple challenges. First, the organisation desirous of being on a high pedestal has to consistently display a very high order of operational excellence for a long period of time. During its long history of 80 years, the IAF has successfully displayed this capability by largely meeting all the national security and defence requirements. The only war India lost was the one in which the IAF was not allowed to participate in a direct combat role. Since 1971, the IAF has been effectively defending national air space and there has been no attack from the air. Secondly, the IAF needs to have a robust doctrine and concepts of operations at the unclassified level. Articulating targeted campaign documents to make all the stakeholders – be they strategic analysts, academicians, bureaucrats, political and military leadership or laymen— understand the philosophy of air power is also crucial. There is significant scope to strengthen this aspect because such documents are hardly available in the public domain. The IAF took 80 long years to publish its first open source doctrine. This initiative needs to be further strengthened in terms of publishing targeted literature. Thirdly, having the requisite confidence to play an active role in the national security community, and the capability to function effectively at this highest level of the security calculus is also significant. Moreover, just getting a place at the highest table is not enough — the aerospace leadership should also be capable of influencing the decision-making process of the national grand strategy. IAF aspirations should focus on an active role in national security dynamics that encompasses defining the bounds of India's national security, determining the desired end state to any crisis/confrontation involving the national security imperatives and the point of military disengagement, providing the government with viable sovereign options and alternatives to meet the threat/crisis, deciding the best course of action, planning and conducting multi-agency and joint campaigns, and tailoring the response to achieve the desired end states at minimum cost. Conceptualising futuristic

rational strategies and doctrines demands philosophical inclinations.

Essentially, the IAF should continue to aspire to be a capability-based, high-tech, modern, well trained and flexible force capable of meeting all future requirements by 2032, when the IAF will be celebrating its 100th anniversary. A long-term transformation policy has to basically begin with the articulation of a thought process on aspirations, capabilities, drivers, enablers, as well as limitations and roadblocks; and this begs for initiating the process of a broader strategic and philosophical debate. The chief of the Air Staff and top brass of the IAF of 2032 would presently be at the middle management levels, with about 15 to 17 years of colour service. Therefore, the concerted efforts should be towards familiarisation of this cadre with the IAF Vision 2032, and rationally grooming them towards realisation of the vision.

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Philosophical Pursuits in the Military

The profession of aviation, as brought out by Winston Churchill, attracts adventurous souls who are physically adept, mentally alert and pragmatic rather than *philosophically inclined* (emphasis added).¹⁵ Across the world, air power leadership has been largely dominated by highly professional and accomplished pilots with a proven track record of mastering the nuances of flying that include learning, training, experimenting and exploring air power with an inherent sense of adventure. The profession of flying and employment of air power demands that its practitioners strive for

15. AP 3000, Royal Air Force, ch 2, accessed at http://www.raf.mod.uk/rafcms/mediafiles/374B96A2_1143_EC82_2E93053B8A5AF3EF.pdf, on July 14, 2013.

Another important issue is the commonly held belief that the military maintains a bias against intellectuals, scholars and thinking-soldiers in favour of soldiers of action. The preference for character over intellect and for brawn over brain is widely talked about.

perfection, and, thus, they naturally develop a practical, scientific and specialist mindset. And a specialist naturally gravitates towards knowing more and more about less and less; and mathematical extrapolation suggests that a '*specialist is the one who knows everything about nothing*'. Hence, in the pursuit of excellence in his own specialised area, generally, a specialist tends to lose the larger perspective. Konrad Zacharias Lorenz has rightly brought out that, in order to compete with other people, every man gets into a narrower and narrower field of knowledge in which he must be an expert. Air power leadership is no

different. On the other hand, philosophical pursuits like conceptualisation of strategy, doctrines, campaign documents, propagation of air power and convincing its stakeholders (internal as well as external) require a fair amount of philosophical acumen and a mindset that is more *generalist* than *specialist*. Philosophical speculators, as stated by Will Durant, know less about more as narrow knowledge does not generate wisdom.¹⁶ Nonetheless, many practitioners of air power have successfully overcome the above stated practical constraints and have excelled in philosophical pursuits as well.¹⁷ Though the size of this elite community is quite small, slowly but surely it is growing. It is desirable to make conscious efforts to promote and energise expansion of this pool of scholar-air warriors, qualitatively as well as quantitatively, so that an increasing number of air warriors acquire adequate knowledge and wisdom to handle strategic, doctrinal and policy matters concerning air power.

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16. Will Durant, *The Story of Philosophy* (New York: Pocket Books, 2006), p. xiv.

17. Air Cmde Jasjit Singh, a renowned national security expert and strategist was an undisputed leader of the strategic community in India.

for brawn over brain is widely talked about. The British war-time Prime Minister Lloyd George (1916-22), caustically observed that the “military mind ... regards thinking as a form of mutiny.”¹⁸ Additionally, intellectual pursuits and professional excellence are generally in competition for quality time. On the one hand, mastering sophisticated air power systems demands considerable training and time, and, on the other, the process of education, learning, introspection, acquisition of knowledge and its practical application all are also long-drawn processes involving immense sacrifice, dedication and sincerity of purpose. The IAF, while facing a shortage of 600 pilots, cannot afford to promote a culture of scholarly pursuits in terms of sparing its pilots on long sabbaticals for undertaking research/studies to explore theories on various relevant fields, including air power strategy, national defence, international relations and diplomacy.

Effective educational measures essentially require both ‘pull’ and ‘push’ mechanisms. Organisationally, the IAF must continue to ‘push’ the air warriors as per the prevailing structure of an institutionalised educational mechanism. However, there is a need to guard against institutionalised educational courses leaning towards training, overlooking an educational spirit. The tendency of treating institutional courses as ‘a series of courses that one has to undergo’, ‘a break from operational pressure’, ‘botheration that has to be suffered’, or ‘something that interferes with one’s primary duties’ needs to be curbed through developing a culture of education.¹⁹ It is important to understand that the culture of excelling through accomplishment of a given operational task is a well entrenched psychology in air forces across the world, at organisational as well as individual levels. Through PME (Professional Military Education), the IAF should take this ‘*task oriented approach*’ to a higher level wherein air warriors not only focus on their respective tasks but understand various dimensions of generation and employment of air power. Additionally, intellectually inclined, capable and interested volunteers should be identified and motivated

18. Col. Lloyd J. Matthews, “The Uniformed Intellectual and His Place in American Arms,” *Army Magazine*, July & August 2002, accessed at <http://www.freerepublic.com/focus/news/735611/posts>, on July 30, 2013.

19. Kainikara, n.12, p. 13.

to pursue their educational interests provided they are aligned with the organisational requirements. For this, at the outset, the IAF needs to bid for adequate manpower so that air warriors are not excessively tasked in routine operational requirements and are left with some quality time for intellectual pursuits.

To 'pull' the air warriors towards educational and intellectual pursuits and to introduce willing learners to quality literature and encourage self-study, significant air forces across the world – including the USAF, Royal Air Force (RAF), Australian RAF routinely publish 'Reading Lists' containing recommendations of their respective chiefs in terms of books, biographies, movies, etc that air power professionals should read or watch to enhance their knowledge and appreciation of air power history, theory, strategy and the leadership challenges likely to be faced in today's and tomorrow's Service. These lists, current as well as archives, are readily available on their respective official website. But the IAF is yet to publish any such list on its official website, though a considerable amount of quality literature on air power and national defence published in India/abroad is already available in the public domain.

More importantly, scholarly pursuits should be suitably rewarded in terms of career progression, promotions, special appointments as well as financial incentives. On the contrary, the world over, there are numerous examples of thinking-soldiers getting ridiculed, superseded and even court-martialled. Giulio Douhet, the Italian author of *The Command of the Air* a seminal work on air power, was court-martialled, imprisoned, and retired for his severe criticism of the conduct of the Great War. Incidentally, when investigation of the Italian defeat at Caporetto in 1917 justified his criticisms, his conviction was reversed, and he was appointed head of the aviation Service.²⁰ Col. John A. Warden III, a renowned theorist of air power, of Warden's Five Rings fame, could not rise in the USAF beyond the rank of colonel. The IAF should essentially be conscious of this systemic faultline across the air forces of the world, and make efforts towards

20. "Giulio Douhet" *Encyclopaedia Britannica*, accessed at <http://www.britannica.com/EBchecked/topic/170252/Giulio-Douhet>, on July 30, 2013.

reversing the trend of sidelining scholars and thinkers. Realisation should dawn that intellectualism is the basis of military transformation and not just technological advancements. Individual thinkers striving for change while working within a system would generally encounter opposition from elements seeped in traditions and bureaucracy. Countering this resistance requires efforts to embed institutional intellectualism in the organisational framework that can promote free thinking and exchange of ideas.

Technology and Human Element

Some quarters, especially the ground forces, feel that aerospace power does not appreciate the ground realities since it operates in the third dimension, far away from the surface where the real action takes place, and being highly technical, its dependence on technology is so high that it almost excludes the human element. Thus, the aerospace leadership is, by and large, believed to be detached from human elements and their understanding of the ground realities is considered to be shallow. It is feared that this *detachment* would further amplify with the increasing use of unmanned platforms and exploitation of space. Such allegations are far removed from truth and reality. How can one overlook the fact that strategy, concepts, tactics as well as conduct of actual operations are always decided and directed by human beings. The human resource has always been more important than the machine, since it is human ability that produces or exploits a machine. The men behind the machines have always been most critical in making a military force credible and effective. During World War I, the required technology and raw material were available with nations to produce aircraft in huge numbers (during the first ten months of 1918, France, Britain and Germany had collectively produced about 50,000 aircraft); but generating well trained and capable pilots in commensurate numbers in the given timeframe must have been a bigger challenge since pilot training is a highly sophisticated, long-drawn and costly process.

Though air forces are highly technical, they are inherently human as well. The IAF also considers air warriors as primary assets and the same is well conveyed through its motto "*People First Mission Always*". All the IAF operations in peace as well as war are inherently human activities undertaken

The political and bureaucratic leadership should take concrete steps to strengthen the image of the IAF in terms of *weightage* accorded to it in the formulation of the national grand strategy and the security calculus.

through technological means. Globally, advanced Unmanned Combat Air Vehicles (UCAVs) are also remotely piloted and are not autonomous. The only difference is that the cockpit is on the ground and not in the aircraft. Thus, as of now, people are indeed central to any air force since autonomous robots or flying platforms are still far from being a technical reality and practical option of deployment. Nevertheless, since a future war will be more and more network-centric and integrated, inter-Service *jointness*, civil-military relations and understanding of each other's capabilities and limitations are

crucial to the national war-waging potential. Thus, instead of just denying these parochial views and in order to dispel these myths, the IAF needs to pursue the necessary steps through the means of campaign documents, discussions, wider debates and increased interaction with sister Services and civilian counterparts. Autonomous think-tanks like IDSA (Institute of Defence Studies and Analyses), CAPS (Centre for Air Power Studies), CENJOWS (Centre for Joint Warfare Studies), CLAWS (Centre for Land Warfare Studies) and NMF (National Maritime Foundation) can play an important role by facilitating preparation of such documents and providing a common platform for bridging the gap amongst the Service HQ, MoD and HDO through discussions and debates.

Attracting Best Talent and Aspiring for Professional Mastery

To produce competent professionals, the IAF essentially needs to attract the best talent available in the country and thereafter educate and train them through the best curriculum and practices that create an excellent work culture and working environment. In the absence of good intake, even the best of the PME (Professional Military Education) practices would be insufficient to produce the best professionals. The military which used to be a profession linked with royalty, honour, patriotism and service to

the nation, is appearing to be gradually losing its sheen. The *profession of arms* has considerably slid down in the priority list of potential candidates looking for a profession. The reasons are many, including a short career span associated with a steep promotional pyramid; inherent social hardships to the air warriors as well as their family members due to frequent postings and remote locations; huge disparities in promotions, remunerations and little influence in higher defence management as compared with their counterparts in the bureaucracy; a highly disciplined work culture demanding a high order of obedience, loyalty and unquestioned execution of orders that is not in step with the societal trends of consumerism, equality and general freedom of choice.²¹ Addressing these systemic and societal issues requires a multi-dimensional approach. At the broadest level, further boosting the image of the IAF (and that of the defence forces) is crucial. The political and bureaucratic leadership should take concrete steps to strengthen the image of the IAF in terms of *weightage* accorded to it in the formulation of the national grand strategy and the security calculus. First, as mentioned earlier, the IAF top brass merits a greater role in the higher defence management decision-making process so that they can initiate and steer appropriate measures to address the given shortcomings. Secondly, the socio-economic status of the air warriors has to be uplifted. Thirdly, the IAF needs to consciously develop a mechanism that unequivocally dissuades *careerism* (a phenomenon gaining prominence in all professions) and promotes *integrity* and *professionalism* — a humongous challenge in the prevailing socio-economic conditions and general aspirations.

POLICY AUDIT

The IAF, a unique institution, is entirely different from commercial organisations at least in three aspects. First, in a war there is no second position: either you win a war or you lose a war. Secondly, in peace-time, real future operations are difficult to predict and it is very complicated to

21. "Generation Next Workforce Study 2013", a study brought out jointly by CII (Confederation of Indian Industries) and Deloitte, highlights and quantifies the reducing loyalty amongst the Indian workforce, especially amongst the generation born after 1981 which is termed as 'Generation Y'.

Transformation is an endless journey and not a destination, thus, no competitive advantage over a potential adversary or capacity to neutralise an expected threat can be retained forever. Retaining competitive advantage requires a mindset to explore and change continuously.

truly ascertain the war-waging potential of a force. Genuine effectiveness can only be tested during actual operations whereas performance appraisals undertaken during simulated conditions are based upon perceptions of likely war scenarios, primarily based on a national understanding of war and assumptions of the enemy's likely capability and strategy. Thirdly, in India — a true democracy with defensive and non-alignment policies — there is no national alternative to the IAF. Unlike the North Atlantic Treaty Organisation (NATO) nations, India does not have any alternative arrangement or fallback mechanism in terms of bilateral or multilateral defence alliances.²² Hence, the nation needs to realise that any laxity in the preparedness of the IAF would

severely jeopardise national security and defence.

Transformation is an endless journey and not a destination, thus, no competitive advantage over a potential adversary or capacity to neutralise an expected threat can be retained forever. Retaining competitive advantage requires a mindset to explore and change continuously. Therefore, to be considered a credible element of the national grand strategy, it is desirable for the IAF to continuously monitor its strategy, policy and organisational practices, their impact on organisational capability to wage and win a war, power projection, handling threats and exigencies. And this entitles the IAF to a reality check through a realistic and consciously critical policy audit on a regular basis (only a financial/performance audit would not suffice). A policy audit has to be pitched at a much higher level and the scope of the audit should include all the larger issues, including vision, strategy, policies, work culture, values, perceptions and aspirations having a bearing on the organisational

22. Historically, India believes in strategic autonomy and international partnerships, not in alliances.

capability to perform and transform. Table I below lists out some essential aspects that need to be covered during an effective organisational audit of the IAF (the list is suggestive and not comprehensive).

Table 1: Audit Guidelines²³

Leadership
<ul style="list-style-type: none"> • What is the vision of the organisation? • What does the organisation aspire to achieve? • What are the core values that guide executive decision-making? • What is the dominant leadership style? • What leadership traits are rewarded?
Strategic Elements
<ul style="list-style-type: none"> • What elements are recognised, developed and encouraged? • What are the external and internal threat perceptions? • What are the drivers of the organisational strategy? • How does the IAF educate and train its professionals? • What are the professional strengths of the air warriors? • Is there a willingness to change? • What is the organisational attitude towards change/transformation initiatives? • What are the elements of pride amongst air warriors?
Organisational Values and Practices
<ul style="list-style-type: none"> • What are the official values and how well are they articulated and communicated to the air warriors? • What are the unofficial values and practices followed? What happens when they are violated? • Does any disjunction exist between the two? If yes, then how is it being addressed? • How do the air warriors interact with each other at different levels?
Technology
<ul style="list-style-type: none"> • What is the extent and nature of technology? • What are the technological aspirations? • How comfortable are the employees with the use of technology?

23. Adapted from Abinash Panda, "Do you know Who You are Dealing With? Cultural Due Diligence: What, Why and How" *Vikalp: The Journal of Decision Maker*, vol 38, April-June 2013, p. 11.

Perception of Air Warriors

- How do the air warriors perceive the IAF?
- How do they perceive India's defence, including other Services and HDO?
- What is their perception of national security threats?
- How do they perceive other air forces, especially the PLAAF, PAF and USAF?
- What is the shortfall between perceptions and aspirations?

CONCLUSION

There is no doubt that maintaining and exhibiting technical and professional mastery is an essential element for the IAF, but it is insufficient to transform it into a full spectrum formidable force. The biggest challenge is to gain a chair at the highest table of the national grand strategy and its security framework. In the politico-civil-military complex of the Indian democratic system, this can be achieved only through establishing credibility, dispelling mistrusts and developing mutual understanding and respect amongst all the stakeholders of national defence. And this begs for transformation in the higher defence organisation and management so that suitable frameworks and systems are created and appropriate practices are followed. Alongside, the IAF has to continually aspire for professional mastery and acquisition of high-tech national defence capabilities.

The most significant step towards achieving transformation is adoption of an appropriate mindset. The old adage that everything is born twice – first in the mind and subsequently in a physical state – would continue to be the cardinal principle of transformational pursuits. A change in mindset, even without any change in force, technology or equipment, can simply change the thought process and transform the way we think, plan, develop, deploy and employ the existing force. Thus, mindset is most crucial to the process of transformation and the air warriors must be continuously educated and trained to inculcate a mindset that has the propensity to understand the big picture and assume a larger strategic role in the national grand strategy.