

THE AIR FORCE'S LEAP OF FAITH INTO STRATEGIC THINKING: WARFARE AND AEROSPACE STRATEGY PROGRAMME (WASP)

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INTRODUCTION

The Warfare and Aerospace Strategy Programme (WASP) is a Professional Military Education (PME) programme of the Indian Air Force (IAF) initiated on the directions of the Chief of Air Staff (CAS) in 2022. It is a 17-week programme with an aim to promote critical thinking at the strategic level. The intention is that these 'critical thinkers' should be able to blend military strategy with statecraft and provide cogent inputs for policy-making. The pedagogy is based on intense reading of 250-300 pages per day followed by a discussion on the material that has been read. The discussion is guided by a Small and Medium Enterprises (SMEs) expert who has recently read the book and he provides a varied perspective to the discussion. The programme has five modules.

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WASP BEGINS

Very soon after he took over as the CAS in 2021, one of the earliest directives of Air Chief Marshal VR Chaudhari, PVSM, AVSM, VM, ADC, was to begin an education programme for a small set of officers which would be rigorous, entail cross-domain education across various fields that impact on strategy and empower its participants with an ability to think critically. Above all, the programme, named Warfare and Aerospace Study Programme (WASP), was intended from the beginning to be centred around an intensive programme of reading selected books in detail which were then discussed by a range of mentors. It was a challenging task for a Service where Professional Military Education (PME) is structured broadly around the Staff Course at the initial stages, the Higher Command and equivalent courses at the mid-career level and the National Defence College (NDC) at the senior level (one-star rank). In all these courses, the participants are exposed to talks by well-qualified speakers, practising leaders and their faculty in some cases, followed by discussions on topics which broaden their knowledge base. Apart from these three foundational PME courses, all three Services (army, navy, and air force) have their in-Service courses as per their professional requirements.

WHY WASP AS PART OF PME?

One may ask, why did the CAS feel the need for another course? He put across his thoughts on the topic in one of his visits to the College of Air Warfare (CAW), Hyderabad. He explained that the present PME being followed has been found to be inadequate in creating critical thinkers at the strategic level. A gap was perceived in 'thinkers' who have sufficient knowledge and critical acumen to provide inputs at the highest level of decision-making in the military, can interact with cross-domain experts for blending of military power with grand strategy, and guide policy-making at the strategic level for achieving national objectives. Traditionally, military PME courses have evolved towards producing military professionals capable of brilliantly executing tasks at the tactical and operational levels of warfare. This does not necessarily hold true at the strategic level.

Lieutenant General Shivane accepts this in the introduction of his book *Professional Military Education: Making of the 21st Century Warrior*

when he states, “The present tactical excellence must seamlessly transition with service progression to operational acumen and strategic competence which presently remain critical voids.”¹ The military has restrained itself from providing inputs or solutions for national security paradigms and blending of military power with statecraft except for when called upon by the state to either protect territorial integrity or prevent a massive humanitarian crisis (India-Pakistan War of 1971) in the face of enemy aggression.

Since ancient times, India has culturally valued the importance of education. There are sufficient examples in history which prove that it was mandatory for princes and rulers to complete their education in *gurukuls* (equivalent of schools in the ancient Indian education system) before they shouldered responsibilities of governance and war-fighting. In the *Mahabharata*, Bhisma covers in detail the wisdom and knowledge about statecraft and use of military force in his advice to Yudhistir (the eldest prince) on the battlefield of Kurukshetra.² Kautilya, in his *Arthshastra* continuously refers to the ancient wisdom accumulated through centuries before him and uses them to build up his arguments.³ What is being brought out is that there is no alternative in a military officer’s education in learning from history and it is not only wise but imperative to read, understand and derive important contemporary lessons from the past and use this distilled wisdom for current and likely future contexts.

The more proximate trigger for a course like WASP came from feedback received over the years from some Indian Air Force (IAF) alumni who had an opportunity to be exposed to a model of critical thinking and its application that leveraged intensive reading. This is explained a little later in this article.

Technology has always had a huge impact on the way in which force could be deployed for the purposes of statecraft; but the social constructs which would lead to the use of force in

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1. AB Shivane, *Professional Military Education: Making of the 21st Century Warrior* (New Delhi: KW Publishers, 2023).
 2. For a detailed reading of this, refer to the sections ‘*Shanti Parva*’ and ‘*Anushashana Parva*’ of the Indian epic *Mahabharata*.
 3. An example of this can be found in RP Kangle, *The Kautilya Arthshastra* (New Delhi: Motilal Banarsidass Publishing House, 2014). Such examples are interspersed throughout the *Arthshastra*.

statecraft would still be dominated by ideas and ideologies and would essentially remain in the human realm. Therefore, while it would be good to understand the technology and devise new ways of using it to conduct statecraft and military operations, use of force would essentially remain a human, societal and cultural concept. Christopher Holshek quotes David Kilcullen to state that the military's "failure to engage with the building blocks of humanity— culture, society, politics, economics and religion – leaves our strategies and plans untethered to reality."⁴ Lieutenant General Shivane argues, "As the war in Ukraine is affirming itself, nationalism, politics, society and people are the new players in this battle space and the contest of will is as much about people as politics."⁵ While the involvement of politics, society and nationalism may not be a new addition to the contestation of wills between nations, they will always be vital factors. Therefore, it will be imperative for a strategist to not only understand technology but also understand, societal, ideological, and cultural constructs. It will be important for him to understand his own society, especially a civilisational country like India which has been culturally conditioned over millennia, along with developing an understanding of his adversaries. This makes the task of educating future strategists that much more difficult. WASP is an attempt to fulfil these difficult educational requirements that are imperative for strategic thinking and the domain of force application. It does so by including in its curriculum studies on India's strategic culture and statecraft, books on India's history and military history, books for understanding the idea of Pakistan and Islamic culture, and the military history of China, among others.

Since independence, India has been using force reactively in statecraft. Wars were thrust upon it in 1947- 48, 1962, 1965, 1971 and 1999. In 2020, China almost forced India into a military confrontation. India's history since independence shows that it often has shied away from using force to find solutions to its long-

4. Christopher Holshek, "The Army is Not Ready to Win Without Fighting," Modern War Institute at West Point, March 28, 2022, <https://mwi.westpoint.edu/the-army-is-not-ready-to-winwithout-fighting/>. Accessed on November 15, 2023.

5. Shivane, n. 1.

standing security problems. In his address to India's National Defence College (NDC), on October 21, 2010, Shivshankar Menon stated, "The armed forces of the Union have only been used defensively against external aggression in the sixty-three years of the Republic."⁶ There appears to have been a diffidence for proactive use of force to address the country external security concerns. This could have led to India being faced with continuous internal security issues which may be manifestations of its external security problems. Arjun Subramaniam writes in his article ("Use of Force in Statecraft"), "Most analysis on the utility of force in India has been reactive (*sic*) in nature and often emerges when an event has passed or has reached a crisis point." He further states that in India, "the debate seldom addresses proactive and preventive strategies to insulate the state from corrosive forces that weaken the state's legitimacy and authority."⁷ Traditionally, India has mostly attempted to find diplomatic solutions to its security issues. While diplomacy is the tool for continuous engagement for resolution of issues, it needs to be backed by credible power and demonstrated capability of intent, to be effective. One of the many reasons for only using diplomacy for the resolution of issues may be because India never created institutional structures involving the military which could advise the policy-makers on the use of force in statecraft.⁸ On the other hand, the Indian military restricted itself to war-fighting when called upon to do so and did not develop knowledge and expertise to provide strategic solutions to the nation for its security problems. The military's PME remained confined to understanding military history, usually from the period of the World Wars. Surprisingly, no focus was placed on understanding India's history and culture over the past thousands of years. This continuity in culture, values and strategic ethos

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6. Shivshankar Menon "The Role of Force in Strategic Affairs," Ministry of External Affairs, October 21, 2010, <https://www.mea.gov.in/Speeches-Statements.htm?dtl/798/Speech+by+NSA+Shri+Shivshankar+Menon+at+NDC+on+The+Role+of+Force+in+Strategic+Affairs>. Accessed on December 29, 2023.
 7. Arjun Subramaniam, "Role of Force in Statecraft: Declining Utility or Inescapable Necessity," *Strategic Analysis*, vol. 35, no. 3, May 2011.
 8. For an elaborate understanding of the evolution of civil-military relations in India and associated institutional structures, refer to Rajesh R. Chaudhary, *Transforming India's External Security Using its Ancient Strategic Culture* (Biblia Impex, 2021).

underwent transformations but because it remained unbroken, it is likely to have led to a conditioning of India, resulting in a strategic culture with distinct concepts and precepts about the societal approach to strategy and statecraft.⁹ While a detailed discussion on the topic will be out of context here, there is a growing number of academicians, strategic commentators and social scientists who have accepted the importance of understanding our own strategic culture and its relevance in developing a comprehensive understanding of international relations. WASP participants are exposed to India's history, ancient strategic approach to statecraft and its contemporary analysis through selected readings on the subject and detailed discussions with subject experts in line with Sun Tzu's dictum that it is as important to understand yourself as it is to understand your enemy. To develop a comprehensive understanding of India's strategic culture, Kautilya's *Arthshastra*, articles with differing views like those of George Tanham and RW Jones, and the Kanti Bajpai et.al. edited *India's Grand Strategy – History Theory and Cases* are used, as well as contemporary writings by Dr S Jaishankar (now the external affairs minister) and Mr Shivshankar Menon, the former National Security Advisor (NSA). However, the books are reviewed and if required changed before every course to ensure that the thought process remains contemporary. The pedagogy of WASP and how it strives to create a deeper understanding of its subjects in its participants is explained later in the article.

WASP FILLS A CRITICAL GAP

A nation cannot possibly have unlimited resources to fulfil all its military aspirations for equipment and technology. While security is an important obligation of the state towards its people, so is prosperity, which the state needs to ensure for its subjects. Therefore, blending military power with statecraft was, and should always remain, the most onerous task of the state and, hence, the requirements of strategists for advising policy-makers and providing

9. For a detailed understanding of India's strategic culture, refer to Rodney W. Jones "India's Strategic Culture," US Department of Defence, October 31, 2006, <https://fas.org/irp/agency/dod/dtra/india.pdf> and Chaudhary. Ibid.

options at the national level for security. Paul van Riper states that “strategy is specifically about linking military actions to a nation’s policy goals, and ensuring the selected military ways and means achieve the policy ends in the manner that the leaders intend.”¹⁰ In an address at the National Defence College (NDC), Shivshankar Menon stated, “It is not just the logic of politics or technology but the values and purposes of the state and society that determine the choices that we make of the uses and nature of force.”¹¹ The military’s needs for equipment and technology have to be synchronised with the national strategy which, in turn, is related to national interests. This would require a deeper understanding of other domains by military officers apart from military strategy. While these domains are covered at the Higher Command level in all three Services, WASP attempts to build a deeper understanding through intensive reading and discussions from historical-strategic perspectives and contemporary situations and developments.

Inter-state relations have become increasingly complex and intertwined. Diplomacy constantly attempts to ensure that national interests are protected and furthered in this maze. However, diplomacy needs to be often backed by hard power and intent for it to be credible; therefore, the use of power – when required– is also an important tool of statecraft. Military and diplomatic policies need to be blended as a composite solution to protect national interests. This makes it imperative to leverage such courses to educate the minds of future military strategists who have a good understanding of international relations and geopolitical constructs. While International Relations (IR) is an important subject of higher PME in all three Services, WASP’s pedagogy attempts to alter how knowledge is assimilated and, therefore, attempts to develop a deeper understanding of the subjects it covers for the selected participants.

10. Paul Van Riper, “The Foundation of Strategic Thinking,” *Military Strategy Magazine* vol. 2, no. 3, Summer, 2012.

11. Menon, n. 6.

WASP: STRUCTURE AND CHALLENGES

WASP is a 15-week programme comprising five modules and culminating in a capstone seminar at the end of the programme. The present modules of WASP are as follows:

- **Foundations of Strategy and Military Theory:** In this module, the participants read many classical works on strategy and warfare, including works by Kautilya, Clausewitz, Sun Tzu, etc. Classics on international relations by authors like Kenneth Waltz and Mearsheimer are also part of the course besides books on strategy by eminent authors like Colin Gray and Liddell Hart. The study of maritime strategic thought is also part of the syllabus.
- **Civil-Military Relations and Higher Defence Organisation:** In this module, the participants are exposed to Huntington's work and other contemporary books on India's Civil-Military Relations (CMR), like *Army and the Nation* by Wilkinson and others.
- **Air Power:** This module exposes the participants to most classical works on air power like those of Douhet, Slessor, Pape, Olsen, Warden, Colin Gray, Jasjit Singh and others. It also covers the role of Indian air power since its inception.
- **Space, Information Warfare and Technology:** This module includes work by John Klein, Clay Waltz, Kaplan, Miller and others.
- **Hybrid Warfare, Contemporary Warfare Strategy and Recent Conflicts:** The participants in this module, are exposed to works like *The New Rules of War*, *Shade of Swords*, *Call Sign Chaos*, *Great Game in the Buddhist Himalayas*, etc.

As may be seen, the last two modules deal with contemporary concepts on space, Information Warfare (IW) and technology which are likely to alter the way force is used in international affairs. As brought out earlier, books in these modules are compulsorily reviewed to ensure that the modules remain contemporary. At the end of each module, the participants have to submit a paper on a topic which is given to them before the module begins. During the capstone seminar at the end of the course, the participants are required to present papers on two topics decided by the air force to

an audience comprising senior officers of the armed forces, think-tanks and academia.

WASP draws its inspiration from the US Air Force's (USAF's) School of Advanced Air and Space Studies (SAASS) programme (duration 48 weeks) conducted at the USAF's Maxwell Air University, in Alabama, USA.¹² Participants of SAASS undergo an intense reading regimen followed by a discussion on the material that has been read. The discussion is guided by the SAASS faculty. The pedagogy of WASP is similar; it involves intensive reading of selected works followed by a two-hour discussion on the material that has been read the previous day. The programme operates at multiple levels. At the level of the faculty, the challenge is to formulate modules based on the domains that are identified and select books and other readings which can provide the participants with a greater depth of knowledge. There are advised that no single book or work is complete and cannot claim to provide total insight on a topic. Therefore, the selection of the reading material has to be such that it provides fairly comprehensive exposure to the topic that the module attempts to cover. Since the overall duration of the programme is limited, the selection of books has to be done very carefully. At the second level, the participants are advised to indulge in concentrated reading of the selected material (about 250-300 pages per day) and at the third level, the participants are expected to have assimilated so much from this reading that they can participate in a meaningful discussion on the matter that has been covered.

The discussion on the reading material is steered mainly by external SME experts who are themselves not only well-versed in the subject but also have a deep understanding of the book(s) that form the required reading. They are mostly from academia, and retired military and government officials from diverse backgrounds with varied academic expertise. Some are also serving mid-level officers with excellent scholastic credentials. The general format of PME in India entails an SMEs expert speaking and interacting with course participants on various topics, but here the requirement is to engage in a discussion on a specific book and provide a varied perspective,

12. "The School of Advanced Air and Space Studies," Maxwell Air University, July 10, 2023, <https://www.airuniversity.af.edu/SAASS/>.

centred on the book to the participants. Therefore, it is reiterated that the selection of the SMEs expert for a discussion of each book needs to ensure that not only has he/she read the book recently but is also able to discuss the essence and provide a critique in such a way that the questions and comments of the participants are responded to. This discussion is the most important component of the programme since it promotes critical analysis of the topic that is being dealt with and makes the participant delve deep into understanding not only the book but also the intent of the author. This understanding of each participant is shaped and challenged by the intense discussion that takes place with and by the expert. An important factor that works in favour of the quality of interaction with an SMEs expert is that the group has just 8-10 participants. In most Indian PME, the class numbers are so large (from 40 to more than 100), that the quality of discussion often suffers. Importantly, the selection of the external faculty to achieve this objective is the next level of challenge for the programme.

At the final level is the requirement to keep the participants motivated to continue their intensive reading of the selected material as it is the foundation on which the programme is based. This challenge emanates from the reality that no other PME in India places this kind of exacting demand for rigorous reading and, therefore, this pedagogy is something that the participants have not been exposed to previously in their careers. This challenge is mitigated to some extent by the programme being completely voluntary and by the rigorous selection as well. Therefore, the participants know what is expected from them. An important aspect of the programme is also to encourage and enhance the future ability of WASP graduates for better articulation of thoughts that solve complex strategic and operational issues in a manner which is clearly and precisely communicable across decision-making and even policy formulation levels. WASP would need to keep trying to see that its participants not only acquire knowledge but also develop the acumen to critically analyse problems and situations to propose cogent solutions. At the highest levels, the aim remains to integrate military strategy with statecraft.

There are other issues as well. WASP creates a challenge for the human resource policies of the air force. Human resource management would need to create sufficient motivation for officers to join a programme which demands from them intensive reading and reflection. The foundation and success of the programme rest on the officers' enthusiasm and motivation to voluntarily subject themselves to such an effort. WASP is open to officers from all branches of the air force. As explained above, the IAF has also decided to keep the course strength small, because it aims to address the issues of quality of attention and interaction that a small group of participants have among themselves as well as with the faculty and SMEs experts. While the first WASP had participants all of who had just completed the 52 weeks Higher Air Command Course (HACC) at the NDC, they were all group captains; Air Headquarters (HQ) decided to open up the next course to the entire air force in the ranks of wing commanders and group captains. The second course had a mix of ranks and the selection became more open as well as more rigorous. The selection for WASP in the IAF is a three-step process. In the first step, the officers have to volunteer to do the course. In the next step, the volunteering officers have to appear for an exam in which their potential for critical thinking and analyses is assessed. At the final stage, they are interviewed by a panel for their suitability for the course.

The conduct of WASP is monitored at the senior leadership level of the IAF. The success of the programme has led the IAF to offer its vacancies for the other two Services also. As mentioned earlier, the effectiveness of the programme requires that the number of participants be kept small; hence, the number is capped at 10. However, No. 3 WASP commencing in mid-March 2024 is proposed to be conducted simultaneously at two locations so that a larger number of participants may benefit, including from the other Services. Since WASP is a new course with huge potential, the air force is in the process of streamlining the post-course future utilisation of these officers in appointments where they can effectively exploit the knowledge and ability that they have gained during the programme. Policies would also need to be evolved in a manner which incentivises further development of knowledge and capabilities which the officers

acquire. If the air force can find effective solutions to these challenges, it can successfully create an environment to nurture critical thinking which would provide great dividends to not only the air force but for an integrated approach to military strategy and statecraft.

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