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# Army Aviation: Does the Army Need its own Air Force?

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## Introduction

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While the context of the Indian Army, many defence commentators and analysts have emphasised the need to develop and define the role of the Army Aviation Corps. Considering the increasing importance of defining distinct roles for various corps that make up the different parts of the military's Combined Arms Team, the National Security Initiative of the Observer Research Foundation held a workshop to examine the relevance of the Army Aviation Corps. This report details the outcome of a discussion amongst prominent defence personnel.

Army aviation was developed as the aviation-related component of a nation's land forces. In its essence, it is made up of fixed-wing aircraft and helicopters, which are required for air assault, liaison, transportation and search and rescue, and which function under the operational purview of the land force commander. Historically, the Army Aviation Corps emerged as a result of the need for spotter aircraft or Air Observation Post (Air OP) units to help facilitate and assist field artillery. In this context, Air OP aircrafts were utilised for the targeting of artillery fire, the gathering of intelligence, assistance in bombing missions and communication, among other functions. The development of the modern-day air force conversely affected the requirement for an Army Aviation Corps. This did, however, coincide with the emergence of helicopters and saw the evolution of army aviation as it began to take on operations that were not covered by the air force.

Observer Research Foundation is a public policy think tank that aims to influence formulation of policies for building a strong and prosperous India. ORF pursues these goals by providing informed and productive inputs, in-depth research and stimulating discussions. The Foundation is supported in its mission by a cross-section of India's leading public figures, academics and business leaders. Many cite the Vietnam War—labelled "America's Helicopter War" by some—as a watershed moment for army aviation. The conflict proved to be a litmus test for army aviation's versatility and flexibility. During the war, for instance, the US Army Aviation's helicopters were utilised for medical evacuation, combat, troop transport, combat and logistical support, and to help re-supply ground forces. They proved to be a critical part of the Combined Arms Team and were extensively utilised thereafter. Among the lessons learnt from the Vietnam War was the need for air mobility in the context of contemporary conflicts. These lessons significantly helped develop the concepts of army aviation's doctrines within the context of an integrated combined arms team.

Although history and examples of other militaries provide a fair amount of preceding models, none can be effectively emulated in the context of the Indian Army Aviation because of the unique operational requirements of the Indian military. The Indian Army Aviation (and Air Force) has to operate in considerably diverse and, at times, hostile environments—from the Himalayas to the Thar Desert—thus creating a set of unique needs and requirements that must be addressed. Furthermore, these requirements are compounded by the need for army aviation to be able to respond to developing challenges, such as cross-border terrorism and counter-insurgency operations. In this regard, Indian Army Aviation needs to be significantly developed and consolidated in an all-round manner to be able to effectively deal with the country's changing security environment.

#### The Indian Army Aviation

The Indian Army Aviation Corps, formed in November 1986, was created with the aim of providing the Indian Army with an air component to provide combat and combat support in coordinated operations as an integrated member of the Combined Arms Team. The Army Aviation Corps emerged from the erstwhile Air OP units of the Indian Army that were tasked primarily to support field artillery. With the creation of the Army Aviation Corps and the transfer of the Indian Air Force's light helicopters, the Army Aviation Corps was utilised principally for reconnaissance and observation missions. Contemporarily, however, with the induction of the Advanced Light Helicopter, the Indian Army Aviation's role in the Combined Arms Team has expanded significantly.

The Indian Army Aviation is fairly unique in terms of the composition and distribution of its equipment. For example, as Table 1 showcases, the Indian military is the only military where the helicopters are distributed almost proportionally between the army and air force. In contrast, the People's Liberation Army and Pakistani Army maintain control over a sizeable majority of the helicopters in their respective militaries.

Country	Army	Air Force	Navy	Total
India	232	352	127	711
Pakistan	260	19	18	297
China	677	50	103	830

#### Table 1<sup>1</sup>: Distribution of Helicopters

In this context, it is worth highlighting that the majority of helicopters under the Indian Army's command are light helicopters, which would be unable to facilitate most of the operational requirements of an Army Aviation Corps. For example, the lack of medium-lift helicopters that can significantly facilitate troop transport hampers a commander's ability to move his troops quickly. Additionally, it is also worth pointing out that attack helicopters, despite being under the Army's operational control, are effectively manned and operated by the Indian Air Force.<sup>2</sup> These operational inconsistencies have created a fundamental dissonance between the Army Aviation's operational objectives and capabilities. Thus, there is an urgent need to consolidate Army Aviation's operational requirements with its capabilities to ensure its continued relevance and effectiveness.

The Combined Arms approach seeks to integrate different combat units, arms and weapons systems into one cohesive unit in order to maximise the combat effectiveness of the whole. In this context, the Army Aviation Corps seeks to be operational in a vast spectrum of operations. It is seen as integral to the provision of ground, tactical, combat and logistic support to troops. Furthermore, its ability to contribute significantly to a commander's tactical awareness through reconnaissance and observation in addition to enhancing tactical flexibility promulgates the idea of army aviation as a "force multiplier."<sup>3</sup>

### The Future of Army Aviation

When considering the future of the Indian Army Aviation, one must acknowledge the need for an overhaul on the macro and micro levels. To elaborate, not only is it imperative for a well-defined approach to determine the direction of Army Aviation, there is also a need for fundamental changes on the ground in terms of equipment, infrastructure, training, etc. These changes, however, can only be formulated in accordance with a well-defined operational posture for Army Aviation. Unless such a posture is determined, the Army Aviation Corps will be unable to efficiently purchase and allocate resources toward a particular purpose.

There are two distinct postures that can be adopted: passive and active. The 'passive' posture would see army aviation maintain status quo and take on activities such as reconnaissance, combat support, and search and rescue. Such an approach would require an all-round and well-developed force with a

<sup>1.</sup> International Institute for Strategic Studies

<sup>2.</sup> Pawar

<sup>3.</sup> Oberoi

flexible range of options, from light helicopters for reconnaissance to medium and heavy helicopters for troop transportation. The Army Aviation Corps would be primarily utilised for support activities and therefore ensure that its area of operation is mostly behind the frontlines. Furthermore, such an approach would limit the extent of the Indian Army Aviation's integration in the Combined Arms Team.

On the other hand, the 'active' posture involves the Army Aviation Corps taking on a more proactive role through the formation of specialised units modelled along the lines of the United States Army's 160th Special Operations Aviation Regiment (SOAR). In this context, Army Aviation would operate primarily with Special Forces and be utilised extensively for assault missions. The most prominent examples of the 160th SOAR's success are Operation Neptune Spear that led to the killing of Osama Bin Laden and the Battle of Mogadishu. Such an approach would also respect the Indian Air Force's desire to maintain operational control over attack helicopters because it would see Army Aviation utilise helicopters such as the MH-6 "Little Bird" that emphasises speed and agility for operations. This approach would particularly be effective for counterinsurgency and Special Forces operations, and could see increasing relevance within the context of the Cold Start doctrine. Furthermore, it would see the Army Aviation Corps' integration in the Combined Arms Team increase significantly and assuage the concerns of the Indian Air Force.

In addition to developing a defined operational posture for the Army Aviation Corps, there is an indubitable need for the formulation of an integrated operational philosophy between all three services, especially the Indian Army and Indian Air Force. As the Army Aviation looks to expand its operational posture and equipment, it must be understood what particular needs and resources are required between the services to ensure that there is no overlap of functions. In this regard, there is significant need for inter-service integration and joint planning to ensure an efficient allocation of resources. In addition to the three services, a key player in the development of such an approach would have to be the Ministry of Defence, which critically needs to step up when required.

Along with inter-service joint planning, it is also essential for the Army to develop the Army Aviation's mandate by keeping the Air Force's concerns in consideration. The individual services need to respect one another and not encroach upon delineated "turfs." Such an approach would be required to remove the entrenched mentality that the Air Force has developed on the issue of the expansion of the Army Aviation.

### The Debate

On 25 February 2014, the Observer Research Foundation hosted a roundtable conference chaired by Dr. Manoj Joshi, Distinguished Fellow, to contemplate whether the Indian Army needs an Air Force. Prominent defence experts present at the roundtable were:

- Mr. Pushpindar Singh, Society for Aerospace Studies
- Lt. General (retd.) B. S. Pawar, former ADG, Army Aviation
- Admiral (retd.) Arun Prakash, former Chief of Naval Staff
- Lt. General (retd.) Charanjeet Singh, former ADG, Army Aviation
- Lt. General (retd.) S. J. S. Seghal, former ADG, Army Aviation
- Maj. General (retd.) Atma Singh, Directorate of Army Aviation
- Air Marshal M. Matheswaran, Deputy Chief Integrated Defence Staff
- Brigadier Jaswinder Singh, Directorate of Army Aviation

In addition, there were serving representatives of the Indian Army, Navy and Air Force present at the roundtable discussion.

Following introductory remarks, the following questions were posed to the experts:

- How militarily effective is the Army Aviation Corps?
- How does the Army Aviation Corps fit into the context of contemporary conflicts?
- How can Army Aviation be an effective element of the Combined Arms team?

The following is a summary of the discussion that followed and is reported as per Chatham House rules that do not directly attribute a comment to an individual:

Talking about the Army Aviation Corps' creation in 1986, many pointed out that the Army Aviation's mandate then limited its operation to light helicopters, i.e., those under six tons. Many criticised the continued application of this retrograde rule due to its inadaptability to contemporary tactics, Army Aviation's mandate and to changes in the way that wars are fought. The discussion considered the need to adapt this rule in accordance with the plans that Army Aviation has and in accordance with its growing mandate. In this regard, many pointed out that Army Aviation is no longer tasked solely with reconnaissance and observation. Thus, changes in mandate have to accompany institutional changes in order to enable the Army Aviation Corps to be operationally effective.

Although some argued that despite a lack of materialistic growth, the Army Aviation Corps had witnessed significant expansion of vision and mandate, many expressed concern. The lack of a technologically modern fleet challenges the combat effectiveness of this unit. The Indian Army Aviation Corps has very unique needs given the distinct and extreme environments it operates in, such as the Siachen Glacier and the Thar Desert. The expansion of the operational vision without a similar expansion of the Army Aviation fleet would be suboptimal. Consequently, the participants asserted the need for simultaneous expansion of vision and material.

Considering the equipment Army Aviation has/uses, many pointed out that a significant proportion—the *Cheetah* and *Chetak* helicopters—of the current fleet is unreliable and verging on becoming obsolete. Developed from the SA-315B Lama and SA-316B Alouette III respectively, both aircrafts were first flown more than 40 years ago. Although they have performed admirably in the extreme operational requirements of the Indian Army, they are no longer compatible with the rapidly expanding mandate of the Army Aviation Corps. Drawing comparisons with the equipment being utilised by neighbouring states, the participants underlined the need to modernise the Army Aviation's helicopters in accordance with Army Aviation's evolving role in the context of its neighbourhood. In this regard, although many welcomed new developments such as the Hindustan Aeronautics Limited's Advanced Light Helicopter or *Dhruv* and the Light Combat Helicopter, they argued for the exigent requirement for light helicopters to replace the ageing fleet of *Cheetahs* and *Chetaks*.

Considering the expanding role and increasing material needs of the Army Aviation, many participants called for accounting of institutional and operational constraints. Many participants noted that an inter-services dialogue is essential to facilitate a unified position of the defence services, given, in particular, the lack of comprehension and apparent indifference exhibited by the politico-bureaucratic establishment with regard to such matters. Furthermore, inter-services dialogue would facilitate greater understanding amongst the services and help delineate roles and missions between them.

Another important matter discussed by the participants was that of optimal utilisation of resources. Some argued that unless certain roles and mandates are delineated, it is possible that resources may be inefficiently utilised due to an overlap in functions between the different services. Considering this, the discussion contemplated the importance of inter-service integration, joint planning and the development of an integrated approach between the three services. For example, aspects such as training could see tri-services integration. This would require operational philosophies of the services to be defined and resources available to be considered, allocated and utilised as efficiently as possible. In addition to the need for a unified position on inter-service integration, the participants considered the importance and implications of an integrated approach on the ground. Emphasising the need to make resources available to commanders for operations, the participants talked about the effective and efficient utilisation of resources through prioritisation and specialisation. Such measures, they said, would enable the individual services to understand each other's strengths and capabilities and provide resources to support commanders effectively and cohesively.

Another aspect discussed was an air arm of the Army itself. Many punctuated the need for an aviation capability that could intimately integrate and operate with the resources of the Army, much like the Navy's aerial arm. They argued that regardless of the competency and capabilities of the Air Force, their resources would be unable to integrate with those of the Army efficiently. Furthermore, many pointed out that Air Force pilots do not have the tactical experience and knowledge of ground

operations that Army pilots possess, thus necessitating the need for an aviation arm that can cater specifically to the explicit requirements of the Army.

The discussion considered the extent to which 'air power' could have a bearing on a conflict. Many argued that although air power can significantly strengthen war-effort, it is unable to win wars independently. To this end, the participants emphasised that wars could only be won by having boots on the ground. Furthermore, they emphasised India's apparent lack of "out-of-country ambitions" as a factor that accentuates the importance of having boots on the ground. Others, however, argued that air power enables militaries to achieve military objectives more economically and swiftly when compared with ground forces.

In addition, these individuals drew attention to the impact of air dominance in determining the results of a particular engagement. Although the discussion was divided on the degree to which air power shapes the result of a battle, most participants conceded that the Air Force would be unable to unilaterally determine the course of a conflict.

### Conclusion

There is no denying that Indian Army Aviation has come a long way from its humble beginnings. From its utilisation as an Air Observation Post to its contemporary role as an integral part of Combined Arms Team, Army Aviation's role, mandate and utility have expanded greatly and continue to do so. Given the ambitious aspirations of the Army Aviation Corps, however, there is an explicit need to facilitate and enable the Corps to fulfil its purpose. Although the Army Aviation Corps continues to be fairly efficient and operationally effective, it is falling behind various global militaries, including those of Pakistan's and China's, in terms of equipment. There is a pressing need to replace the ageing *Cheetahs* and *Chetaks* with aircrafts that dovetail with the intended vision of the Army Aviation Corps.

Additionally, as the Army Aviation expands, there is a need to determine the operational posture for the Corps to decipher how it fits into the larger picture of the Indian military doctrine. To this end, there is certainly a need for an integrated tri-services approach to help facilitate joint planning and integration. Unless the three services are able to define an integrated operational philosophy, the potential for the Army Aviation's continued progress is certainly limited. Within this, however, the role of the aviation component that needs to be embedded with the land forces must be examined. This component, as noted above, relates to air assault and anti-tank helicopters, liaison and transportation helicopters, and fixed-wing aircraft for transport and logistics.

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