

Escalation and Air Power

*AJ Kolhatkar**

Air power has emerged as an important military tool to manage conflict, having proven its utility and lethality repeatedly. It has evolved from being rudimentary and indiscriminate to now being extremely sophisticated, precise and powerful. The belief that air power aggravates conflicts has remained a limiting factor. In the Indian context, many still hold on to this dogmatic idea. Numerous instances of the use of air power the world over disproves this notion. Military doctrines define methods to use military power in conflict, and recognise varying degrees of conflict. Air power is not restricted to the highest levels of conflict. It can be used across the spectrum of conflict and is not meant only for escalated situations.

Constraints on air power employment is a peculiar sub-continental thinking without concrete backing. Recent military operations have served to break this mythical equalising of air power with escalation. What matters is context and perceptions. Air assets are one amongst varied means available to achieve required ends. Air power can execute missions across the full array of operations, utilising systems ranging from the smallest drones to hypersonic missiles. Technological advances have enabled air power to manifest in far greater ways than earlier considered possible. The fear of perceived escalation should not inhibit employment of air power. There is a need to comprehend that the necessary effects matter more than means employed.

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* Group Captain AJ Kolhatkar is affiliated to DSSC, Wellington, Tamil Nadu, India.

AIR POWER IN CONFLICT

Conflict has been an inescapable part of human history. It is described as an active disagreement between people or groups of people with opposing opinions or principles. It leads to situations where beliefs, needs and facts are very different and cannot exist together.¹ Incompatibility of interests and the perceived ability to manage own interests through violence results in conditions conducive for armed conflict. Organised violence in a war between nations and grey zone warfare are very often an outcome of these conditions. Origins and results of conflict have been studied for long in human history. The manifestation of conflict in domains other than the traditional has evolved through the centuries, and is not a modern concept.

Air power emerged as a tool of conflict soon after the Wright brothers first took to the air early in the 20th century. Manned and controlled flight was exploited for armed conflict very quickly. Balloons had been used by the military for far longer, as early as the late 18th century. But powered flight dramatically changed the way air power can be used, and vastly expanded its horizons. The World War I adequately proved the utility and lethality of air power. Over the course of a century, air power emerged as an important and independent facet of warfare.

Since then, various scholars of air power have advocated its use to pound the enemy through the medium of air. They have extolled the merits of aerial platforms in their ability to hit the enemy's land or sea-based military. Infrastructure contributing to national strength which was normally out of range of ground-based weapon systems could now be targeted. Douhet propounded investment in aircraft and aerial weapons that could decimate not just the military and industries, but also cities, bringing the enemy leadership to the negotiating table.² Rapid technological progress and increasing capability of aerial platforms till the end of the Second world war had changed both tactics and operations, undeniably affecting strategies of war. By the mid-20th century, air power had proved some of its prominent characteristics: reach, speed, flexibility and shock effect. These were reinforced in subsequent campaigns over succeeding decades of military conflicts around the globe, including Korea, Vietnam and much later in the Gulf wars and Afghanistan.

Air power is undoubtedly lethal and effective in conflicts. Readiness to acknowledge its capabilities has not been too forthcoming, especially among land warfare experts and maritime thinkers. The reluctance to cede ground to this domain was possibly due to characteristics of air power, which can

also be classified as limitations—impermanence and payload limitations. An artillery barrage can continue pounding enemy positions for as long as ammunition is available. If the same ammunition were provided to aerial platforms, the limitation of air attacks would be due to aircraft availability, as also weather. Added to this is relatively greater amount of effort and a markedly greater cost.

Modern platforms are no longer wood and canvas aircraft or simple sheet metal aerial vehicles of the world war era. During the world wars, the Germans as well as the Allies could produce relatively simple aircraft much like they produced jeeps and trucks. Hundreds of thousands of aircraft were produced, flown and lost on both sides.³ Today aircraft can neither be mass produced nor quickly and easily replaced, definitely not at the rates possible with world war era aircraft. Cost of aircraft production and maintenance have grown exponentially higher.

The rising costs are not illogical or without reason. Aircraft are now capable of increased speed, reach and most importantly, precision. Survivability has become a see-saw game between air defences and modern aviation technology. Expectations from modern combat aircraft are far greater, rising at much the same rate as costs. Tasks are also no longer as simple as dropping a clutch of bombs on an industrial hangar as part of a large package of bombers and escorts. Individual aircraft now are necessarily capable of more than one specific task, or multi role. This is made possible by a plethora of sensors and computers aiding their survival and ensuring mission success. Consequently, air power has greater lethality, while being comparatively less affordable compared to the past. Cost itself has become a factor to consider when air power is analysed. Cost in turn also affects perceptions about air power, requiring readiness to invest and spend larger amounts of resources towards what is another means of achieving military objectives. Arguably this means comes with its own unique set of advantages, providing for rapid response.

There are various means to meet ends demanded in fraught relationships between adversaries. Conflict progresses through various stages, either increasing in intensity and violence, or retreating from higher magnitudes towards peace. This manifestation of actions and assessment of tensions between players is generally termed as escalation or de-escalation. Escalation and de-escalation are ultimately a matter of perception. Before delving into specifics regarding air power and its place in escalation, there is a need to understand this dynamic.

ESCALATION LADDER

Escalation is an opinion in the minds of the parties involved in a conflict. By definition, escalation is an increase in extent, volume, scope amount, intensity or numbers.⁴ The Latin word 'scala' is the root word for escalation, which itself means a ladder. Escalation follows an incremental increase in the intensity of a conflict, variously described as stages or levels or steps. Ladders are a prevalent means of defining levels of escalation. The ladder model will be used to understand and explain air power in the complex interplay of conflict and escalation.

The seminal work of Hermann Kahn regarding escalation can guide us on the basics of this concept.⁵ Kahn suggested a generic escalation ladder with 44 steps or rungs for a given situation. There have been disagreements by researchers and experts alike on both the sequence and placement of these steps. Several other models have also been suggested to determine escalatory behaviour, almost all of them being situation-specific. Some of the conflicts considered in these were the US–Soviet cold war scenario, Vietnam war, ethnic conflicts and also corporate competition.

The overall escalation matrix as described by Kahn covers a few domains. He identifies three ways to escalate a conflict, through increase in intensity, area or compounding it, the last option including additional and different players. Escalation can also be achieved by increasing the levels of violence or political, military or economic actions. These domains were combined for ease of understanding in escalation ladders. The 44-step ladder enumerates different states of escalation, starting from disagreements or cold war state, rising all the way through full-blown conflict up to aftermath of conflicts. Many rungs in his ladder considered nuclear options. He further created groupings that included actions along this ladder. These groupings include sub-crisis manoeuvring, traditional, intense crisis and bizarre crises, exemplary attacks, military central and civilian central wars. The groupings were in turn separated by various thresholds. They include the generalised P-DIME (Political, Diplomatic, Information, Military, Economic) domains. Each domain does not have its own escalation ladder.

The ascent or descent along this ladder would normally be controlled centrally. However, it is possible for escalation in each domain to be expressed separately, independent of other domains. A combination of all the escalatory positions may indicate a single tentative combined escalatory position of each state or nation. Kahn has himself delved into explaining this ladder, while

also suggesting that a typical Soviet escalation ladder may have different rungs, as of 1965.

Escalation has been discussed in contexts of conflicts around the globe. The Soviet–US, Indo-China, Indo-Pak, Korean and China–SE Asia conflict zones have been discussed by numerous researchers and scholars. Each have their own distinct escalation rungs or levels specific to each situation. Each conflict would also have a different escalation ladder depending on the perspective from each side. As a result, an Indo-Pak conflict scenario could have a ladder articulated from the Indian viewpoint, and another distinct ladder from the Pakistani perspective. Each side would view actions through their own lens, and hence the ladder from opposite viewpoints may be constructed differently. All of them invariably involve multiple domains of action to manage the conflict.

Kahn had also suggested a 16-step escalation ladder⁶ in 1962 before he published the more extensive 44-step ladder. The steps are listed below to give context to the construction of a typical ladder.

- Sub-crisis disagreement
- Crisis
- Political, diplomatic and economic gestures
- Show of force
- Modest mobilisation
- Acts of violence
- Limited military confrontations
- Intense crisis
- Limited evacuation
- Super ready status
- Spectacular show of force
- Controlled local war
- Limited non local war
- Complete evacuation
- Some kind of all-Out war
- Aftermath

It is obvious that some of these steps are directly related to the military domain, while the 44-step ladder has clearer demarcated steps related to this domain. We can refer to the ladder without considering expansion of area of conflict, that is, geographical escalation, and only focus on effects. We must be clear that these rungs are theoretical in nature and from an academic point of view. No state or nation would follow a custom created ladder for a given

situation. Neither would any nation follow a one-rung-at-a-time approach. The ladder would serve to indicate current level of escalation in rough terms.

The aim of escalation ladders is to gauge escalation in specific circumstances. A ladder can also be constructed considering purely military action. In all the examples of military escalation ladders, there is generally no segregation in terms any sub-domain of military power—ground based, maritime or air power. More aspects are added from time to time in military escalation ladders, like cyber and space.

In military terms, each domain of warfare can no longer be independent of others. In each tactical situation, an escalation ladder may be restricted to a particular domain. Today these ladders have become increasingly interlinked, and even tactical situations do not readily translate to independent situations. Inter-domain dependencies have increased manifold. It is almost impossible to construct separate military sub-domain specific ladders. The military would become one of several verticals of overall escalation. The ultimate military application of force would depend on the situation at hand. Pressure points in each domain and their exploitation may well depend directly on decisions by the leadership.

Other domains beyond the military may preclude any employment of military power. Practically, kinetic actions may not be the first response in all conflict situations. Economic sanctions or diplomatic manoeuvring has been exercised often in India. The reaction to the Mumbai terror attacks were mainly diplomatic, with no military action supplementing these. These responses were considered adequate by the national leadership. A similar diplomatic response may have been politically unacceptable after the Pulwama attack. There was possibly the risk of being viewed as benign and ineffectual. The domain of response would finally depend on the situation, signalling required, urgency and the desired effect. An additional consideration would be likely responses from the adversary and their escalation calculus. Each situation being unique, much depends on perceptions of the parties involved.

De-escalation, the reverse of escalation, would also not follow a rung-wise sequence. Just like escalation, de-escalation can occur abruptly or in a slow and graduated manner. It may be possible for either side to judge and manipulate rate of escalation in case involved parties indulge in logical thinking and decision-making. It would be safe to assume that a full-fledged conflict would not normally be the first choice if the same end state can be achieved by far lesser effort. Even so, it would be wishful thinking to expect an evenly calibrated approach from adversaries. If each side exercises options restricting or avoiding further escalation, and the opposing party chooses

to reciprocate, both escalation and de-escalation could be achieved in a controlled manner. De-escalation would depend on the situation, the outlook of each side and their own prediction of future events. It may be possible to predict behaviour during conflict based on templates gleaned from doctrines and patterns of behaviour. This has been brought out amply by Kahn⁷ in his work, where he differentiates American and Soviet approaches based on their individual philosophies.

MILITARY DOCTRINES

Escalation is being considered in this discussion in the Indian context. Hence, it is logical to study what Indian doctrines state. Military doctrines provide stated guidelines regarding tools available for action or responses. The Joint Doctrine of the Indian Armed Forces gives out security challenges faced by the country.⁸ The doctrine states that Armed Forces ‘serve as the ultimate instrument for maintaining the unity and the integrity of the Nation in the face of external threats and internal unrest and disturbances’.⁹ It implies that military forces would be used across the entire spectrum of conflict, from peace to war, from deterrence to full-blown conflict. The use of military power links to political aims through conflict prevention and use of force as per requirement.

The Army land warfare doctrine¹⁰ of 2018 describes a wide spectrum of conflict and the need to respond to different scenarios, ranging from internal security challenges to external threats. It does not specify military instruments at its disposal, nor does it assign levels of warfare to different actions under this spectrum. It mentions the current state of conflict is NWNP (No War No Peace), also referring to the Joint doctrine as its base document.

Naval documents including the maritime doctrine¹¹ focus on the application of naval power across the spectrum of conflict—war, less than war situations and peace. It clearly differentiates between non-violent and violent conflicts, ranging from political, economic and ideological competition to all-out war. It brings out that the multi-dimensional nature of the maritime environment affects every facet of warfare in the sea. The doctrine recognises the need to retain freedom of action in the maritime domain across the entire spectrum of maritime activities during peace as well as war. Capabilities of the navy cover different rungs of the escalation ladder, although the doctrine specifically does not refer to any particular ladder template.

The IAF Doctrine¹² (IAP 2000–22) examines air power in the Indian context. The fifth chapter speaks of spectrum of conflict, ranging from peace

to war, also defining the NWNP (No War No Peace) state. This state falls under the air strategy umbrella, running parallel with the army and navy strategies. It envisages operations over the entire spectrum from capability demonstration to offensive operations.

The latest Russian military doctrine specifically speaks of escalation from the conventional to the nuclear and from local to regional war. The doctrine lists military goals in each situation, referring to the same possibilities of escalation in broad terms.¹³ Escalation does find mention in discussions on nuclear doctrines also. The nuclear option is considered a guarantor of peace or restricting escalation, as also means available to escalate.¹⁴

These documents speak of the ways and means to address different rungs of the escalation ladder without explicitly assigning specific actions and levels to each rung. Looking at air power alone, it is possible to analyse actions and assign them to rungs in a generic or specifically constructed ladder format. If one wants to assign levels or groupings in escalation to air power applications, there would be a need to differentiate between varied options of air power across the spectrum of conflict. Perceptions regarding air power differ between employers of the military. Distinction between kinetic and non-kinetic actions, and the variation of their effects is often not understood clearly. As a result, air power may be viewed incorrectly in the escalation calculus. Combat aircraft and missiles may be erroneously assigned to higher levels in the escalation matrix, instead of considering the situation where it is employed. Involvement of any kind of air power should not necessarily mean a step upwards on an escalation ladder.

AIR POWER ROLE IN CONFLICT

Powered flight changed the way wars were fought. It brought means to monitor the battle from an apparently unassailable aerial vehicle, quickly clubbed with near instantaneous transmission of information by radio sets and the next logical step, delivery of ordnance. Minor niggles were quickly overcome. Aircraft mounted guns were a fearsome addition to the utility of air power. Weapon capacity and accuracy increased as the demands increased. With time, aircraft became more powerful and capable. This in turn spawned the requirement to develop anti-aircraft systems.

The progress of technology by World War II resulted in air power playing a far greater role execution of operations, altering basic planning considerations. It was now possible to bomb the enemy and land troops behind the front-lines. The character of manoeuvre warfare changed forever.

The role of air power in conflict grew rapidly. It changed the way wars were fought in more ways than the armoured tanks or machine guns. Maritime roles were readily available for land-based aircraft, later taken on by sea planes and carrier borne aircraft. Even deadly submarines could now be targeted by aircraft.

Air power is no longer an option for planners. Its employment is almost always a compulsion to ensure one's advantage. A battle fought without available air power would be akin to fighting with one hand tied behind one's back. Any military operation would almost always have some aspect relying on air power for success. The roles expected are pretty similar to a century ago—reconnaissance, information relay, offensive action through weapons, defence against enemy air power, rapid transportation, battlefield surveillance and psychological effect on the adversary. The way these roles are performed now has altered vastly.

Modern air warfare uses data linking, Artificial Intelligence, drones, manned-unmanned teaming, stealth, precision weapons, multi-role combat aircraft, and a variety of helicopters and transport aircraft. The global war on terror of military states against radical groups would be impossible without modern air power. Today's platforms and weapons provide the same effects, but with far greater effectiveness and efficiency. Conventional conflicts have far greater dependency on air power than before. Decades of air power exploitation and its current uses are testament to the fact that air power is necessary and unavoidable even in the most mundane of military operations.

India is no exception to the incorporation of air power in conflict and routine military operations. There are several examples of use of air power in the sub-continent. The roles may not always have been kinetic. Some instances are the IPKF (Indian Peace Keeping Force) operations in Sri Lanka, Operation Meghdoot in Siachen, Operation Snow Leopard in Ladakh, helicopters used during operations against the terror attacks in Mumbai, rescue operations and HADR (Humanitarian Aid and Disaster Relief) in the wake of natural disasters and accidents like the Silkyara tunnel rescue or evacuation of citizens from conflict zones. Some element of air power was always used. The task and involvement may not have been very large, but air power invariably contributed.

Despite its advantages, air power in India seems to be holding back its punches. Surveillance from the air has been used in anti-terror operations in J&K.¹⁵ But transition to armed surveillance and targeting has not been a natural transition as with other world powers. The 1965 war saw delayed and inadequate use of photo reconnaissance, which led to lack of necessary

information on Pakistani defences in the Punjab sector.¹⁶ The 1971 war stands out as the conflict where air power was utilised with co-ordination and purpose.¹⁷ Much later in Kargil, aircraft were used offensively at a fairly late stage.¹⁸ Indian military inventory holds adequate capability to offensively employ air assets in a conflict. Yet hesitation and lack of understanding restrains the will to use this potent weapon in the inventory. One major reason could be that air power is wrongly implicated as a positive catalyst that escalates conflict.¹⁹

AIR POWER AND ESCALATION

Has there been a background to air power being considered escalatory? Air power has been used in all major conflicts in India. Available military capabilities have been withheld in very few conflicts. Internal security matters have usually been handled exclusively by ground forces, with maritime and air assets generally providing indirect support. Terrorism in Jammu and Kashmir has been fought with ground troops. Like the Indian context, British security forces fought against the Irish Republican Army, without using air power in an offensive role.²⁰ Naxalism has been almost exclusively fought by paramilitary forces, with air support only contributing through tasks like transportation. Offensive air power has never been used in India to retaliate against Naxals. However, air assets have been targeted by them. This has not prompted use of lethal platforms against them, with restraint always being exercised.

Offensive use of air assets has possibly been avoided because there was no need felt to involve air power in a manageable situation, or the available technology was unsuitable for the situation. Possibly there was wariness regarding public opinion. All these factors may have been addressed to some extent now. This extends to conventional conflicts too.

Major conflicts between states have almost always used all available means to fight the enemy. Examples of exception of air or maritime power are very few. Indian leadership stalled the use of air power, limiting it to minor support roles in the 1962 Indo-China war.²¹ The Army HQs initially did suggest use of offensive air power. Major General Palit had recommended use of offensive air power to counter the adverse ground forces ratio. But apparently the suggestion did not make it to the ministry.²² The decision was premised on the superiority of the Chinese air force and apprehension regarding retaliatory strikes against Indian cities.²³ Despite the dread, Prime Minister Nehru requested the Americans to help India with fighters and

bombers in mid-November. He completely ignored the Indian Air Force with its readily available military assets for the same task. This was done either because of poor advice or ignorance. This was repeated against Pakistan in 1965, when the Indian leadership did not use the navy fearing an expansion of the conflict beyond the land borders.

Surprisingly, the Chinese themselves used their air force very sparingly during the 1979 Sino-Vietnamese conflict. The reasons were possibly obsolescence of their equipment or limited utility in thick jungles. The Vietnamese air force also did not participate offensively.²⁴ This was despite American use of air power in similar geographical settings a few years earlier during the Vietnam war.

The delayed use of air power, even for routine reconnaissance during the Kargil conflict in 1999 indicates erroneous rationale. Ground forces could have gained valuable intelligence regarding enemy dispositions through air reconnaissance capabilities. Had there been accurate information on enemy equipment in the area, avoidable losses in attempts to recapture posts and to enemy artillery firing could have been averted. The ground forces first noticed the incursions on 5 May 1999. The first aerial reports came from IAF helicopter on 8 May, and the Army finally requisitioned armed helicopter support for ground forces on 11 May. Reconnaissance by Canberra, MiG-25 and Jaguar aircraft started from 12 May, while the first offensive missions were flown on 25 May 1999.²⁵

The delayed use of air power was also purportedly to avoid escalating the situation,²⁶ since the use of fighter aircraft by the IAF could only be effectively countered by bringing the Pakistan Air Force into the fray. Shoulder fired missiles were indeed a threat, but not enough to halt air operations altogether. Two aircraft were ultimately shot down by advanced anti-aircraft missiles, clearly beyond means normally available to mere insurgents or terrorists. All this while, Pakistani leaders had maintained that the Kargil intrusion was an act of insurgents with no organisational support. Despite this, when air power was finally employed, stringent restrictions were placed, the main being maintaining the sanctity of the Line of Control (LOC).²⁷ Even here, the air force sought permission from the CCS (Cabinet Committee on Security) to employ offensive air power in the conflict.²⁸ Clearly, air power was still not considered just another tool of military power, but something that was more visible, potent and possibly escalatory.

American forces have repeatedly used air power in Vietnam, Iraq, Kosovo and Afghanistan. Russia has used their air forces in Syria. Israel has been dropping weapons in Gaza using regular combat aircraft, and has earlier

extensively used armed helicopters against the Hezbollah and Hamas. British and US fighter aircraft based far away Cyprus or on aircraft carriers are firing munitions at Houthi targets. Air power and escalation is more a matter of context and perception. Escalation cannot be considered a presumed tag affixed to air power. Ultimately it is just another tool for application of military power.

Air power has the capacity to reach or strike deep and fast, giving little chance to the enemy for meaningful reaction. But this capacity has not always been considered as upping the ante in military escalation. This has been proven repeatedly and most effectively by the Israelis. The Entebbe rescue and the Osirak reactor attack involved air power almost independently, one displaying reach and capability to achieve surprise, while the attack added offensive action to it. Both did not result in retaliatory action.

The operation in Entebbe was an aircraft hijacked and taken to Uganda by four passengers, including two Palestinians. There was no response that Palestinians could give to a rescue mission, while the Ugandans responded to Kenyan support for the mission by killing Kenyans in Uganda. The Osirak attack meanwhile was termed a preventive attack by Israel to stall Iraq's nuclear programme. The countries were not at war, and Iraq only responded with criticism. The attack was carefully planned considering Iraqi reactions and ability to react. Ultimately the Iraqis were caught totally by surprise. However, the Israeli action was roundly criticised by almost all nations, including the US and the UN passed resolutions against Israel's action.²⁹ However, both stand-alone use of air assets by Israel did not escalate into conflicts.

The comparison of different means for the same effects invariably pits foot soldiers and ships against aerial platforms. Would it be fair to draw parallels and compare between domains of warfare to designate its position in an escalation ladder? Patrolling on foot in border areas, as well as on the high seas and territorial waters, is considered a norm. It is not a particularly worrisome activity even for the most adversarial of neighbours. The same is not assumed true for aircraft. Violations of airspace by military aircraft are viewed far more seriously. Hence there is a difference in distances from borders that aircraft can approach, compared to soldiers and ships. Aircraft are kept the farthest due to their speed. Freedom of navigation passage by naval battleships in disputed waters increases tension, but can be quickly defused without escalation. The Chinese air incursions around Taiwan have increased tensions, but without retaliatory actions. This is different from air space violations.

Aircraft are of greater concern because of the characteristics of speed, reach, lethality and consequently, surprise. The shooting down of the Pakistani Atlantique aircraft in the Kutch area in August 1999 by Indian MiG 21 aircraft implies that air space violation is perceived as more serious than a land incursion or a violation of territorial waters. Standard Operating Procedures dictated that the aircraft could be shot down, a purely tactical consideration with no thought given to escalation. Hence, the repercussions were not the same as an air strike across the border. Considering that the Kargil conflict had happened barely a month ago, this makes a significant point. Tensions were still high, although the active conflict had stopped. Despite the background, the loss of a vital Maritime Patrol Aircraft with crew did not lead to an escalation of tensions. The only reaction was a case filed in the International Court of Justice, which itself was later dismissed.

Other nations have carried out kinetic action using air assets with non-escalatory responses. The Osirak reactor attack has already been described. Often very little can be done to stop this kind of action. A combination of sound tactics and innovative use of technology can still get past the most formidable defences. Heads rolled in the Iraqi military, but the damage was already done.³⁰ Iraq demanded compensation from Israel, but it did not lead to escalation from an already tense situation. Each situation is unique, and it would not be possible to mirror the Israeli action in the sub-continental context, by either India or Pakistan.

The argument of inability to react quickly and correctly to an air attack holds true in case of cruise and ballistic missiles also. With the advent of inter-continental ballistic missiles (ICBMs), reaction time available during the Cold War was mere minutes. Further complicating the issue, it is impossible to determine the nature of the weapon, conventional or nuclear. Each type of weapon itself has different implications in escalation, especially with nuclear tipped ballistic missiles. Military command centres during the Cold War between the US and USSR were invariably on a hair trigger, awaiting only clearance from higher authorities to counter attack. This has led to many situations when either side was on the verge of starting a conflict based on false triggers.

Actual missile firing may still not lead immediately to escalation. The accidental firing of a Brahmos supersonic cruise missile across the Indo-Pak border on 9 March 2022 is a case in point. The reaction to the incident was fairly muted on both sides. First, it is possible that the missile was not detected when in flight. Even if it had been, there was hardly any reaction time to address the weapon itself. Another major reason could have been

the absence of any damage or any significant target near the impact point of the missile. The incident only led to some protests from Pakistan, while the officers responsible for the incident in India were sacked.³¹

The effect of air attacks in a normal military campaign will always be viewed differently from an independent air strike. An air raid during the 1971 war would have been routine during the conflict. In contrast, the air strike targeting Balakot was considered outrageous by Pakistan. During Operation Parakram, a single aircraft dropping bombs across the border would potentially have commenced the war. But the bombing itself would have been the trigger point for an already tense situation, not a cause for conflict. On the other hand, the Balakot strikes had the potential to start a conflict. Aerial weapons dropped by the Pakistan Air Force on Indian territory the next day were a reaction to the Balakot strikes. This cycle of action and reaction could have continued and expanded the conflict. Perceptions of each action from either side would lead to the next round of exchange of blows. This repetitive cycle of actions could end up being escalatory, de-escalatory or lead to a new status quo. That the Balakot strikes did not lead to conflict conflagration beyond a point is a separate matter. But the role of air power in such situations is misunderstood.

The concept of air power itself being escalatory is faulty. Air power encompasses a wide range of capabilities. The perception that employment of a particular tool of military action may result in escalation could emerge during consultation amongst decision-makers specific to each situation. These decision-makers would be leaders, military or political and their individual insights would colour their opinions and decisions. For example, there are different levels of maritime actions to indicate the gravity of the situation. Responses can vary from traffic monitoring, patrolling, searches to naval blockades, even attack and sinking of vessels. The maritime realm has been employed for many centuries, and the thought of a response in that domain is also not alien, especially in the non-conventional domain. However, the thought of aerial attacks brings with it the vision of combat.

It is incorrect to equate tools of air power employment with other military actions. A 'small' raid by a 'small' team across the border would invoke a different reaction from a relatively larger action to capture a post or a feature. Similarly maritime patrols that arrest fishermen would evoke a diplomatic response or a request, which would vary from the reaction to a littoral attack by a naval vessel. One cannot equate dropping a combat team across the border or firing weapons from the air at enemy troops to actions in other military domains. But the outcomes and effects from such action may

essentially be the same as cross-border incursions by troops or sniper action across the border. Drones or quadcopters used during cross-border action would possibly qualify as tactical level use. One cannot set a threshold for size and capability of unmanned platforms beyond which it is considered at par with traditional air power. In these cases, there may be rough equivalence of kinetic military action. But just adding air power to the mix and calling it escalation is erroneous.

Combat aircraft employed in any kinetic action across the border has somehow always been considered unacceptable, especially in the Indian context. Artillery fire across the border meanwhile may just be considered a ceasefire violation. Yet in the case of other nations, there has been lesser distinction in the platforms and means used. The Israelis have proved this repeatedly. However, context always matters. In the India–Pakistan paradigm, the glass ceiling was never previously broken. An airstrike targeting undisputed territory was probably considered unthinkable by both sides for a long time. Despite this background, the Balakot strikes and their response happened with the concurrence of the respective national political leadership. There was an attempt to control the narrative by explaining compulsions and justification to use offensive air power in response to the Pulwama attacks.

The Pakistani response was much the same—offensive air strikes aimed against military targets, although it caused no damage. Whether targets missed was a tactical or technical error, or intentional is inconsequential. The aim of the strikes from both sides was mostly political messaging. But the myth of offensive air power being purely escalatory was debunked in the Indo-Pak context. A great deal of luck due to the sequence of events that followed, apart from mature decisions from both sides halted further escalation. But the situation stabilised relatively quickly. The border remained tense for months afterwards with military deployments continuing on both sides. Compare this exchange with surgical strikes by the Indian Army in response to the Uri attacks and the response from Pakistan. While the Indian side celebrated the action, the Pakistani side refused that any such incursion occurred. The Indian air strikes were undeniable, hence the response was also in almost equal measure. It seems illogical to invoke escalation just because air strikes are involved.

The Israel– Hamas battle in Gaza is another latest example. Rockets have been used by Hamas for decades now against Israel. Military response from Israel for the same time duration has consistently involved air power. This use of aircraft has been considered acceptable and justified by Israel, as also other

world powers. The attacks against Hamas have been in urban areas, with some consideration for minimal collateral over the years.

If we were to apply the same template to anti-Naxal operations in jungles or against terrorists in semi-urban areas of Kashmir, air power will be found unacceptable. This despite definite increase in accuracy, and the added advantage of quick reaction. This is especially true with capable unmanned platforms being inducted. However, the only roles assigned so far have been passive like Intelligence Surveillance and Reconnaissance (ISR) and transportation through quad-copters Medium Altitude Long Endurance (MALE) and other Remotely Piloted Aircraft (RPA) without weapons, which invites no objections. Weapon delivery from an aerial platform within our own territory would even now be considered unacceptable. This thought process is clearly irrational.

The US has routinely used offensive air power against the Taliban in its campaign in Afghanistan. No one objects to their use of armament like heavy calibre bombs from fighter jets against insurgents or terrorists who cannot fight these threats directly. A soldier or a policeman firing at a suspected Naxal or terrorist location is not completely different from a precisely delivered weapon from an aerial platform, if the effect required is similar. The US has been able to use air power due to fewer budgetary constraints and availability of requisite resources. These may not be as easily available currently to Indian forces.

There is a definite difference between using offensive air power on own territory, and against own citizens. Naxals and terrorists may very much be our own citizens, but we differentiate between a bullet fired from a gun and from an aircraft. The reason may have been that the aircraft operator may be unable to discriminate between a legitimate target and innocents. Air power may have been moderately indiscriminate in the past. This is no longer the case due to much improved sensors, as well as precision and guidance for weapons. Proof of this precision and minimal collateral damage has been given by US forces in Afghanistan and Iraq and Israel against Hamas and Hezbollah. In the Gaza conflict, Israel has bombed entire buildings to rubble on suspicion of harbouring Hamas members. Obviously, any similar action in the Indian context would be intolerable, since there are different dynamics at play, including acceptability.

But a change in the context allows use of air power in sub-conventional situations. Indian weapons targeted isolated buildings in the Balakot hills, which invoked no opposition from either the Indian public or political parties. The situation, context and mindset in these cases are different. The

possibility of air assets being utilised for required effect exists within India too. There is no need to hold back if military action is well thought-out, and hence acceptable.

AIR POWER: ANOTHER TOOL OF MILITARY POWER

Air power is no longer nearly as indiscriminate as in world war campaigns. It is also a misconception that air power is too costly or inefficient to be employed in Low Intensity Conflicts (LICOs). Efficiency of air power has been demonstrated time and again by multiple nations. Advent of drones and AI have permitted very significant improvement in employability of air power in such conditions. US forces have proved for years that it is possible to track, relying on accurate intelligence and reliable identification, to execute targeting. There are also enormous budgetary costs associated with it. There is only a need to change mindsets. Small calibre weapons have been developed with exactly these missions in mind. They have hit targets that are time-sensitive, aiming to minimise collateral damage. Air power allows faster reaction times resulting in the shortest possible OODA loop. US experience in Afghanistan has repeatedly proved the capability of manned and unmanned platforms to target individuals, facilitated by surveillance, terminating with an attack using smart small weapons. One needs to analyse if adequate resources are available to use in such situations. Indian forces have still to acquire and use such systems, but the process is ongoing.

Chinese incursions into Taiwanese air space have only resulted in a few protests with no tangible changes, apart from vociferous reactions from Taiwan and her allies. Violation of ADIZ (Air Defence Identification Zone) is not a violation of sovereignty, and neither can it be enforced under international law. It can be classified as harassment in the air domain. The same is being done at sea by the Chinese. Harassment of maritime vessels, military and non-military, in the South China Sea have also not led to an escalation beyond a threshold. This cross-over point to escalation has been controlled by the Chinese alone, despite being the instigators.

The Balakot attacks were a demonstration of just another tool of military power, not very different from other conventional means. Such examples are merely a logical exploitation of capabilities, which thus far were restricted by the perception of air power being exclusive and exotic, as also escalatory. There are innumerable examples of use of air power in operations other than war. Punitive strikes, targeting of terrorists, and coercive patrolling is done in

all domains of military power, including air, but without use of lethal force. There is a need to change the approach that air power could instigate the adversary to up the ante. Calculated use of advanced technology, precision and smart munitions is merely logical.

Indian apprehension regarding targeting cities by Chinese bombers precluded offensive use of air power in 1962. The air force was not exploited even in non-kinetic roles. This robbed the ground forces of much needed support in terms of ISR. Unfortunately, critically required offensive support in remote and inaccessible areas was also forestalled. Air power could well have tipped scales in favour of Indian troops physically, apart from being a great morale booster.

Conventional military domains are not the only avenues available in a conflict. Cyber and space have emerged as important domains that can compel an adversary to change their will. Cyber-attacks have not resulted in catastrophic results so far, but the potential exists to seriously disrupt the enemy. AI adds a new dimension to all existing options. Autonomous systems present an ethical dilemma as well as a potent means to conduct 'remote-control' or even uncontrolled warfare. Drones, although using the air as a medium, are one such manifestation of options. Airborne drones are just one option in unmanned systems, but their increasing autonomy in all steps of the OODA (Observe, Orientate, Decide, Act) loop present a huge challenge. Space-based assets are ubiquitous and they possess enormous potential in conflict. Where then do use of AI, cyber and space assets stand in the argument on escalation? Would visible employment of these means imply that one has moved up the escalation ladder. In comparison to air power, the effects of these new domains are more disruptive than destructive. Their employment would be dictated by the situation, just like air power employment needs careful consideration. The grey zone has expanded, and by virtue of being grey may also have unpredictable effects on escalation.

Escalation depends on perceptions and decisions of national and military leadership based on available information. A perception of own actions being escalatory would be misplaced if intent and understanding of the adversary is misjudged. Escalation would result from specific circumstances that dictate the course of events, decisions taken and resultant outcomes. Cyber is a surreptitious, invisible and largely unattributable method. Air power meanwhile is a supposed 'glamorous' tool in the kit of military options. Air power would seldom be unconditionally escalatory. An assumption that air power will always escalate is unfounded and based on pre-conceived notions.

Adequate examples exist of conflicts stabilising or de-escalating after air power employment. The recent exchange of weapons between Iran and Pakistan in January 2024 is yet another example of air power alone being used to convey political intent, with no escalation.³²

Air power has evolved greatly over the last century. Technology has leapt forward, transforming options for air power. It is best illustrated by vastly varied unmanned platforms and their ubiquitous application. Strikes on shipping vessels by Houthi militia through drones debunks the idea that air power is exclusive and unaffordable, although arguably inaccurate and relatively easily countered by existing systems. An unmanned platform does not evoke the same response as a manned aircraft currently. This may well change in the future, but the shift in response will not be dramatic. Soldiers have already started surrendering to unmanned systems, although technically to the man behind the machine.³³

The presence or absence of a human on a platform should not be the governing factor to decide on a response. Air power is no longer limited to large-scale bombing and air defence as in world wars almost a century ago. Capabilities of air assets have expanded manifold. The idea of exclusivity of air power and it being an indicator of escalation has been debunked repeatedly across the world. There is no need to think twice before employing lethal, swift and accurate military equipment in a situation. This means careful and non-indiscriminate use of a tool at hand, there is no need to unnecessarily retain misgivings regarding air power and escalation.

CONCLUSION

Air power and military assets utilising the medium of air are merely options available in the modern and complex military toolbox. The idea that a particular tool can escalate more than another still exists within some policy-makers and decision-makers. Air power is definitely more visible and almost always indicates a willingness to use top-notch, high-tech and expensive equipment. Equipment profile and associated costs are changing. This rigid air power and escalation equation is slowly morphing towards greater acceptability, best displayed by consistently increasing use of air power across the spectrum of conflict. Speed, flexibility and reach are distinct characteristics that air power brings to the table, unmatched by most other means. These properties cannot be readily replicated by either ground-based platforms or LRVs (Long Range Vectors). Similar effects by multiple means may permit strategic messaging with more than one option at hand. Not all available means bring with them

the qualities of air power. What air power may entail is greater visibility, with costs not necessarily as high as assumed probably a decade ago. These are no reasons to restrain air power employment.

India broke away from its self-imposed restrictions on employment of air power in Balakot. Other countries have long discarded the equation of air power with escalation. It is decidedly time to let go of dogmatic mindsets. The constraints on air power employment have existed more in the minds of leaders than any practical limitations. Restrictions on use of air power may well be placed after careful consideration. It can provide solutions to problems through effort that require exploiting exclusive characteristics and producing desired effects. The fear of escalation can be handled by reading the situation better, and calibrating responses unrestricted by the domain where the weapon system operates. There is no case for excluding any potent capability. A considered decision to use the right tool will yield better results than unnecessary restraint born of self-imposed perceptions.

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