THE AIR POWER JOURNEY
PART II: FROM UBIQUITY TO DOMINANCE

‘The advent of the aircraft and its use as both an instrument of commerce and a weapon of warfare have transformed mankind. Indeed, air power now permeates all modern societies and military organizations, having become as indispensable as it is decisive.’

David A. Deptula,
In Global Air Power edited by John Olsen, p. 409

The ubiquity of air power as a power projection capability was demonstrated during World War II and subsequently accepted by most military strategists. The culmination of World War II also saw technology becoming predominant in the development of air power capabilities—the atomic bomb, radar, surface-to-air missiles, and jet engines creating near-revolutionary changes to concepts of operations and the direct application of air power. It will not be an exaggeration to state that air power capabilities improved by leaps and bounds in the immediate aftermath of World War II.

Between 1945 and the 1991 Iraq War, air power went through its own troughs and crests and eventually emerged from the artificial constraints that had been placed over it as a dominant force. Command and Control systems were placed in airborne platforms, electronic warfare took on a completely different meaning and perhaps more importantly, exploitation of space became a reality, while microprocessors maximised the merging synergies of air power.

If the 1991 Iraq War epitomised the real coming of age of air power, warfare between 1945 and 1991 provided some indication about the troubled developments that it went through. The challenges that air power faced in delivering its promise should always induce caution in claiming primacy for air power in the application of force.

In the early years after World War II a number of colonial conflicts took place, where air power was once again relegated to its secondary role, mainly because the adversaries to western forces did not possess adequate air power capabilities to even peripherally contest control of the air. Air power was primarily relegated to being employed in support of ground forces who were conducting the core operations in the campaign. The entire concept of strategic bombing and air superiority became inconsequential to the final outcome of the campaign.

From a historical perspective, the Vietnam War was a watershed event in the application of air power. Even though the Vietnamese Air Force attempted to contest control of the air, the US Air Force had absolute air superiority and conducted a number of air campaigns unhindered by even the slightest air opposition.

However, after flying more than a million fixed-wing aircraft sorties in the war, losing about 700 aircrew and 3,700 aircraft, air power did not ‘dominate’ the war. Air power apologists have opined that political circumstances combined to reduce the effectiveness of air power, but the end-result was the same—air power did not determine the final outcome of the war.

The stark lesson that was learned in Vietnam was that irregular wars—a term that encompasses, insurgencies, guerrilla wars and all other unconventional conflicts—
did not automatically lend themselves to the doctrine of ‘bombing-to-win’. The doctrine and strategy of bombing was seen to be applicable only to a fast-paced conventional war against a peer adversary.

The Soviet Union faced a similar situation vis-à-vis air power during their ill-fated intervention in Afghanistan. What can be surmised is that during the conflicts fought in the decades following World War II, from Korea and Vietnam to the brief but decisive fight in the Falklands, air power was not the dominant, but a ‘good-to-have’ secondary capability. It was very clear that the effective application of air power depended on its relevance to the achievement of the desired political objectives. The closer air power is to enabling the achievement of political objectives, the more effective and dominant air power would become.

It took a great deal of soul searching and concept-driven technological advancements to once again bring air power to its place of prominence. The next watershed moment for air power was its employment in the Gulf War of 1991. By this time changes had been brought about in the application of force to achieve national security objectives, some of which were evolutionary and some more revolutionary. The major changes were referred to as a Revolution in Military Affairs, which could, in hindsight be called something of a misnomer. The changes to concepts of operations and air power application had been brought about not as a step-change function but in a more graded manner, one development after the other, even though they happened in rapid succession.

By the time the Western nations and their allies went to war in the Middle-East in 1991 to evict Iraq from Kuwait, air power had once again become the core of the concept of operations. This was made possible by technology that permitted air power to deliver on the precision, proportionality and discrimination that had long been promised by air power theorists and strategists. The application of force, when it is deemed necessary, to achieve the political national security objectives has for centuries suffered from its lack of precision. Even though this drawback was in some ways condoned during World War II and to some extent even in the conflicts of the second half of the 20th century, the lack of precision that leads to unintended collateral damage has become taboo in the current context.

This is the exact situation in which air power comes into its own. Technological advances now make it possible for air power to deliver devastating destructive power not only with pin-point accuracy but also with the ability to tailor the destructive capacity in such a way as to make it discriminatory in a controlled manner. In turn, the ability to be discriminatory also ensures that the ‘force’ applied is proportionate to that needed to achieve the neutralisation of the intended target and the desired effect. Air power is now capable of precise, discriminatory and proportionate application of force without exception—always and every time.

With this demonstrated capability, air power now influences most concepts of operations, at least in cases where adequate air power capabilities are available to the planners. In the current security circumstances where irregular wars are common, air power itself has become an asymmetric advantage for conventional military forces engaged in such wars. It is observed that most successful irregular war strategies, concepts of operations and battlefield tactics are heavily dependent on the appropriate and optimised employment of air power. This is a testimony to the overarching ability of modern air power to become an envelope force that can, when required, dominate the battlespace.

The air power journey, although it has had many pitfalls along the way, has never been convoluted. The acme of its capabilities were predicted by visionary thinkers in its infancy, although at the time of the predictions being made, some of them would have seemed a bit too farfetched. It is to the credit of the scientists, concept developers, strategists and operators that the vision of air power has been realised in what could only be called a relatively short time-span of a little over a century. Air power has indeed moved from secondary to ubiquitous to dominant.

Key Points

- The culmination of World War II also saw technology becoming predominant in the development of air power capabilities.
- The stark lesson that was learned in Vietnam was that irregular wars do not automatically lend themselves to the doctrine of ‘bombing-to-win’.
- It has been demonstrated that modern air power has the overarching ability to become an envelope force that can, when required, dominate the battlespace.