A Jesuit priest of the 17th century, Francesco de Lana-Terzi, ranks amongst the great visionaries of air power, writing in vivid detail about the military use of flying machines to transport troops by air and for the bombing of cities, fortresses and ships. However, he qualified his visions by also exhorting God to withhold such an invention from the grasp of mankind. However, about 275 years after the priest’s entreaty to God and a mere 42 years after the first heavier than air flight, a Japanese city was destroyed by a single bomb dropped from a single aircraft. The influence of air power on international affairs had been emphasised and underlined in red.

The phenomenal rise of air power makes it necessary for statesmen and strategists alike to have a clear understanding of its nature and the challenges that have to be addressed in employing air power in the pursuit of national security. While air power is but one of the elements within the military force of a nation, it has become a critically influential element in international geopolitical dealings. On the one hand, air power has the capacity to facilitate the creation of military alliances amongst like-minded nations through technological interoperability. On the other hand, air power also retains the capacity to lead the world towards the apocalypse because of the extreme destructive power it can rapidly unleash. These are two sides of the same coin, making air power a special instrument of national power.

So what is the nature of air power? Viable air power, a nation’s ability to project power from the air, needs to be organised. The importance of organisation in the employment of air power was demonstrated as early as World War I. British air power was organised to pursue its end-goals through concerted efforts to secure air supremacy, the simultaneous organisation for intensive production of aircraft and the establishment of the Air Ministry to provide strategic guidance. The nature of air power is such that an appreciation of the need to combine strategic and overarching policy; the creation of a doctrine that provides guidelines for the development of concepts leading to operational excellence; and the technological expertise necessary to produce systems that function at the cutting-edge, are critical to its effectiveness. A robust organisation and allied administration become foundational requirements in this equation.

Such is the nature of air power that it requires greater understanding from a national perspective than any other power projection capabilities—the term ‘national airmindedness’ conveys this aspect. The inculcation of airmindedness in a nation involves bringing together a number of, at times, disparate entities. It starts with the technological orientation of the national education system, which in turn, creates the ability to conceive the systems and platforms to create air power of the necessary calibre. Air power is intensely technological in all aspects of its development and employment. A national ethos of airmindedness can only be achieved after the nation has developed an adequately high technology bias in its broader educational stance. The nature of military air power is such that it cannot exist without the support of an air-minded public. It is not the materiel alone that creates air power, but airmindedness of the people as a whole that sustains it.

Two enduring lessons were gleaned from World War II, and both have to do with the nature of air power. These are still valid even though the character and conduct of war have altered remarkably over the past decades. First is that an army without air power fighting another which has
recourse to adequate air power capabilities is practically helpless. The ability to ‘see’ beyond the horizons of the surface forces makes air power a war-winning capability in these circumstances, even if its offensive capabilities are not used. The comparison is of a blind man fighting a sighted person. It is the nature of air power to have an enhanced perspective of the battlespace, unlike any other force projection capability.

The second lesson is of even greater contemporary importance and relevance—only air power can counter the employment of air power by an adversary. There is an argument that air defence capabilities can be an effective counter to offensive air power. Under certain circumstances, air defence may be reasonably efficacious, but it will never provide an assured defence against aerial attacks. History is a pointer in this—whenever a new weapon superior to those previously in use has been developed, only systems with similar capabilities have been able to counter it. For example, the introduction of the bow and arrow made the archers dominate the battlefield until their opponents also armed themselves with the same weapons. The ubiquitous nature of air power makes it very difficult to counter by any other means other than a robust air power capability.

Over the past century, air power capabilities have developed to emphasise the core characteristics of speed, reach, flexibility and precision. The nature of air power is such that it is able to ‘reach out’ and ‘touch’ very rapidly without being constrained by geographical barriers or man-made sovereign boundaries. This capability transforms air power into a political instrument par excellence. Air power has a central role to play in all the strategies that secure a nation—from the strategy of influencing and shaping, through deterrence and coercion, to the high-end strategy of punishment. The inherent advantage of air power is that it has the capacity to function in a benign state while retaining the ability to employ lethal and destructive power very rapidly. This spread of capabilities can be converted to a powerful statement of intent to a potential adversary. This is the unique nature of air power and its employment can be tailored accordingly.

Five facets that set air power apart have been described above. A full appreciation of the nature of air power in all its nuances and the inimitable capabilities that it brings to national security is a complex subject of considerable detail; one that cannot be studied casually. What has been postulated above is not intended to be definitive or complete, but is a representative analysis of air power that highlight its pervasive nature.

Key Points

- The nature of air power is unique and underpinned by a number of factors
- A robust organisation and administration is critical to the effectiveness of air power
- The inherent characteristics and nature of air power make it uniquely suited to employing any of the strategies within the spectrum of strategies that support national security