Air power has been an integral part of military forces for just about a century and yet, within this relatively short period of time, it has progressed from being a secondary support capability to become an indispensable element in any balanced military force. When compared to the fact that both land and maritime forces have been employed for a very long time and the history that both those forces have to draw upon to develop their doctrine and concepts, this is a remarkable achievement. Two fundamental reasons can be identified for this notable progress. First, a number of the pioneering group of airmen were men of vision who were not averse to stating their views regarding the potential of air power as a military capability even at the cost of their personal careers. They were also able to think far ahead of their time and espouse concepts for the employment of air power that were not even fully understood by other military personnel. Second, these ‘fanciful’ concepts were supported by technological developments that provided air power with the ability to progress at a pace that had never been witnessed previously with maritime and land power. The combination of these two factors resulted in air power becoming a crucial capability within military forces. It also facilitated air power becoming an influential consideration in all joint campaign planning.

Over a period of time, some characteristics that are unique to air power came to be generally recognised and air power concepts of operations started to be developed around them. The primary characteristics that have had significant influence and are still relevant today are: perspective, speed, reach, flexibility and precision. Perspective is the greater field-of-view and extended horizon obtained by virtue of the airborne systems’ operating altitude; speed is the ability to cover distance quickly and apply force with minimal delay; reach is the ability to project military power over distances unconstrained by physical barriers; flexibility is the ability to create a variety of lethal and non-lethal effects across the full range of military and military-supported operations to achieve desired outcomes; and precision is the ability to employ lethal and non-lethal capabilities accurately, with discrimination and proportionality.

Air power capabilities are, however, not defined by individual characteristics alone, but also by the effects created by a synergistic combination of two or more of them. For example, a combination of perspective, speed and reach enables air power to penetrate enemy territory and create strategic, operational and tactical effects unconstrained by physical barriers. The effect of such penetration capabilities is further enhanced when combined with the precision of airborne systems in the application of both lethal and non-lethal force. Similarly, a combination of speed, reach and precision enables air power to respond rapidly and decisively to sudden change in the prevailing strategic or operational circumstances, providing the initial response to an emerging and unanticipated challenge. This responsiveness can contain, as well as create, surprise at all levels of war.

An optimised and contextual combination of air power characteristics when united with robust concepts of operations, create four unique features of air power.
An appreciation of these features is necessary to enhance a nuanced understanding of air power and its optimal employment. First is the ability of air power to overcome physical barriers. By virtue of its capacity to operate at varying altitudes, air power can bypass obstacles of terrain as well as the adversary’s surface forces and, to a large degree, the air defence systems. This ability is enhanced by precision navigation and self-protection systems that permit operations over a very wide area and greater penetration of an adversary’s territory to undertake deep strike missions that create effects independent of surface operations.

Second is air power’s geographic versatility. Air power operates in the third dimension and therefore cannot be accurately represented in the traditional manner on a map or chart. This is made more challenging by the speed of airborne systems that make it difficult to pinpoint their exact location at any given time. While air power is indeed based at a geographical location, its influence is not restricted or confined to a geographically demarcated area as in the case of surface forces. As a corollary, air power effects are also far ranging and omnidirectional from any given point in the operational envelope of an airborne system. These effects can be conceived as increasing rings of range in which the weapon systems can exert influence. Further, air power can also be simultaneously effective in areas far beyond the theatre of immediate interest.

Third is air power’s ability to concentrate force rapidly. Air power, enabled by precision-guided munitions, can concentrate force rapidly at any given point to create the desired effects. Further, it can concentrate force at multiple locations over a large geographical area—even in widely separated theatres of operations—in a coordinated manner by combining its characteristics of flexibility, reach and speed. For example, air mobility facilitates the swift concentration of surface forces at the time and place of choice, which could be critical to success in joint campaigns. Importantly, surface forces can also concentrate force, given sufficient warning and adequate time. The uniqueness of air power in concentrating force, however, is its ability to do it rapidly and to apply this concept deep in enemy territory, if required, to create immediate strategic effects. This makes air power an inherently offensive capability.

Fourth is the political dimension of its employment. Although air power can be considered to have come of age during World War II, it has become a preferred instrument of choice to apply military power in the past few decades. One of the major reasons for this, external to air power capabilities, is the political unwillingness to deploy surface forces, or put “boots-on-the-ground”, to intervene in circumstances and areas of increasing instability. However, air power’s ability to respond rapidly, minimise collateral damage, reduce the chance of friendly casualties and avoid mission creep, significantly influences its selection as a primary contender to be at the vanguard when military options are considered.

Air power is of comparatively recent origin. But its ubiquity is well understood and along with its rapid evolution in both capabilities and concepts of operations has made it a critical part of national power projection capabilities. In a world where the insertion of military forces on the ground is becoming increasingly challenging in the political sense, and intervention in unstable regions is becoming more necessary to pursue the humanitarian concept of “responsibility to protect”, air power is being viewed as a viable option. Optimising the capabilities that give air power its unique features is critical to success in such operations.

Key Points

- In a relatively short period of time air power has become a crucial element of military forces
- The primary influential characteristics of air power are perspective, speed, reach, flexibility and precision
- The combination of its characteristics and concepts of operations provides air power with a set of unique features