Air power burst into the realm of military power projection capabilities only a century ago. Its rise to prominence and the current pre-eminent position that it occupies within the ambit of national security has been nothing short of phenomenal. The rapid rise in air power capabilities, proliferation of concepts and growing operational success has, however, created its share of challenges and drawbacks. The strategic concepts underpinning the employment of air power were developed in between the World Wars and were based on speculative thinking rather than on historical analysis, since there was no ‘history’ to fall back on. This situation required harnessing the intellectual potential of technically proficient airmen for them to become professional masters of air power.

In World War II, air power was employed based on unproven theories in two distinctively different ways. First was the strategic bombing model that promised strategic success through attacks on the enemy hinterland without having to confront the adversary’s army or navy. The second was the ground-centric model that saw air power as yet another technology-enabled tool to support traditional land or maritime campaigns. The advent of the atomic bomb and the emergence of the Cold War brought about a change in air power thinking, based on the concepts developed by political scientists—deterrence, massive retaliation and mutually assured destruction.

Subsequently, the Vietnam War and other minor conflicts leading up to the 1991 Gulf War, saw the emergence of the ‘air-land’ doctrinal and conceptual focus. This development emphasised the tactical and operational level aspects of the application of air power—stressing the support for the war on the ground—almost completely ignoring the conventional and direct use of air power to create longer-term strategic effects. This situation even influenced the common understanding of John Warden’s famous rings. The debate whether air power should be applied against ground targets as support to the land war or employed against targets that would produce decisive strategic effects, continues to this day. However, the 1991 Gulf War was also the starting point for laying a set of new conceptual foundations for the employment of air power.

The visible effects of the application of strategic air power in the 1991 Gulf War—Operation Desert Storm—unequivocally established air power as a strategic element of national power. This move to the vanguard of power projection capabilities was accompanied by a common perception, especially amongst the political leadership, that air power alone could win wars while limiting own casualties. The perception that, though the application of air power, wars could be fought, and won, in a relatively cost-effective, risk-free and bloodless manner skewed the understanding of the importance of air power and the effects it could create, at the strategic political level of national security. As a result, the key concept of an effects-based approach to the application of air power was not sufficiently refined or developed as an overarching strategy.

The campaigns to alter the leadership’s behaviour, Bosnia(1995) and Kosovo (1999), turned air power into a coercive instrument, and in the eyes of some air power enthusiasts, proved that the lethal application of air power as a war-winning strategy. It reinforced and perhaps entrenched the concept that air power should ideally be used as a strategic instrument and if employed ‘correctly’ could win wars on their
own. This is a contestable, if not wrong, assertion. The 1991
Gulf War or the campaigns in Bosnia and Kosovo did not
change the reality of the failings of the conceptual development
of air power. While they were all clearly satisfying campaigns
for the air power supporters, they did not, in actuality, prove
their fanciful claims, nor did they point towards air power
becoming an independent war-winning force. Just the opposite.

The insurgencies of Iraq and Afghanistan in the 21st
century clearly demolished the myths that were being built
around the efficacy of air power after its successes in the
last decade of the 20th century. The fact was that these air
campaigns were not adequately analysed with sufficient
intellectual rigour in order to develop a strategic approach
to the application of air power that could cater for the broad
variety of conflicts and contingencies that bedevil the military
planner. This lack of intellectual approach to carrying out an
in-depth analysis of successful as well as unsuccessful air
campaigns has been a long-standing challenge for the ‘correct’
conceptual development to ensure the efficient application of
air power.

The breakneck speed of air power’s technology-enabled
development has led to air power attracting action-oriented
operators or ‘doers’ to the exclusion of persons—best
described as ‘thinkers’—motivated by intellectual curiosity
and/or well-versed in analytical and academic disciplines.
This is not to say that the airmen adept at operations do not
possess analytical inquisitiveness or academic qualifications.
It only indicates that purely because of the sophistication of
their professional competency and the intensity of dedication
to the ‘art of combat’ necessary to excel in that sphere, airmen
are not instinctively inclined to pursue proficiency in the study,
understanding and critical analysis—all intensely intellectual
activities—of air power and its direct connection to the grand
strategy of the nation.

By virtue of their being operators, they also tend to be at
the lead of creating and delivering air power. This is further
emphasised as the result of the visible complexity in the
delivery of air power—through its entire spectrum, from
benign employment to lethal application—being considered
the responsibility of the flying fraternity. Further, air power was
born and baptised by fire in World War I, and saw the step-
change functions in its capability being encapsulated during
World War II and subsequent wars. Air power’s capabilities are
most visibly demonstrated in times of war. In war, leadership of
a fighting force is, more often than not and rightly, delegated to
a combatant, a ‘warrior’, in the case of air power, the operator.
In relatively recent times as the employment of uninhabited
combat aerial vehicles have come into common usage, the
application of air power continues to be undertaken by
operators. Therefore, it is not surprising that operators have
been air power leaders, perhaps by default, in air forces across
the world. (In this Pathfinder, the moral challenges and ethical
issues of leadership of combat forces are not discussed.)

The fact that operators have predominantly been leading
air power has also harboured one of the major drawbacks in
creating a holistic understanding of air power and its myriad
capabilities. The nuances of air power’s employment, how it
transcends from the operational to the military strategic and
through it, to the national security and political arena, and
the political effects that it can create at the grand strategic
level have all been pushed to the background because of a
lack of deep-seated and long-standing analytical processes
and academic development within air forces. From their
very inception and for far too long, air power generating and
sustaining organisations—essentially the air forces of sovereign
nations—have been focused on the tactics, procedures and
operational planning that combine to make the application
of air power immensely successful. In the bargain, air forces
as institutions, have not produced an adequate number of
intellectually astute air power professionals who while being
adept at its operational level application, can as easily transcend
to the strategic level of its employment aimed at achieving
national objectives. The institutional culture in air forces has
not so far been conducive to the creation of structures and in-
house institutions oriented towards and best suited to analyse
and plan the application of air power in the complex spread
of the broad spectrum of possible contingencies at the Grand
Strategic level. This is a visible gap in the professional capacity
of airmen that can only be filled by the development of men
and women who are intellectually curious and academically
qualified, while still retaining the capability to ‘operate’ the
systems to their optimum.

Key Points

- Air power should be employed to produce decisive
  strategic effects to achieve national objectives,
  while still being part of a joint force.
- The key concept of an effects-based approach to
  the application of air power has not been sufficiently
  refined or developed as an overarching strategy.
- The lack of deep-seated and long-standing
  analytical processes and academic background are
  visible gaps in the intellectual development of air
  forces.