

PATHFINDER

AIR POWER DEVELOPMENT CENTRE BULLETIN



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DEFINING AIR POWER: PART I EVOLUTION OF THE TERM

Winston Churchill once suggested, *'Air power is the most difficult of all forms of military force to measure, or even express in precise terms.'* Although this statement was made when air power as a military capability was in its infancy, more than sixty years later with air power a mature and indispensable military force, the statement is still a profound reflection of the complexity in understanding air power theory and its optimum application. In many respects, Churchill's observation is amplified by James Spaight, a 1930s air power theorist, who suggested that air power *'defies reduction to the confines of a sentence, or even an expanded definition.'* He further stated *'such a definition must always be related to the character of the state which uses air power and to the nature and stage in which it is used.'* Spaight's statement illustrates the reason for the continuous evolution of the definition of air power. As the Royal Australian Air Force transitions to a future force capable of generating strategic effects over long distances and air power develops in response to new challenges as well as opportunities afforded through technological innovations, there is merit in analysing its definition in the evolving context.

The term 'air power' was first used by H. G. Wells in 1908 in his novel *The War in the Air*. While F. T. Jane used the term in the 1909 edition of *All the Worlds Air-Ships*, it became common use only in the late 1920s when air power theorists articulated broad definitions of air power. Of the acknowledged early air power theorists—Guilio Douhet, Hugh Trenchard and William

Mitchell—Douhet did not use the term at all, although he was the earliest proponent of command of the air and theories of aerial warfare. Likewise, although he published three pamphlets on air power in 1943, 1945 and 1946, Trenchard did not define the term. In 1925, Billy Mitchell defined air power as, *'the ability to do something in the air.'* In his pre-war treatise *Air Power and Armies*, the articulate and thoughtful RAF Air



Chief Marshal John Slessor, provided a clear definition of air power as, *'a compound of Air Forces and all those things on which Air Forces directly or indirectly depend, such as flourishing aircraft industry and civilian aviation, a good meteorological service, secure fuel supplies and so on.'*

The dramatic impact of air power on the conduct of World War II brought recognition of the importance of air power to national security. The post-war definitions reflect this awareness. The US Army Air Force defined air power as *'the total ability of a nation to fly, to act through air space, to use controlled flight.'* In later years Slessor provided a pragmatic and direct connection between national security and air power when

he defined air power as *'the use of the air to enforce the national will.'* In 1955, Alexander De Seversky, a keen air power proponent reaffirmed this linkage by defining air power as *'the ability of a nation to assert its will via the air medium.'* General 'Hap' Arnold, Commanding General of the US Army Air Forces during World War II, also enunciated this connection when he suggested that *'air power includes a nation's ability to deliver cargo, people, destructive missiles and war-making potential*

While Douhet and Trenchard did not specifically define air power, other air power thinkers such as Slessor, Hap Arnold and Billy Mitchell did define air power.

through the air to a desired destination to accomplish a desired purpose.'

As air power development focussed more on its lethal capabilities, the definitions also tended to lose the connection between broader national security and the application of air power. In 1983, Richard Mason and Michael Armitage defined air power as *'the ability to project military force by or from a platform in the third dimension above the surface of the earth.'* The RAAF embraced this definition and defined air power up to the third edition of its strategic doctrine, *The Air Power Manual*, as *'the ability to project military force in the third dimension—which includes the environment of space—by or from a platform above the surface of the earth.'* The definition was widely accepted by both Western (UK, USA) and non-western (India, Malaysia, Philippines) air forces and provided a degree of standardisation to the understanding of air power. However, this definition did not encapsulate all the effects that air power can create in pursuing national security and confined itself to projecting military force. Further it also combined the air and space environments.

The idea of a combined air and space environment gained further prominence in the fourth edition of the strategic doctrine, titled *The Fundamentals of Australian Aerospace Power*, where air power was replaced with the term aerospace power. However, this focus quickly shifted and in 2007 the fifth edition of *The Air Power Manual* defined air power as *'the ability to create or enable the creation of effects by or from platforms using the atmosphere for manoeuvre.'* Although this definition emphasises the creation of effects and the conduct of manoeuvre, it does not explicitly connect those effects to national security.

In 2003, the USAF defined air power as *'the synergistic application of air, space and information systems to project global strategic military power.'* This is a significantly broader definition but reflects more the USAF's desire to dominate the three domains than a doctrinal correctness in understanding air power. The requirement for global power projection precludes the acceptance of this definition by smaller air forces.

Although the 2007 Canadian definition of air power, *'that component of military power applied within or from the aerospace environment to achieve effects above, on or*

below the surface of the earth', uses the term aerospace, it also reflects the growing perception that air power creates effects from the air environment. This is further reflected in the RAF definition that was published in 2009. It states that air power is *'the ability to project power from the air and space to influence the behaviour of people or the course of events.'* This is perhaps the most innovative of currently available definitions and clearly enunciates air power's position at the strategic level of national security.

A historical review of the definitions of air power reveals that they evolve along with air power itself. Although the term was first used only five years after the Wright brothers' first flight, it was not until the 1920s that the term was first defined. Theorists and strategists were quick to make the connection between air power and national security immediately after World War II. It is surprising that this direct and appreciable strategic connection was somehow overshadowed by the developments that took place in the ability of air power to project lethal force as part of the military power of a nation. Only in the recent past has air power's ability to create strategic effects, both lethal and non-lethal, in pursuance of national security been re-learned and is gradually being articulated.

- *Although the term was coined in 1908, 'air power' was defined only in 1925 for the first time.*
- *Air power definitions have developed progressively over the past seven decades.*
- *The direct link between air power and national security needs to be clearly enunciated.*

'The measure of airpower is the ability of a nation to exploit air space for its own purposes—and in wartime to deny it to an enemy.'

Admiral Arthur Radford



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