

# AIR FORCE



AND JOINT WARFARE

time to reflect

# DOWER

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By Squadron Leader J W Erskine, RAF

**F**or some military thinkers the case for air power has not been made, thus engendering the belief that the 'all conquering' air power is a hypothetical concept rather than a factual reality. Some early air power theorists, Douhet, Trenchard and Mitchell to name but a few, promised much and urged intensive development of air power. But in truth their almost 'tunnel-visioned' quest pushed theoretical promises too far in front of practice and technology. Whilst history has revealed that it has been the lack of such technological capability that has restrained the employment of the full potential of air power, the situation was exacerbated by the manner in which the air power theorists presented their case. Those early 'prophets' believed in the potential for air power; however, our sister Services already had their own traditions that traced back centuries and had already tasted the sweet smell of many successful war campaigns, all without the use of air power. Notwithstanding this, Mitchell aggressively advanced the theory that air power would replace the

fleet as America's first line of defence. This brought him the accolade of being regarded as opinionated, arrogant and intolerant' or as an ambitious egotist and zealot who ran roughshod over anyone who opposed his views on air power, especially his military and civilian superiors.<sup>2</sup> Douhet went one better by suggesting that the air force should be independent from the other Services and that air power could become the instrument of victory in another war.<sup>3</sup> Therefore, I consider it to have been quite natural for our sister Services to have viewed air power 'the young pretender' as an impostor. After all, its 'prophets' had the audacity to not only 'claim a seat at the table' but to do so without having the wherewithal to back up their claims. The result was that the combination of a lack of technological capability coupled with air power's early insensitive marketing has been a 'noose' around air power's neck ever since. Somewhat ironically, those opponents of air power had been delivered their arguments almost 'gift wrapped' from those very people whose interests were to take air power forward. Therefore, we find ourselves as the owners of the inherited unfulfilled promises and false expectations relative to what air power could and could not do.<sup>4</sup> In addition, old sores have never really healed and the flames of the debate have continued to be stoked between the sea, land and air forces thus resulting in a legacy of disagreement, distrust and ignorance over the efficacy of air power. Moreover, at times, the debate has been fuelled by parochial self-interests and differing viewpoints on how to wage joint warfare.

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For the purpose of this article I have adopted the following definition for air power: air power is the use, or denial of the use, of the air or space for military purposes, by or to vehicles capable of sustained and controlled flight beyond the area and range of the immediate surface conflict. This includes surface or submarine-launched missiles as well as aircraft.<sup>5</sup>

Operating in a different environment from sea or land, air forces have now acquired their own distinct characteristics, strengths and weaknesses being able to exploit speed, range and flexibility better than land and sea forces. Such changes demand specific skills and types of expertise and, as a result, generate a different type of ethos amongst its practitioners. Although the reluctance from some parties to accept and understand the significant attributes of air power has generated legitimate scepticism among our fellow Servicemen, healthy scepticism is always valuable thus healthy scepticism of air power's contributions in modern war is valid. We should, however, assert air power's rightful place in war and our arguments should be robust and coherent. We can only achieve this through the development of the perspective of all those who are involved in the very concept of air power, its development and operational use. Once this is achieved, it is our duty to explain the critical importance of air power to operations. However, when extolling air power's virtues and debating its strengths, air power's potential and capability must not be confused with its overall contribution.

Sea, land and air warfare depends on the blend of *theory*, *technology*, and *practice*.<sup>6</sup> Air power could be the dominant element of combat in modern warfare but it is no more important than land or sea power in a given situation. The proper relationship and evolution is similarly critical to the maximum use of these military instruments in a joint campaign. At long last, during the Gulf War the *theory* and *practice* elements were in balance with the *technology* element. However, whilst technology appeared to be finally catching up with the vision and air power has fundamentally changed the nature of warfare, its advancement was restricted further because our joint and

combined doctrine had not caught up with its development. Many Service-specific complaints are not yet solved and will remain unsolved until the Services agree on a joint war-fighting doctrine. This statement can be somewhat contradictory when one considers that the Gulf War was always based on a 4-phase campaign; phase 1 – the strategic air campaign; phase 2 – eliminate air defences in Kuwait; phase 3 – commence attrition of the Iraqi military forces; phase 4 – the offensive ground campaign. But this statement is balanced by acknowledgement that there has always been a doctrinal dispute between different Services' utilisation of aircraft in the combat theatre.<sup>7</sup> "Each one of those people sort of wants to put a box around aeroplanes in an area and say, (it all belongs to me)".<sup>8</sup>

Now that the euphoria over the Gulf War achievements has settled, there are those who continue to advance the argument that air power has become the decisive factor in joint warfare. I am neither an air power 'Prophet' nor a 'Heretic' nor do I seek to be canonised or pilloried for offering my views on the 'decisiveness' of air power debate. I am however, fully convinced of the outstanding benefits that air power brings to the 'joint-table'. That said, any pretensions or allusions to declaring a decisive role to air power should be treated with the contempt they deserve and we must question whether such a claim is being used as a lure set to entrap and seduce by a veiled representation from those whose interest and or survival is entrenched in the air power debate. I believe it arrogant to allude to the fact that air power has become the decisive factor in joint warfare. Moreover, if we are hypnotised by such spurious claims we will become too stovepiped, miss the bigger picture and our gradual ascendancy as part of the joint war-fighting machine will be nothing more than a 'house of cards'. More critically, our seat at 'the table' may become a back row standby. Therefore we must carefully choose our words and ensure that they can no longer be burned on the 'sacrificial pyre'; the term 'schadenfreude' does spring to mind. In short, any attempt to formally attribute air power the decisive honour is divisive, destructive and misplaced.

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Airmen are not alone when recognising the potential of air power. There are many recorded statements from 'ground commanders' who eulogise over air power's capability. But why has it taken so many years for the capabilities of air power to fully mature from the predictions laid out in some of the visions of the early air power 'prophets'? Whilst the very basic principle of fighting wars has remained constant, its development reflects the pace of technological advances. But there is a degree of scepticism about their all-pervasive influence which is increased by the 'selective reporting' of air power's performance or achievements.

A 'pro air power' report of the Gulf War conflict could correctly state that:

Desert Storm consisted of a 43-day air campaign, capped by a 100-hour offensive. Air power destroyed Iraq's C2 system in the first day of the war. The air campaign then closed down the supply routes, kept the Iraqi Air Force out of action for the duration of the conflict, destroyed a high percentage of the enemy's armour and induced mass desertions. Moreover, these results were achieved with low casualties and with limited collateral damage in civilian areas around the targets that were struck.

An Army traditionalist's report could review the same battle as:

'The recent air campaign against the Iraqi forces gained not a single one of the US or UN objectives in the Persian Gulf War. Four days of land combat, aided immeasurably by the air campaign, achieved every goal and victory.'<sup>9</sup>

A more balanced report would be:

During Desert Storm, Gen. Schwarzkopf achieved campaign objectives at an extraordinarily low cost in terms of friendly casualties when all friendly forces were used in support of each other. He achieved this by using the coalition ground and amphibious forces at the beginning of the campaign to 'fix' Iraqi units into positions where air interdiction could inflict destruction. In addition, the success of the Special Ground Forces' missions contributed to the diminution of the air defence capability thus significantly facilitating a successful air campaign.

The Gulf War was the proving ground and in some cases the testing ground for a multitude of advanced weapon systems the armed forces had been incorporating into their inventories over the previous decade. It is argued this was a unique military operation and that a different battle would be needed to overcome a more evenly matched enemy. In the first instance, air power could not have been deployed rapidly without the use of Saudi military airfields and Commanders were able to favour medium-to high-altitude strike tactics that maximised aircraft and pilot survivability rather than weapon effectiveness. This was because of early and complete air superiority, a limited enemy response and terrain and climate conditions generally conducive to air strikes. The predicament that air power finds itself in is that it continually chases the completely new dimensions that technology opens for it. This was evident of the impact of new technologies introduced during the Gulf War that

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have been largely identified with the air campaign. What the Gulf War revealed was the major shift in the accepted methods of waging war. As the air campaign involved nearly every type of fixed-wing aircraft in the U.S. military inventory, air power appeared to be provided the opportunity to 'come of age'; the air campaign provided a valuable opportunity to assess the performance of combat aircraft and munitions systems under actual combat conditions. That said, an analysis of the air campaign revealed several issues that perpetuates the argument over air power's lack of technical capability to achieve its goals. For example, air power's effectiveness was inhibited by the aircraft sensors' inherent limitations in identifying and acquiring targets. Pilots found that infrared Electro-optical and laser systems were all seriously affected by clouds, rain, fog, smoke and high humidity. Moreover, pilots advised that they were sometimes unable to tell whether a presumed target was a tank or a truck or whether it had already been destroyed.<sup>10</sup> Somewhat ironic, however, was the fact that this time, it was the Pentagon and defence contractors who had made overstated and misleading claims about the air power used during the air campaign, particularly concerning the



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F-117 stealth fighter, the Tomahawk cruise missile and laser-guided bombs. At the same time an opportunity was also provided to confirm the need to re-evaluate the traditional and practised ways of using air power in executing war. Low altitude munitions deliveries had been emphasised in pre-war training but they were abandoned early. The subsequent deliveries from medium and high altitudes resulted in the use of sensors and weapon systems at distances from targets that were not optimal for their identification, acquisition or accuracy. Medium and high-altitude tactics also increased the exposure of aircraft sensors to man-made and natural impediments to visibility.<sup>11</sup>

Some would say that the potential of air power had never been realised until the Gulf War but the striking potential of this unique capability was revealed earlier by the success of Israeli air power in the 1967 Arab-Israeli War. The Six-Day War started with a far-reaching air attack, code-named 'MOKED' to shatter the Arab air forces while their aircraft were still on the ground.<sup>12</sup> At 0745hrs on Monday 5 Jun 67, the Israeli Air Force (IAF) used the element of surprise (the principle of war that is air power's strongest advantage)<sup>13</sup> to launch a pre-emptive strike at 24 Arab air bases in Egypt, Syria, Jordan, and Iraq. This precisely timed and co-ordinated strike consisted of two 80-minute attacks that destroyed the offensive potential of the Arab air forces. In the first 3 hours of the war, 387 Arab aircraft were destroyed, and Egypt's air force, the largest in the Arab world, went from 520 planes to 220.<sup>14</sup> General Hod, commander of the IAF, when asked how it managed such

unprecedented success, stated four key reasons: sixteen years of planning for the initial 80 minutes, good intelligence about the enemy, flexible and centralised control of the air assets and skilled execution.<sup>15</sup> The Israeli strategy relied heavily on Liddell Hart's theory (when using its inherent advantage of surprise, air power is the ultimate indirect approach) and attacked the Arab air forces

before they could be used against it. A Clausewitz theory was also clearly recognised (war plans supporting clear political objectives and the criticality of the human factor in war). Strategically, Israel knew that victory had to be quick and decisive.<sup>16</sup> Surprise was the key to success; air power, with its speed, range, flexibility, and ability to directly attack enemy centres of gravity, was the only force that could meet the criterion. Israeli armoured forces could then fight the battle under 'clear skies', and the IAF was free to provide support to the IDF ground forces in all the sectors, the breakthrough and transportation axes without leaving the

rear of the State of Israel in danger of air attack.<sup>17</sup> In short, air power sealed Israeli victory within hours of the first strike. This was the promise of air power *theory*; the available *technology* provided the necessary capability; and the IAF pilots exploited both in their employment *practice*.

Air power has the potential to provide a credible deterrent and effective first response in today's conflict-ridden environment. However, although it seems to represent the only means of engaging the target of an enemy, we must question the appropriateness of employing it in that role. Whilst to some it appears so obviously to be a natural military instrument it does not mean that it is automatically the most suitable instrument to choose. Policymakers and politicians around the world must suggest how the international community should react to stop some infringement of the established order or crimes against humanity. Therefore, depending on the location of and the objectives for entering into conflict, air power is another tool that the commander has at his/her disposal to execute the war plan. But whether it is a resurgence of national adventurism, violations of human rights or attacks on UN peacekeepers, the politically correct response when the international community must resort to force always appears to be air strikes. Why? The reason for this appears logical. Air power offers the potential of force projection without, politically unacceptable risks, risk of entering upon the 'slippery slope' of long-term involvement characterised by the commitment of ground troops, risk of coalition casualties in a casualty-adverse world and without massive logistical expenses and subsequent reconstruction costs. The objective of any campaign is to neutralise, delay, disrupt or destroy the enemy's military potential before it can be brought to bear against friendly forces.<sup>18</sup> So when we discuss 'decisive

force' do we really mean 'decisive results'? How aggressive a stance each side adopts will depend on both the relative and absolute attrition levels involved. Joint-commanders must decide whether the priority is to maximise the rate of enemy losses, to minimise their own loss rate or to pursue the most favourable exchange ratio.<sup>19</sup> Overwhelming power is a means to an end not an end in itself: a collection of aircraft does not equal air power. Constraint is not necessarily the least violent and punishment is not necessarily the most violent forms of behaviour. This is why it is important to

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define carefully the intentions for which force is being used. In real combat situations and in particular in major wars, rationales for the use of force are more intuitive than calculated; warfare remains more of an art than a science. Nevertheless, in wars of the future it is overwhelmingly likely that the use of force will be surrounded with great political sensitivity. One thing is certain however, there will always be a requirement for air power in some shape or form and the enemy should not underestimate its potential effects.

*'Both psychologically and physically, it must have been terrible to be on the receiving end of Coalition air power. From the start of the war the dilemma facing Iraqi troops was acute: they got hit if they stayed in their fortifications, they got hit if they fired their heavy guns, they got hit if they moved and they got hit by Iraqi execution squads if they tried to cross over to us. . . . It was clear that the air campaign had done far more damage than we had imagined. There was little fight left in the Iraqi divisions facing our troops. Indeed, they must have realised the war was over. If they dug in, air strikes destroyed them piecemeal.'*<sup>20</sup>

Success in modern warfare is reliant on a combination of all the tools that are available at the time of need. During the Gulf War as with the evolution of technology, employment practices that had been perfected over many years were also provided the opportunity to prove themselves. Air power clearly benefited from a transformation in the way forces train for combat. But we must accept that air, land, and sea combat are all starkly different and air and surface components' commanders are experts in the employment of combat forces in their particular medium. As such, the Services have organised, trained, and equipped superbly competent forces whose ability to fight with devastating effectiveness is the foundation on which successful joint action rests. The success of 'jointery' is recognising that land, sea and air power are co-equal and interdependent forces; neither is an auxiliary of the other. We will always need people schooled in their own type of warfare; what we must do is trust in each other's capabilities. We must therefore overcome the psychological barrier of believing that it is unpalatable for a ground commander to relinquish authority for fire and manoeuvre of his forces to an airman or for a ground commander to presume control of air power.<sup>21</sup> A true joint-Service perspective, especially in the roles and missions, should eliminate any distrust. Careful control of all assets therefore must be centralised with specific command being exercised through the respective component commanders if the inherent flexibility and ability to deliver decisive blows are to be fully exploited.<sup>22</sup> We must, therefore, speak with one overall voice and, if jointness prevails over inter-Service rivalry, we shall be rewarded with the military forces we need and can afford. We all must step above the paradigms of our own Service doctrines and structures and look for ways to combine efforts.

When used to its maximum potential, air power can indeed be a primary factor in maintaining the necessary balance. It promises an improved chance of victory with fewer casualties through its inherent capabilities such as speed, flexibility, and manoeuvre in a new dimension. If we are able to intervene successfully without risking a significant number of lives or incurring high logistics costs, we may find it easier to consolidate domestic and international will. The big payoff for air power could be the ability to intervene sooner, when the risks are lower and the chances of success greater.<sup>23</sup> Nonetheless, we must be wary of mistaking air power as a quick fix to problems that require a long-term commitment to achieve lasting conflict resolution.

Air power is being tested anew. Burdened by previous visionaries' predictions that have left a tidal sea of sand in their wake, it is plagued by constant debate over its contribution towards the war

effort. Sometimes slowly, sometimes mind-boggling but always with predictable persistence, technology has overcome limitations, peeled away problems and is now surpassing all expectations. The excitement that air power stimulates is intensified by the rapid, almost awesome development in technology. In hindsight therefore, it is easy to see why the air power 'prophets' were seduced by its early mesmerising potential appeal as it now appears that the sky is not the limit, the evolution of fighting wars is not complete nor are the pioneering days of aviation over. Fully developing and exploiting air power continues to be an enduring challenge; therefore the revolution continues but technology has its limits. The ultimate 'high ground' to employ air power is from space but satellites, lasers, and spaceships are not yet operationally capable to be used practically. We must therefore address ourselves to the achievable and not be drawn into the debacle of further

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debates that encourage scepticism over air power's capability. The key to air power's success is technological advancement but it must be through concurrent and integrated development with theory and practice. In addition, if air power is to 'feed the joint-centre' a joint-doctrine is required to ensure that all potential 'users' fully understand its significant attributes. Without this synergy, air power will not provide its maximum potential – the ability to restrain warfare through quick, decisive, and low-casualty outcomes. *'Air power today confronts an uncertain and unstable world and it is more than ever important that our doctrine remains relevant, dynamic and flexible. To this end, it is imperative that we continue to engage in an informed debate about how air power doctrine and capability should be adapted to reflect the evolving strategic environment.'*<sup>24</sup> In essence, through informed and logical debate over achievable air power goals we should no longer have to endure the burden of our past air power prophets' predictions.

Air power can now fulfil more of the early promises and its dominance should not be surprising. It is merely a milestone in the accumulation of experience, the development of technology and the refinement of doctrine.<sup>25</sup> It has proven to be a viable concept but we must accept that it is not appropriate for all scenarios. Air power has a significant role to play with its potential for speed, reach and concentration of force and offers the commander unique opportunities for achieving surprise, shock, simultaneity and tempo. As the joint-forces offer us the opportunity to combine our military power for maximum effect, our forces must be interoperable, so that the joint-force commander can operate them in various combinations for maximum effect. In future wars, in which air activity could be a precursor to any land operation and naval weapons could engage a wider range of land targets, the interests of operational effectiveness will require joint-Service or coalition communications as a matter of routine.<sup>26</sup> In short, decisiveness in joint-warfare cannot be attributable to one aspect. The correct and successful use of the entire joint-war machine is the decisive factor.

## NOTES

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