

Has

# Air Power Become the Decisive Factor in Joint Warfare?





Since the inception of air power as an instrument of force in warfare, there have been many claims as to the value of its overall contribution. Many of the perceived capabilities of air power were used to support strong arguments for the original establishment of independent air forces. More recent campaigns have demonstrated that air operations, and the gaining of air superiority in particular, can have a marked effect on the conduct and outcome of modern conflicts. This essay examines the overall value of air power in the joint warfare context to determine whether it can be described as decisive. Historical examples are drawn upon to examine whether there is evidence to support the central claim, and the various ways that air power impacts upon the outcome of joint warfare are considered so as to determine its overall contribution. The role and value of air power is found to be highly dependent on the circumstances of the joint theatre. This essay demonstrates that air power can be critically important to the success of the joint force package, even indispensable, but that the roles of all the elements have a part to play. No one factor can be said to be decisive in all situations: the appropriate employment of all available forces will be the key to success – whatever air power's role may be.



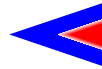
**The Royal Flying Corps was formed in 1912: the Sopwith Pup entered service in 1916.**

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In considering whether air power's contribution to joint warfare is decisive, it is necessary to examine the precise meaning and inherent assumptions contained within the words. Pivotal to this is the definition of 'decisive'. The Concise Oxford Dictionary defines decisive as: 'acting to settle an issue quickly and effectively'. In addition to the explicit time and performance requirements, the definition suggests that anything decisive must also act to settle an issue. To be the decisive factor in joint warfare, therefore, it is not sufficient to demonstrate that air power is critically important, but rather to show that it is conclusive. Furthermore, the use of

the definite article in the question implies singularity, suggesting that among the factors involved there is one decisive factor that will apply in all joint warfare. The language of the question also requires an historical examination – if air power has become the decisive factor then its overall contribution must have changed over time from supportive to conclusive.

From the early years of aviation the potential importance of air power has been recognised, and this has often led to overstated claims about its capabilities and relative contribution in war. Mitchell, Douhet and Trenchard predicted that air power would revolutionise war and urged intensive development and the establishment of independent air forces. Douhet even suggested that air power could become the instrument of victory in another war; thus, the idea that air power could be decisive is not new. Unfortunately, as Erskine argues, the lack of technological capability to back up the claims of these 'early prophets' left a legacy of unfulfilled promises and false expectations.<sup>1</sup> When considering the question posed in this essay, therefore, it is important not to fall into the same trap – ie, overstating the capabilities of air power to support inflated claims as to its contribution. Air power has significant strengths in terms of prosecuting a joint campaign. Its speed, range, flexibility, firepower, precision and lethality make it an extremely capable and versatile asset. However, it also has its limitations. It is vulnerable not only to enemy air defence but also to natural effects such as bad weather, which might prevent its use, or terrain that might afford the enemy camouflage and protection and hence diminish the effectiveness of air attack. It is also heavily reliant upon accurate and timely intelligence. In the Gulf War, for example, the technological advantages of America's conventional weapons and doctrine were far superior to Iraq's, yet the JFACC was not able to destroy all of Iraq's strategic targets because intelligence could not keep up with the tempo of the campaign.<sup>2</sup>



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So, what is it about the contribution of air power that makes it so beguiling, and leads to claims of decisiveness? Certainly, air superiority/supremacy is seen as a vital ingredient in any modern campaign. Indeed, US Army doctrine recognises that: 'the control and use of the air will always affect operations; the effectiveness of air operations in fact can decide the outcome of campaigns and battles'.<sup>3</sup> Hallion also suggests that in the air power era, loss of air superiority equates to loss of the ability to exercise national prerogatives, and that when a high tech society is stripped of air superiority, it is utterly vulnerable to an enemy, which can attack it as it wishes.<sup>4</sup> This view is exemplified by the success of Israeli air power in the 1967 Arab-Israeli War. Israel's strategy in the Six-Day War recognised that victory had to be quick and decisive. 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, without leaving the rear of the state of Israel in danger of air attack.<sup>5</sup> However, despite claims that air power's contribution was decisive, there was still a need for ground force action, supported from the air, to take and hold terrain. Thus, achieving air superiority is only a means to the desired end – permitting both air and surface forces to operate more effectively, while denying these advantages to the enemy.<sup>6</sup> In addition, as Sabin points out, the future effectiveness of air power in this role is uncertain: 'As technologies such as passive SAMs, laser weapons, stealthy airframes, and cruise and ballistic missiles spread to more nations, it may become harder for superior air powers to use aerospace vehicles with impunity while denying their use to the opponent'.<sup>7</sup>

Another significant contribution of air power to modern joint warfare is that it 'defines the battlespace'. The combination of air operations for strategic effect, interdiction and close air support enables joint commanders to shape an environment for the benefit of surface forces.<sup>8</sup> This factor emphasises the supporting role of air power in the joint environment, essentially suggesting that it may not be the conclusive factor. However, it is also possible for the roles to be reversed; Gen Schwarzkopf effectively demonstrated this during Operation Desert Storm: 'He used coalition ground and amphibious forces at the beginning



**Egypt temporarily lost control of its airspace during the six-day war. Such scenes were repeated at most Egyptian airfields, after attack by Israeli forces.**



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of the campaign to 'fix' Iraqi units into positions where air interdiction could inflict terrible destruction...while simultaneously denying these units effective resupply'.<sup>9</sup> Thus air power can also be dominant rather than supportive.

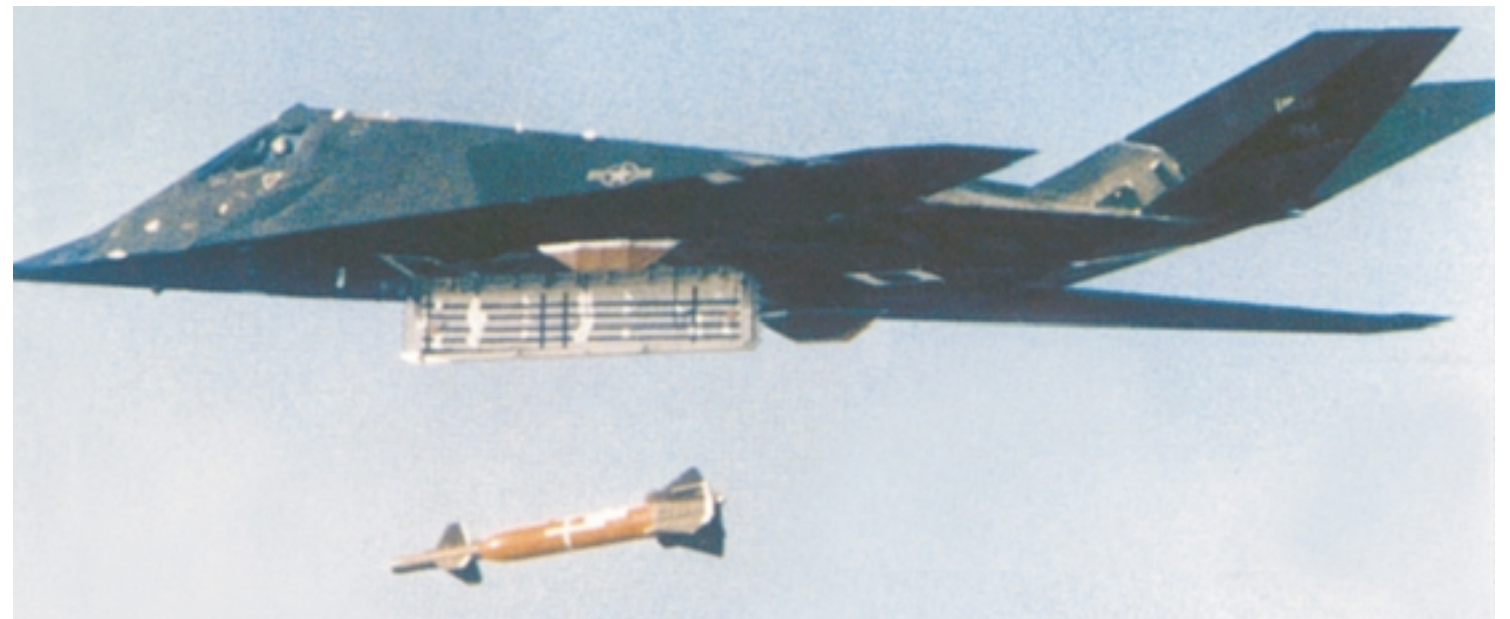
Air power's contribution in defining the battlespace can also be independent, and it is the independent aspect of operations such as strategic bombing that is often used to support assertions of decisiveness for air power. Most recently, the Kosovo air campaign brought claims that the eventual capitulation of Milosevic proved that air power alone could be decisive. Previously, a similar conclusion was drawn from the Linebacker II strategic bombing operation, which was credited with bringing the North Vietnamese back to the negotiating table. However, neither of these examples demonstrates the point convincingly. Certainly the contribution of air power to these campaigns was critically important; but were these contributions conclusive, quick and effective? The reasons for Milosevic's capitulation over Kosovo are still a mystery, but factors other than the air campaign are evident. In particular, the credible threat of a ground invasion, or the failure to gain Russia's support for Serbia could each be viewed as final, conclusive factors. Furthermore, air operations over the Balkans did not 'settle the issue' as quickly as had been expected. Operation Allied Force bombing commenced on 24 March 1999 and continued for 78 days – Gray points out that: "What had started as a short and sharp operation aimed at bending President Milosevic's will became a lengthy battle of nerves".<sup>10</sup> In Linebacker II, there is also a question over the effectiveness of the campaign. Werrell cites 2 major reasons: that there were no strategic targets in the North and that American airmen were neither adequately equipped nor tactically ready to carry out decisive non-nuclear operations. He suggests that: 'The tactical aspects, 'the victory', should not obscure the fact that strategic bombing did not achieve decisive ends in Vietnam'.<sup>11</sup> Certainly, the North Vietnamese sued for peace, but they did so in the knowledge that the US was desperate to withdraw from the conflict and with every intention of re-grouping and subsequently invading and taking over the South.

The Gulf, Kosovo and Vietnam examples of the contribution of air power to joint warfare are some of the most obvious in support of a decisive claim, yet none demonstrates all of the attributes required – quick, effective and conclusive. Other factors

come into play such that it is not possible to pick out one specific factor as decisive. In joint warfare this may always be the case. All of the forces arrayed within the battlespace will often have a contribution. Even in Kosovo, the RAF Chief of the Air Staff emphasised that: 'Operation Allied Force was a joint operation in which navies and armies as well as air forces made their own contributions'.<sup>12</sup> Thus air power's contribution, whether it is dominant, supportive or independent is highly situation specific, it will sometimes take a leading role, and sometimes be subordinate to other joint components. As a lesson from the Gulf War, Canan suggests that there is a potential for air operations to prove decisive: 'Operation Desert Storm left no doubt that air power can dominate modern war and can even prove decisive if there is no need to take or hold terrain',<sup>13</sup> but there is no evidence to suggest that this is yet the case, or ever will be.

US Joint Chiefs of Staff state: '... the nature of warfare in the modern era...is synonymous with joint warfare'.<sup>14</sup> Joint warfare is characterised by the multidimensional application of force involving more than one service component. Thus, in the joint arena, air, land and sea forces may all apply to some extent. Air power is a key factor, which allows non-linear battle lines to be defined and permits the use of 3 dimensions, but it is not able to claim decisiveness. The success of jointery is in recognising that land, sea and air power are co-equal and interdependent. Indeed, whether any one of these factors can claim to be, or to have become, decisive is largely irrelevant, and could even be counterproductive. Erskine contends that the danger with claims of decisiveness for any one factor is that they may lead to tunnel vision; concentrating thought on that one factor to the detriment of the big (joint) picture.<sup>15</sup> In the case of air power this tunnel vision is particularly relevant in the political context. The nature of modern operations is diverse, and the political reasons for involvement vary from deterring or reversing aggression to peace keeping or enforcing. The potential allure of air operations is that they may allow involvement without commitment (in terms of ground forces) and with minimum risk in a casualty-averse world. These notions, however, are misinterpretations that dominate political thinking and make air power the

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initial overall threat of NATO impotent and contributed to the lengthening of the campaign. The eventual credible threat of ground force involvement can be seen as a contributory factor in Milosevic's final decision to capitulate; had this threat existed from the outset, the joint campaign may have had a decisive effect. On the other hand, the success of the NATO action depended on cohesion, which might have been threatened at the outset by suggestions of a ground offensive and without which the joint campaign may never have occurred.

In order to determine the overall contribution of air power in the joint arena, therefore, it is necessary to examine the attributes of joint warfare and air power's place within it. Drew best sums this up in his analysis of the Gulf War:

*The capabilities of modern air power and a truly three-dimensional war-fighting model may obviate the need for sequential strategies in many situations. If an enemy is vulnerable everywhere all the time, theatre commanders can choose and then orchestrate the combination of simultaneous or near-simultaneous actions that will create the greatest impact upon that enemy's ability to resist. The result should be a rapidly unfolding campaign in which there are no front lines, in which holding territory is often irrelevant (and may be a detriment), and in which air, land and sea forces are used to their greatest advantage against the most appropriate and important enemy vulnerabilities anywhere at any time.<sup>16</sup> (Emphasis added)*

Drew neatly encapsulates all the beneficial attributes of joint warfare, as well as air power's vital role in contributing to joint success. The key here is in identifying the correct role for air power, and the ability to deploy it in that role whether it is supportive, dominant or independent. This requires joint doctrine to agree the role of air power and, most critically, the correct command, control, communications and battle management infrastructure to enable it to be used to best effect. Modern public and political opinion requires that wars be conducted effectively, with minimum risk, and without waste. This can only be



achieved through co-ordinated economy of effort using a joint approach. Thus, success is dependent upon jointery and effective command and control of all the forces at the commander's disposal, with air, land and sea power working together.

As Erskine says: 'Healthy scepticism of air power's role in modern warfare is valid, and when extolling its virtues it is important not to confuse potential and capability with overall contribution'.<sup>17</sup> Air power certainly has unique strengths and the potential for them to critically affect the outcome of a joint campaign is great. However, it also has limitations, which mean that it cannot always be deployed to its greatest effect. Historically, in campaigns such as Linebacker II, and more recently in the Gulf and Kosovo, extraordinary claims about the decisiveness of air power have been made.<sup>18</sup> In these examples, however, there have been other factors involved that leave the case far from proven. To be the decisive factor, air power needs to be shown to be always quick, effective and conclusive. Whether or not air power meets any, or all, of these criteria will depend on the circumstances in which it is employed. Joint operations will shape the future of warfare and the air component is only part of a joint package that is deployed to achieve the political aims of the campaign. In joint operations air, land and sea take on supportive or dominant roles as required, and as commanded by the joint HQ. There is no need for any one factor to be decisive in all situations; it is the co-ordinated effort of the whole force package that will determine success. Indeed, to claim decisiveness for one element would be counterproductive, leading to infighting and a lack of cohesion. Air power is critically important in shaping and preparing the battlefield for surface forces, and in ensuring the success of the overall campaign. It may be indispensable, but it has not proved to be quick and effective in settling an issue on its own. The key to success in joint warfare is the correct use of air power within the context of a given campaign; the overall contribution of air power, therefore, will vary. Air power has not become the decisive factor in joint warfare – that accolade should, perhaps, be reserved for jointery itself.

## REFERENCES:

- 1 Erskine, J W. Air Power and Joint Warfare – time to reflect. *The RAF Air Power Review*, Vol 2, No 2, Summer 1998, pp127–128.
- 2 From *Airpower Journal*, Spring 1994, p7.
- 3 Bingham, P. Air Power in Desert Storm and the Need for Doctrinal Change. *Air Clues*, September 1992, p 327.
- 4 See Hallion, R P. Air Power Today and Tomorrow: A Post-Gulf War View. *RUSI Journal*, October 1994, p 27.
- 5 See Erskine, J W. Air Power and Joint Warfare – time to reflect. *The RAF Air Power Review*, Vol 2, No 2, Summer 1998, p132.
- 6 Bingham, P. Air Power in Desert Storm and the Need for Doctrinal Change. *Air Clues*, September 1992, p 327.
- 7 Sabin, Dr P A G. Air Power in Joint Warfare. In Peach, S (ed). *Perspectives on Air Power*. London: The Stationery Office 1998.
- 8 Johns, Sir Richard. Trenchard Memorial Lecture: The Trenchard Vision and its Relevance in an Age of Joint Warfare. *RUSI Journal*, October 1997, pp 13–14.
- 9 Bingham, P. Air Power in Desert Storm and the Need for Doctrinal Change. *Air Clues*, September 1992, p 326.
- 10 Gray, PW. Air Power in the Modern World. *The RAF Air Power Review*, Vol 3, No 3, Autumn 2000, p4.
- 11 Werrell, K P. Linebacker II the decisive use of air power? *Air University Review*, Vol XXXVIII No 2, January – March 1987, p59.
- 12 Johns, Sir Richard. Sir Frederick Tymms Memorial Lecture. *The RAF Air Power Review*, Vol 3, No 1, Spring 2000, p 14.
- 13 Canan, J W. Lesson Number One. *Air Force Magazine*. October 1991.
- 14 Frontispiece to *Joint Warfare of the US Armed Forces*, 11 Nov 1991, p2.
- 15 Erskine, J W. Air Power and Joint Warfare – time to reflect. *The RAF Air Power Review*, Vol 2, No 2, Summer 1998, p129.
- 16 Drew, D M. Desert Storm as a Symbol – Implications of the Air War in the Desert. *Airpower Journal*, Fall 1992, p6.
- 17 Erskine, J W. Air Power and Joint Warfare – time to reflect. *The RAF Air Power Review*, Vol 2, No 2, Summer 1998, p128.
- 18 For example Keegan, J. So the bomber got through to Milosevic after all. *Daily Telegraph*, 4 June 1999, p28.

## BIBLIOGRAPHY:

- Brookes, Wg Cdr Andrew. Air Power and the Italian Campaign, 1943–1945. *RUSI Journal*, December 1996, pp 55–61.
- Brungess, James R. *Setting the Context: Suppression of Enemy Air Defences and Joint War Fighting in an Uncertain World*. Air University Press Maxwell AFB, Alabama, June 1994.
- Dudgeon, Wg Cdr Mike. Air Power – A Key to Army Manoeuvrism. *Army Doctrine and Training News*, No 9, pp 1–2 – 1–9.
- Fedorchak, Maj Scott A. Air Operations Must be Joint. *Airpower Journal*, Spring 1995, pp 79–86.
- Hammond, Grant T. Myths of the Gulf War – Some ‘Lessons’ not to Learn. *Airpower Journal*, Fall 1998, pp 6–18.
- Kendall, Frank. Exploiting the Military Technical Revolution: A Concept for Joint Warfare. *Strategic Review*, Spring 1992, pp 23–30.
- Nason, Commodore K A. Joint Operations in the Canadian Forces: A Meaningful and Timely Start. *Canadian Defence Quarterly*, December 1994 pp 6–9.
- Skelton, Ike. Joint and Combined Operations in the Post-Cold War Era. *Military Review*, September 1993, pp 2–12.
- Mann III, Col Edward C. *Thunder and Lightning – Desert Storm and the Air Power Debates*. Air University Press Maxwell AFB, Alabama, April 1995.



Maintenance work being carried out on an RAF Search and Rescue, Sea King helicopter.



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