



# Air Power and Trans-national Terrorism: The Possibilities, Advantages and Limits to Using Australian Air Power in the ‘War on Terror’

by Sam Gray-Murphy

## FOREWORD

Since 11 September 2001, trans-national terrorism has assumed greater importance in the minds of defence planners. Subsequent events, such as the bombings in Bali, Jakarta and London, strongly suggest that the threat of terrorist attacks will be an ongoing issue for some time. Although conventional military forces, including air power, have been used in various ways to contribute to efforts to deal with terrorist threats, such forces have not been designed with the threat of terrorist attacks foremost in mind. This raises important questions about the applicability of contemporary air power capabilities to deal with such threats.

After describing the nature and significance of threats to Australian interests posed by trans-national terrorism, this paper discusses the primary roles for, and limitations on the use of, air power in that context. Selected future air power systems are evaluated in that light. The paper concludes that a fundamental refocusing of air power capabilities is not appropriate, but recommends several practical measures to improve the performance of air power capabilities in counter-terrorism operations.

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*'Bringing aerospace power into this primarily civilian war will not create an Orwellian force or a military challenge to civil primacy. Aerospace power is not the enemy; it is an important part of national security, and it is under-utilised against what may prove to be the region's gravest security threat.'*

– Raymond S. Press  
The Fight Against Transnational Crime

## INTRODUCTION

The devastating September 11 terrorist attacks on the United States of America (US) and the subsequent bombings in Bali and Jakarta are representative of what David Rapaport calls, the 'religiously inspired, fourth wave of terrorism'.<sup>1</sup> This contemporary variant of terrorism is most commonly associated with the perpetrators of the aforementioned attacks, Al Qaeda and Jemaah Islamiyah (JI). Such terrorist groups pose a grave threat, both directly and indirectly, to Australians and Australian interests. Many have become truly global in nature with adequate resources to 'view the whole world as their theatre of operations.'<sup>2</sup> Today's terrorist threat is therefore rightly known as trans-national terrorism.<sup>3</sup> This paper will examine how Australian air power can contribute to the nation's efforts to defend against trans-national terrorism.

Section One will briefly compare Australia's past experience of terrorism with that of the contemporary security environment, in which trans-national terrorism is a significant concern. It will examine the level of terrorist threat to Australia in the context of the broader security environment and discuss the implications of Australia's involvement in the so-called 'War on Terror' for the Australian Defence Force (ADF). Finally, it will assess whether the 'War on Terror' demands a fundamental overhaul of Defence's strategic priorities.

Section Two will focus on the scope for air and space power to contribute to Australian anti-and counter-terrorism efforts. It will briefly examine air power in relation to other elements of national power employed against terrorist adversaries, and will subsequently outline the possible roles for air power, citing various examples.

In assessing the capacity for Australian air power to assist in protecting Australian interests from terrorist attack, the legal, normative and political concerns to be discussed in Section Three cannot be overlooked. This section will also examine how the Royal Australian Air Force (RAAF), and the ADF more generally, should cope with such considerations and whether any doctrinal changes should be made.

In light of findings made in the previous sections, Section Four will assess the adequacy of future RAAF force structures and capabilities. It will discuss any adaptations that may be necessary, to either platforms or weaponry, with particular reference to the AIR6000 (New Air Combat Capability) and AIR7000 (Multi-mission Unmanned Aerial Vehicle and Maritime Patrol Aircraft) projects. Section Four also examines RAAF capabilities that have been identified as areas of concern and discusses these apparent weaknesses in relation to terrorist threats.

## SECTION ONE: AUSTRALIA'S SECURITY ENVIRONMENT POST 9-11

### Terrorism and Australia

Although Australia has not been immune from terrorist attacks in the past, comparatively speaking, such attacks have seldom occurred, were most often aimed at foreign interests, and were usually in response to events abroad.<sup>4</sup> Thus, domestic law enforcement and intelligence agencies have generally been capable of adequately dealing with terrorism without military support. The recent attacks in Indonesia, however, represent a significant and worrying change, insofar as Australia was clearly targeted both in the Bali and Jakarta bombings. The determination and global nature of contemporary trans-national terrorist groups mean they have an alarming capacity to seriously threaten Australian interests. As the Government's *Defence Update 2003* acknowledges, 'the terrorist threat to Australians and Australian interests has increased, both domestically and overseas'.<sup>5</sup>

The attacks by extremist–Islamist terrorist groups have thus far occurred outside Australian territory; however, this does not mean that the terrorist phenomenon is any less worrying. These groups have demonstrated their interest in conducting attacks on Australian soil in the past, and there is a significant risk that they will attempt to do so in the future.<sup>6</sup> Moreover, a nation’s interests are not confined to its territorial landmass. Australia has a vast array of political, economic and commercial interests around the globe, not to mention a population inclined towards international travel. For example, the shipping and trade routes to Australia’s immediate north are vital for the continued economic prosperity of Australia and the region. Therefore, ensuring Australian security also entails protecting embassies, consulates, trade missions and travellers abroad.

The increased terrorist threat means that the Australian Defence Force may be required to assist in protecting Australians and Australian interests from terrorist violence anywhere and everywhere if civil agencies alone are not up to the task. While the ADF’s primary focus has long been on protecting Australia from a conventional military attack, the grave threat posed by trans-national terrorism means it is no longer appropriate to consider national security adequately protected by maintaining a ‘fortress Australia’.<sup>7</sup> If military assistance in the ‘War on Terror’ is required, the contemporary ADF must be prepared and ready to provide it.

Ironically, because an attack on Australian soil would prove relatively difficult to carry out (although far from impossible), due to its geographical isolation and relatively well-protected borders, terrorists are much more likely to attack Australia where it is more vulnerable, ie. overseas. The tragic verification of this hypothesis was witnessed in Bali and Jakarta. Martha Crenshaw, a leading terrorist expert, argues that ‘terrorism in general is deflected rather than prevented’.<sup>8</sup> For the ADF, this means that now more than ever, it may find itself called upon to protect Australian interests from terrorist attack across the globe.

## How the ‘War on Terror’ affects Australia

The Australian Government’s enduring commitment to the US-led ‘War on Terror’ has undoubtedly altered Australia’s contemporary security environment.<sup>9</sup> The proactive and uncompromising US response to terrorism and (some) states that harbour terrorist groups<sup>10</sup> has led to a heightened operational tempo for the ADF, and it is reasonable to suppose that further military support from Australia will be forthcoming in future.<sup>11</sup> Heretofore, ADF involvement in the ‘War on Terror’ has primarily been in the Middle East, however, this does not suggest that the ADF should not assume important counter-terrorism responsibilities, both in the region and domestically. That said, ADF participation as a member of the coalitions in Afghanistan and Iraq has won much praise in the US, clearly strengthening the Australian–US alliance, which is rightly regarded by Defence as a vital ‘national asset’.<sup>12</sup> This bolstered alliance means that the likelihood of conventional state-on-state warfare involving Australia is lower now than it has been for many years.<sup>13</sup>

Conversely, as mentioned, the *Defence Update 2003* acknowledges that non-state trans-national terrorist groups are an increasing source of concern for Australia. Although the *Defence Update 2003* itself does not suggest that ADF involvement in the US-led ‘War on Terror’ in the Middle East has *caused* the increased threat, many well-regarded terrorist experts hold such a view.<sup>14</sup> Crenshaw argues that military responses to trans-national terrorism can have the adverse effect of engendering further animosity and increased attacks.<sup>15</sup> To be sure, prior to September 11 and Australia’s subsequent military contributions in Afghanistan and Iraq, David Sadleir argued that Australia’s limited involvement in the Middle East was to be credited for the relatively small number of terrorist attacks directed against it.<sup>16</sup> This recognises the fact that ADF involvement abroad has definite implications for terrorist threat levels. Such expeditionary military operations are not strictly essential for the immediate defence of Australia; however they are undoubtedly an operational reality that must be considered when assessing the contemporary strategic environment for the ADF.

## Implications for the ADF

In the age of trans-national terrorism, Weapons of Mass Destruction (WMD) and globalisation, assessing a nation’s security priorities is extremely difficult. The one reality that Defence must come to accept is that ‘uncertainty is certain’.<sup>17</sup> Peter McLennan argues that the method of trying to predict dominant future threats to security is fundamentally flawed and therefore concludes that defence structures and capabilities must be

balanced, flexible and adaptable in order to deal effectively with a range of contingencies. He observes that US and Australian defence and intelligence agencies either failed to predict any of the major conflicts over the last 50 years (with the exception of the violence in the former Yugoslavia in 1990); did so too late to adapt defence force structures or capabilities appropriately; or predicted conflicts that did not eventuate.<sup>18</sup> Although it remains important to analyse credible future challenges, by expecting the unexpected, the ADF will be much better equipped to protect Australia's interests from a wider range of threats.

It is very unwise, despite the temptation, to overstate one threat, in this case terrorism, and disregard strategic planning for what Nye calls 'low probability but high-impact contingencies' such as conventional attacks.<sup>19</sup> Australia's region is inherently more precarious than that of North America or Europe, with major war not unthinkable to our near north.<sup>20</sup> Terrorism, on the other hand, does not pose a threat to the survival of the Australian nation as a whole.<sup>21</sup> Risk management demands that the degree of damage each scenario may inflict on Australia be taken into account as well as the likelihood that it will occur. Although trans-national terrorism raises novel and frightening challenges for national security policymakers, planning to 'fight the last war' must be avoided. Therefore, Paul Dibb argues that the ADF should maintain its focus on the five long-term strategic objectives enunciated by the Defence White Paper, Defence 2000: Our Future Defence Force.<sup>22</sup> These objectives are as follows:

- to protect Australian territory and its direct approaches,
- to foster the security of our immediate neighbourhood,
- to promote stability and cooperation in South-East Asia,
- to support strategic stability in the wider Asia Pacific region, and
- to support global security.<sup>23</sup>

As such, if these strategic goals have not changed greatly since 2000, the *Defence Capability Plan* (DCP) which was based on that same strategic assessment also remains on-the-whole appropriate.<sup>24</sup>

Although the ADF's heightened operational tempo, due to commitments to the US-led 'War on Terror', should be kept in mind when assessing Australia's strategic priorities, these are by and large 'operations of choice' rather than of necessity.<sup>25</sup> The government clearly sees value in contributing militarily to these operations. However, as they are 'discretionary' operations, Australia needs only to contribute what it can (or says it can), in order to honour its political commitments and bolster the alliance. Aldo Borgu argues that 'the substance of the contribution [to counter-terrorism operations with coalition partners] does not matter as much as the contribution itself'.<sup>26</sup> Heretofore, the ADF has been a valuable contributor to coalition operations without discovering any major shortcomings in terms of effectiveness or competence. Therefore, the political, economic and security advantages to be gained from contributing to US-led coalitions can be obtained without any drastic changes to ADF priorities.

However, this is not to suggest that the ADF should not enhance its capabilities to *better* support Australian counter-terrorism efforts, both at home and abroad. The Australian Federal Police are responding to the demands of the contemporary security environment by assisting more and more with international peacekeeping operations, and they are well suited to undertaking such tasks.<sup>27</sup> Similarly, Australia should exploit ADF capabilities and expertise in order to meet the security challenges posed by trans-national terrorism. However, the 'War on Terror' should not dictate force structures or capabilities. The role of the ADF has not fundamentally changed, but assuming some of the counter-terrorism burden is a logical and therefore advisable move. This is not a zero sum game; assisting civil agencies with counter-terrorism will not necessarily detract from the ADF's primary objective of protecting Australia from more conventional threats. Alan Thompson notes that terrorists are extremely proficient at reacting and adapting to counter-terrorist measures taken by a defending state.<sup>28</sup> Accordingly, the ADF should also focus on maximising its flexibility, adaptability and diversity, with personnel, platforms and weapons able to undertake a wide range of tasks, against a variety of opponents, both quickly and effectively.

## SECTION TWO: AIR POWER AND COMBATING TERRORISM

### **Air Power in Counter-Terrorism**

Air power is an influential and often decisive force. It has unique capabilities that should be exploited in order to enhance the Australian government's counter-terrorism efforts.<sup>29</sup> Air power (or military force more generally) cannot single-handedly defeat trans-national terrorism, particularly over the long-term, nor should it play a primary role in counter-terrorism efforts.<sup>30</sup> On the contrary, all elements of national power, including civil intelligence, law enforcement, diplomatic, economic and political efforts as well as the military, need to be employed collectively if Australia is to wage a successful 'War on Terror'. To date, the RAAF has made a significant contribution to the 'War on Terror' and it should continue to enhance Australian counter-terrorism efforts in future. Coalition operations in Afghanistan in 2001 and 2002, although not likely to be emulated consistently, demonstrated air power's decisiveness against asymmetrical forces. Indeed, there are a number of roles to which air power is uniquely suited.

Air power is commonly seen to perform two broad counter-terrorism functions, namely prevention and response. However, these two functions should be considered mutually supportive rather than disparate objectives.<sup>31</sup> For example, the US-led coalition attacked the Taliban government of Afghanistan in response to that regime's continued failure to act against, if not for its outright support of, Al Qaeda. While this was clearly a response to the trauma that was September 11, it was also aimed at preventing future attacks by killing Al Qaeda operatives and destroying their training camps and infrastructure. Moreover, the Afghanistan campaign encompassed a psychological objective, warning other states of the consequences of harbouring trans-national terrorist groups, as well as aiming to dissuade the terrorists themselves from conducting future attacks.

### **Roles for Air Power**

Within the two broad categories of prevention and response, the four most important functions for air power in counter-terrorism are as follows:

- airlift;
- strike;
- intelligence, surveillance and reconnaissance (ISR); and
- psychological operations.

It must be noted here that there are a number of other significant airpower roles such as achieving air superiority, defending forward operating bases, and conducting diversionary operations to focus an adversary's attention away from forces on the ground.<sup>32</sup> Furthermore, it may be necessary to re-examine what is required of air power to effectively deal with the threat of trans-national terrorism in future.<sup>33</sup> However, at present the RAAF should focus on the aforementioned four capabilities due to their relative suitability for counter-terrorism operations and the probability that such capabilities will be called into use.

### ***Airlift***

Airlift involves the rapid deployment of forces and essential hardware to a desired location and provides the capacity to sustain and support an operation once it has begun.<sup>34</sup> This capability has proven fundamental to numerous counterinsurgency campaigns and Australian air power can expect to have a significant airlift role in counter-terrorist operations due to their essentially expeditionary nature.<sup>35</sup>

Special Forces (SF), which are one of the most effective ADF counter-terrorism tools, are dependent on airlift for prompt insertion and extraction, to and from their desired location.<sup>36</sup> Airlift may be used to evacuate Australian nationals, embassy staff or intelligence agents in the event of an imminent terrorist attack. Airlift capabilities would also be crucial in the wake of such an attack, to evacuate casualties and to transport medical personnel and supplies to and from the attack site, as RAAF Hercules aircraft did after the terrorist attacks in Bali.<sup>37</sup>

### ***Strike***

Strike refers to an attack conducted by an air platform on a designated target in order to ‘weaken an enemy’s capacity and will to fight’.<sup>38</sup> The speed, reach and devastating force that characterise air power place it in a position of superiority, vis-à-vis other military capabilities, in the event that a pre-emptive strike is needed to eradicate an imminent terrorist threat.<sup>39</sup> Indeed, because an aircraft does not have a sustained physical presence, airstrikes are often less of a ‘political disadvantage’.<sup>40</sup> Consider the significantly more damaging effect the deployment of ground troops has on inter-state relations, compared to that of a sudden and rapid air strike against a target in a foreign land. Air platforms are also less vulnerable to adversary firepower, thus minimising the likelihood of friendly casualties when on a strike mission, particularly as terrorists typically have little in the way of air defences.<sup>41</sup>

The potential use of air strikes against terrorist targets is increasing in line with the improving accuracy of Precision Guided Munitions (PGM), which minimise the likelihood of collateral damage. In January 2005, the Philippine Air Force used its precision strike capability to destroy a terrorist base that was being used for a meeting between an Abu Sayyaf chieftain and members of JI.<sup>42</sup> During Operation *El Dorado Canyon* in 1986, US strike aircraft successfully attacked terrorist targets, training camps and infrastructure as well as local air defence capabilities in Libya in response to that country’s continued support for terrorist activity.<sup>43</sup> Air strikes were also heavily utilised by the United States Air Force (USAF) throughout Operation *Enduring Freedom* in Afghanistan, and when integrated with SF troops have been credited with ultimately making the ‘difference between stalemate and victory’.<sup>44</sup> The Israeli Air Force (IAF) is increasingly reliant upon air platforms for ‘targeted killing operations’ (ie. assassinations of insurgents) and they are purported by IAF commanders to be extremely effective.<sup>45</sup> John Warden claims that it is essential to attack an adversary’s ‘senior officials, command and control systems, and communications’.<sup>46</sup> This may especially be the case if those replacing the killed leaders are not as efficient or influential as their predecessors; however, the long-term effects of these so-called ‘decapitation’ tactics are by no means conclusive.

Although the use of air strikes by Australia against terrorist operatives, infrastructure and states that support them is not inconceivable, the RAAF should not expect to use its strike capabilities often in the near future because of the associated implications (to be discussed in Section Three) such a strike would have.

### ***Intelligence, Surveillance and Reconnaissance***

Air platforms (fitted with advanced radar technologies) and space-based satellites are effective means of conducting surveillance and reconnaissance of terrorist movements and operations. They can do so in so-called ‘peacetime’ operations and can also provide crucial intelligence prior to and during military operations against terrorist adversaries.<sup>47</sup> Although human intelligence provided by the relevant Australian civil agencies is at the forefront of counter-terrorism, air and space platforms are often better able to conduct ISR missions, both in urban areas and over vast, uninhabited terrain.<sup>48</sup> They are much less constrained by great distances, national borders (to an extent) or geographical barriers, providing the capacity to quickly locate, observe and report on terrorist activity wherever it appears. Nevertheless, air and space-based ISR should not replace human intelligence capabilities; it should simply enhance them. After all, overhead imagery can monitor terrorist movements, but it ‘cannot explain why’, nor can it see inside buildings.<sup>49</sup>

Air and space platforms can not only observe the terrorists themselves, but can also monitor and disseminate real-time information relating to the movements of civilians who may be located close to the terrorists, thereby decreasing the likelihood of collateral damage if a strike by friendly forces is undertaken. Therefore, air and space power is well placed to make a vital contribution to Australian intelligence-gathering efforts, which are of primary importance in the ‘War on Terror’.

Due to the ‘time-sensitive’ nature of a terrorist target, meaning that it can mobilise quickly, attack and disappear soon afterwards, ISR platforms may need to be fitted with strike capabilities to respond in near real-time upon identifying a terrorist threat. The United States Air Force (USAF) used the Predator Unmanned Combat Aerial Vehicle (UCAV) with devastating accuracy and success during Operation *Enduring Freedom*. Its prolonged presence, highly developed sensor systems and precision strike capabilities meant it could locate, track, and engage terrorists almost instantly.<sup>50</sup> Australia looks set to acquire an Unmanned Aerial Vehicle (UAV) within

the next few years through the AIR7000 project<sup>51</sup> and this could be fitted with strike capabilities which would enable it to conduct such operations.

### *Psychological Operations*

Air power may be used for so-called psychological operations aimed either at dissuading the terrorists from conducting future attacks, discouraging local populations from supporting terrorists, or calming the fears of a defending state's population. While it is unlikely that the presence of strike aircraft, for example, will act as a long-term deterrent, it may certainly be expected to disrupt immediate terrorist plans, or at least direct them elsewhere; which from a purely nationalistic point of view is not undesirable.<sup>52</sup>

The use of RAAF F/A-18 Hornets for a 'standing combat air patrol' in the skies above Canberra during President Bush's 2004 visit may be seen both as a psychological and tactical move. The Hornets were reportedly given the authority to engage any unauthorised aircraft flying within a 40-kilometre radius of the President.<sup>53</sup> The presence of such overwhelming air superiority alone has an adequate psychological impact to thwart a terrorist attack from the air. If an air attack were attempted, the Hornets could divert the plane through psychological tactics such as 'fly-bys' or by firing warning shots. However, this is not a long-term deterrent, nor are Al Qaeda or JI likely to employ the same strategy of attack as for September 11 in the near future.

### **Humanitarian Assistance as Counter-Terrorism**

In order to conduct an effective long-term fight against terrorism, the 'hearts and minds' of local populations must be won.<sup>54</sup> Humanitarian operations undertaken by the RAAF play an important psychological role to this effect. Crenshaw argues that in order to effectively tackle trans-national terrorism, a 'two-tier approach' must be taken; targeting not only the terrorists themselves, but also sympathetic local populations that provide vital, but not necessarily overt, operational and financial support and which offer concealment and protection.<sup>55</sup> Greg Fealy also argues that Indonesia's answer to extremist Islamist terrorism 'lies within the Islamic community itself', and most notably in increasing the willingness of the community to inform on terrorist suspects and activities.<sup>56</sup> This is unlikely if the Islamic community has an unfavourable opinion of the West. Australian humanitarian operations, to which the RAAF currently makes a valuable contribution, encourage a more positive public perception of Australia, thereby discouraging local populations from supporting terrorist groups.<sup>57</sup>

While humanitarian efforts are clearly distinct from other regional counter-terrorism initiatives, they are emblematic of a wider effort to promote a safe and prosperous region (in line with the 2000 Defence White Paper's strategic objectives). Although the military inevitably plays a secondary role to diplomatic, political and economic efforts, the impact on the local psyche of seeing Australian air forces transporting food, conducting search and rescue missions, and helping to rebuild hospitals cannot be overstated. Indeed, a recent survey indicates that '65 per cent of Indonesians now are more favourable to the United States because of the American response to the tsunami'.<sup>58</sup> Australia can expect similar security dividends due to its own significant tsunami-relief contributions. In short, the support base for Islamist terrorism has decreased in the world's most populous Muslim nation (and Australia's most important neighbour) as a direct consequence of the use of 'soft power'.<sup>59</sup>

Working on humanitarian operations in conjunction with one's military counterparts abroad, as the ADF has done in Indonesia, can also have quasi-diplomatic results such as gaining clearances for over-flight, which proved crucial during Operation *Enduring Freedom*.

### **Air Power: One of Many Tools**

Although civil agencies will assume primary responsibility in the 'War on Terror', air power can act as an effective force multiplier in what must be a 'whole of nation' counter-terrorism effort. Civil agencies will not be as effective without the option of air power support, just as air power cannot operate effectively against a terrorist adversary in isolation. For example, is it useful for Australian intelligence agencies to locate an imminent terrorist threat to Australia or Australians abroad, without the rapid and far reaching response capabilities of air power? By the same token, air and space platforms cannot easily distinguish between a suspected terrorist target and other neutral civilians in a complex warfighting environment without reliable human intelligence

acquired on the ground.<sup>60</sup> Therefore, air power is reliant to an extent on other forces in order to be employed most effectively.

The establishment of joint commands that integrate civil and ADF capabilities implies a mounting realisation that the military is an effective force multiplier in the 'War on Terror'. Although no real legal transfers of anti/counter-terrorism jurisdiction have occurred, such an integrated approach acknowledges the fact that military assistance is necessary more often in the current security environment.<sup>61</sup> Raymond Press makes this connection in his analysis of trans-national crime, stating that air and space power should be considered an 'able assistant to an overloaded system' and that 'the military does not need to take control. It just needs to help.'<sup>62</sup>

Air power has proven particularly effective against terrorist adversaries when used in conjunction with SF troops. David Jeffcoat calls this a 'symbiotic relationship'. During Operation *Enduring Freedom*, devastating precision firepower was delivered against ground targets by coalition aircraft in conjunction with SF movements on the ground.<sup>63</sup> Only air platforms can transport SF troops to a required location quickly and over great distances, as well as simultaneously providing close air support and conducting precision strikes against ground targets. During the Vietnam War this integrated approach to fighting small numbers of combatants in a complex environment was also used to great effect, with Australian SF troops reliant on air power for reconnaissance, insertion and extraction as well as medical evacuation.<sup>64</sup> Also, due to the comparative efficiency of SF when combined with air power, Australia can afford to contribute less in overall numbers to coalition operations without any real decline in the political or operational significance of its military contribution. However, the SF-air power collaboration cannot be used to the same extent in 'peacetime' counter-terrorist operations due to legal and political considerations. Nevertheless, it is an important relationship to nurture and, in selected exceptional circumstances, could be called upon to eliminate an imminent terrorist threat with precision and speed.

### **Problem of Impermanence**

Impermanence is a problematic characteristic of air power when dealing with trans-national terrorists, who, unlike insurgents, seldom engage in sustained armed conflict.<sup>65</sup> Rather, a terrorist threat lies dormant, only to surface with devastating force at sporadic intervals. This necessitates sustained ISR operations by systems that are able, upon identification of a looming threat, to either rapidly communicate a request for an immediate military pre-emptive strike, or in the case of multi-role platforms, to conduct one itself. Strike aircraft may also be needed on standby in the area while intelligence is confirmed. The impermanence of air power makes this difficult. Nonetheless, with greater air-to-air refuelling capabilities and the advent of UAVs, impermanence will become less of an issue in future.

## **SECTION THREE: LEGAL, NORMATIVE AND POLITICAL CONSIDERATIONS**

### **Legal Restraints**

The use of Australian air power for counter-terrorism operations is restricted by domestic and international legal considerations, some of which are particularly ambiguous about the military's role in dealing with contemporary trans-national terrorist adversaries. This paper will not discuss the legal issues surrounding ADF counter-terrorism operations at length; however, some examples of the legal issues the RAAF must contend with will be given.

Legal jurisdiction for anti/counter-terrorism lies first and foremost in the hands of intelligence and law enforcement agencies within Australia, and their local counterparts abroad. The ADF, under the Defence Legislation Amendment Act 2000, can assist civil law enforcement agencies but only if explicitly requested to do so.<sup>66</sup> Nonetheless, the ADF has been increasingly involved in counter-terrorism operations. For example, the ADF assisted state and federal police with security at the Sydney Olympics and RAAF Hornets have been used to protect visiting dignitaries. The ADF also established the Special Operations Command in May 2003, which has significant anti-terrorism defensive capabilities and is also involved in coordinating the more



offensive counter-terrorism outfits, namely, the Special Air Service (SAS) regiment and Tactical Assault Groups (TAG).<sup>67</sup> The recently opened Joint Offshore Protection Command, integrating defence and customs personnel and capabilities, also assumes 'direct responsibility for counter-terrorism prevention, interdiction and response in all offshore areas of Australia'.<sup>68</sup>

Such initiatives, clearly a fitting response to the demands of the contemporary security environment, mean that jurisdiction is becoming increasingly difficult to discern.<sup>69</sup> In short, identifying when the ADF is merely aiding civil authorities and when it is acting more independently in the defence of Australian interests has become ever more problematic in the age of trans-national terrorism.<sup>70</sup> This legal ambiguity poses difficulties for Defence planners because it is unclear whether the ADF has gained additional responsibilities that they need to accommodate, or whether it is simply adequate to use the capabilities they currently have to assist as best they can.

It is equally difficult both to identify terrorist operatives and to establish how they should be dealt with. Although the IAF is a staunch proponent of 'targeted killing operations' conducted by air platforms against terrorist suspects, Australian law generally regards terrorists as criminals. This raises doubts as to whether they may also be considered 'legitimate military targets', which is a necessary precondition for a military strike (assassination) to comply with the Law of Armed Conflict and Rules of Engagement.<sup>71</sup>

Despite air strikes having been used against insurgents and terrorists by other states, the RAAF can seldom expect to emulate such tactics. Israel does not acknowledge or adhere to a Palestinian national airspace as Australia does with its neighbours. Also, unlike states such as the Philippines and Indonesia, terrorist threats to Australian interests will most likely materialise within its neighbours' territorial boundaries. Thus, a RAAF strike against these targets would inevitably involve intruding into a sovereign nation's air space.

This is not to say that air strikes cannot be used abroad. If a neighbouring government does not have the capacity to engage a terrorist target in our immediate region, and therefore requests military assistance from Australia, a RAAF air strike would not be implausible. Indeed, Prime Minister Howard has emphatically reserved the right to conduct a pre-emptive strike if absolutely necessary.<sup>72</sup> Although the term 'pre-emption' has been misused in recent times, it is in fact an entirely legal, albeit difficult to distinguish, strategy of self-defence.<sup>73</sup> However, even in instances when pre-emptive military action may legally be taken, the political ramifications would be significant if permission to do so is not given.

Therefore, when considering the application of Australian air power in the fight against terrorism, one must acknowledge that Australia is bound by legal considerations that may not apply elsewhere. Nonetheless, cases in which air power has been used effectively abroad against terrorists and/or insurgents can be instructive insofar as they provide examples of what capabilities and particular weapons systems are needed if the ADF is called upon to assist in combating terrorism.

## **The Implications of Using Air Power**

The application of military force is not always beneficial to a nation's longer-term fight against terrorism. For example, conducting an air strike against a terrorist target may be a tactical success, by eliminating an individual leader or destroying vital terrorist infrastructure; however, one must also consider the secondary and subsequent ramifications of the attack.<sup>74</sup> It may disperse terrorist groups and push them further underground, making it harder to monitor their movements. It may also exacerbate antagonism amongst other terrorist cells, thereby provoking a new wave of terrorist attacks.<sup>75</sup>

In addition, a pre-emptive strike performed by a RAAF platform may prove detrimental over the long term by alienating Australia from much-needed allies, thus harming Australia's trade relations and future security prospects. Trans-national terrorism is a global problem necessitating near-seamless cooperation between Australia, its allies and especially its regional neighbours. For example, customs and law enforcement efforts at Australian harbours and airports will be less effective if their counterparts in Indonesia and Malaysia do not take similar precautions. Australian intelligence agencies also require greater cooperation from their regional counterparts. The need for such cooperation is the driving force behind the large number of Memoranda of Understanding signed between Australia and other countries in the region.<sup>76</sup> However, a military strike by the

ADF on foreign soil without the direct approval of that sovereign state would undoubtedly affect the scope for such cooperation and would surely alienate otherwise willing allies.

Although psychological operations, strikes and even military invasions have been used to discourage states from actively aiding and abetting trans-national terrorist groups, there is no conclusive evidence that these measures have dissuaded states from supporting terrorist groups in the longer term.<sup>77</sup> Despite US air strikes against Al Qaeda targets in response to the 1998 bombings of US embassies in East Africa, there is no evidence that Al Qaeda abandoned its agenda (see the subsequent attacks on the USS Cole as well as 9-11), although it was delayed in the short-term.<sup>78</sup> Moreover, even if David Ochmanek's assessment that states are now less inclined to support terrorists (particularly after witnessing what happened to the Taliban and Saddam Hussein's regime) is correct, terrorist groups decreasingly use or need state support.<sup>79</sup>

Moreover, by applying a military-first modus operandi, one risks increasing the threat to a nation's security. Military attacks may anger local populations, enhancing public support for terrorist organisations and unifying otherwise moderate individuals with the extremist cause.<sup>80</sup> Provoking governments into inappropriately forceful military responses is a common terrorist tactic and may be just the effect Al Qaeda hoped to achieve by way of its September 11 attacks.<sup>81</sup>

This is not to say that a military response should never be used. Greg Fealy notes that the Darul Islam movement in Indonesia was eventually destroyed by killing its leaders; leaving 'the movement with only a few scattered insurgents thereafter'.<sup>82</sup> Michele Malvesti's suggestion that air strikes against Al Qaeda targets in 1998 'did not achieve US counter-terrorism policy goal of preventing future acts of terrorism'<sup>83</sup> does not tell the whole story. This assessment was based on President Clinton's statement that 'Our objective was to damage [Al Qaeda's] capacity to strike at Americans and other innocent people.'<sup>84</sup> President Clinton did not suggest that the air strikes would destroy the terrorist's will or intent to conduct attacks in future, nor should he have. However, his stated policy objective was achieved because Al Qaeda's *capacity* to conduct an attack was indeed damaged through the air strikes, albeit only in the short-term. This discredits the notion that military force is *never* the answer.

However, the decision to take such action should not be made hastily and must take into account both short- and long-term effects, whether or not these effects are in line with broad national security interests and, most importantly, must acknowledge that military force is only a small part of an effective counter-terrorism policy.

Furthermore, the overwhelming military superiority a state has over a terrorist adversary, such as that afforded by Australian air power, does not deter or dissuade trans-national terrorist attacks to the same extent that it is expected to do for more conventional adversaries, particularly over the long-term. Indeed, Crenshaw argues that:

The superior power of the defending state makes it a more rather than less attractive target, because of the symbolic value of a strike by the weak against the strong. The strong are 'target-rich' while the weak are 'target-poor'.<sup>85</sup>

Unlike the defending state, non-state terrorist groups seldom have readily identifiable combatants, infrastructure or territory on which to focus a military attack. This limits the scope for the effective use of air strikes against a terrorist adversary.

Therefore, if air power is relied upon too heavily to target only one component of the trans-national terrorist threat, such as the terrorist's capacity to fight, other vital components that need to be addressed, such as the will and intent to fight, will be ignored.<sup>86</sup> Although it is much more difficult to accurately assess the latter two elements of a terrorist threat, such qualitative steps must be taken in order to tackle terrorism effectively.

## Collateral Damage

The risk of collateral damage and its associated repercussions limit the effectiveness of air power in counter-terrorism operations. Although PGM have become increasingly accurate, they are not *yet* at the stage where an aircraft can strike individuals or a single room in an office block without significant risk of collateral damage.<sup>87</sup>

Such capabilities remain the forte of the 'soldier on the ground'. Particularly when targeting a terrorist adversary in an urban 'complex warfighting environment', air strikes risk causing unintended casualties. Inadvertently killing neutral civilians, although a much less frequent occurrence in modern warfighting, still 'tends to make the population more hostile to government forces and any claims they make to represent a just cause'.<sup>88</sup> Important moral implications aside, this is particularly problematic in the age of the 'CNN factor', when the extremely detrimental political costs that collateral damage inevitably incurs must be avoided.

However, as has been discussed, air power can be both accurate and effective, especially when employed in conjunction with other friendly forces, such as SF or sound civil intelligence. Moreover, the scope for air power to contribute to counter-terrorism operations will increase with the improved accuracy of PGM, and with the future development of low yield, non-lethal PGM and beam weapons, thereby decreasing the likelihood of unintended casualties.<sup>89</sup> In future, air-delivered, non-lethal devices may be used simply to identify and thus facilitate the capture of terrorist suspects by law enforcement agencies, rather than to kill them.<sup>90</sup>

Although enemy combatants during Operation *Enduring Freedom* were more easily identified than can readily be expected for terrorist targets, it was nonetheless a fine example of the extent to which PGM have progressed the scope for air platforms to accurately strike asymmetrical forces. The only instances of PGM missing their intended targets were due to intelligence failures, rather than shortcomings in the accuracy of platform weapon systems.<sup>91</sup> Nevertheless, precision is something that must be developed further, and weapons will inevitably have to be tailored to meet the requirements of terrorist adversaries to ensure the viability of air power as a weapon in the 'War on Terror'.

## Effects-Based Operations

Due to the innate risks of employing air power against a terrorist threat outlined above, the RAAF can no longer think solely in terms of its military and tactical objectives. The broader effects of air power operations, taking into account direct, indirect, physical and psychological effects, are as important, if not more so, than the tactical success of the operations themselves. If the measure of a war is the proverbial quality of peace it delivers, then it is the national end state, rather than the application of military power itself, that is important in the 'War on Terror'.<sup>92</sup>

Corum and Johnson summarise the point well:

The employment of military power and airpower in counterinsurgency [read counter-terrorism] is not an end in itself. The . nal political goal is always paramount, and the political repercussions of the use of military power must always be considered.<sup>93</sup>

An Effects-Based Operations (EBO) approach to military strategy gives such consideration to the broader implications of employing air power. This strategy is the military component of a concept more broadly known as a National Effects-Based Approach (NEBA) to national security. EBO is defined as 'coordinated sets of actions directed at shaping the behaviour of friends, foes and neutrals in peace, crisis and war'.<sup>94</sup> The four main elements of national power (military, diplomatic, information and economic) work more closely together at achieving prescribed national security goals and this 'synchronisation' of power is crucial for effective counter-terrorism. An EBO approach recognises that all actions, be they air power, military, economic or diplomatic, have 'cascading' effects much more wide-reaching than may be immediately apparent.<sup>95</sup>

As with the 'War on Terror', an EBO approach dictates that air power is not necessarily the primary tool (nor is any other single element of national power). It is used in support of, and supported by, other civil and defence capabilities in order to advance more broadly defined national security interests. Ironically, trans-national terrorist groups understand this extremely well; it is the symbolic power and the effects a terrorist attack has on its targeted audience that are important for them, not tactical 'victories'.<sup>96</sup> In short, due to the multi-faceted nature of combating terrorism, and the implications air power's counter-terrorism roles can have, EBO must be the guiding doctrine for the RAAF in its involvement in Australia's 'War on Terror'.

## SECTION FOUR: CAPABILITIES AND PROCUREMENT, WHAT IS NEEDED?

### Risk Management

As discussed in Section One, it is impossible to predict Australia's future security environment with any degree of certainty, nor has the ADF's role in counter-terrorism been clearly defined. This in turn renders it difficult for the ADF to assess what is the optimum mix of capabilities needed to best meet the security challenges of the future. In short, if strategic planners cannot predict what type of adversaries Australia should expect to be fighting, how can the ADF develop its capabilities appropriately? Australia does not have the resources to plan for every conceivable contingency and thus, using a conventional risk management strategy, the ADF must prioritise its finite resources and make them as flexible, adaptable and efficient as possible.<sup>97</sup> Even if one could be certain that the current trend of a decreased conventional threat and an increased terrorist threat would continue for the next 15 years, which one cannot, it would still be inadvisable to optimally structure RAAF capabilities for counter-terrorism operations.

Although there is scope for improvement, current and proposed RAAF capabilities adequately meet their counter-terrorism responsibilities.<sup>98</sup> Alan Stephens suggests that 'the threats of jihadist revolutionaries and rogue states' should be 'the dominant considerations for today's leaders, including military commanders'.<sup>99</sup> However, air power forces developed with high-end conventional threats in mind, as were current RAAF capabilities in the 'Defence of Australia' era, can be tailored to contribute effectively to lower-end operations including against terrorist targets without detracting from higher-end capabilities. On the other hand, forces developed especially to target trans-national terrorist groups, as well as being restricted in doing so by the considerations described in Section Three, would be wholly unable to defend against a conventional attack, which would inflict a great deal more damage on Australia.<sup>100</sup> Therefore, no fundamental restructuring of priorities or RAAF capabilities is appropriate. Current and proposed RAAF platforms and other weapon systems should simply be optimised to make them better able to assist other elements of national power in counter-terrorism,<sup>101</sup> without jeopardising their ability to fight more conventional adversaries. As Paul Dibb suggests, one should not 'confuse the crucial difference between how to structure a defence force and how it may be used'.<sup>102</sup>

### Air Combat Capability

Undoubtedly the most important addition to Australian air power capabilities is AIR6000, now called the New Air Combat Capability Project, with the single most significant purchase likely to be the high-profile Joint Strike Fighter (JSF). Although the Howard Government is not due to make a definite decision about their purchase until 2006/7, Senator Hill has indicated that it will more than likely be the JSF.<sup>103</sup> However, it is not expected to be operational in Australia until 2012 at the absolute earliest,<sup>104</sup> and it is possible that the terrorist threat may have diminished by then. The time lapse between planning, procurement and eventual capability lends even more weight to the argument that it is unwise to base one's air forces on the most pressing current threat.

Nevertheless, the multi-role JSF would be more than capable of adapting to the requirements of counter-terrorism operations if required to do so. The advanced sensor and targeting systems on the JSF make it capable of detecting, tracking and striking potential terrorist targets such as a moving car or a single room in an office block.<sup>105</sup> These capabilities make the JSF equally effective as a sensor node or as the 'shooter', which renders it particularly well suited to the air power-SF relationship. Its stealth capabilities will enable the JSF to monitor a suspected target covertly, which increases the feasibility of a strike. The Israeli Air Force has noted that 'we [IAF] need platforms and missiles that terrorists won't see or hear'.<sup>106</sup> Perhaps they need the JSF.

The JSF and its weapons can also be optimised for the requirements of counter-terrorism.<sup>107</sup> It will be compatible with a 250-pound small diameter bomb that can be delivered without a warhead, reducing the impact of the weapon and when employed with precision making it more suitable for terrorist targets. However, in a complex warfighting environment, even a bomb of this size risks causing significant collateral damage. Thus, it is important to exploit even smaller yield weapons such as the 20-pound Hellfire missile.<sup>108</sup> The JSF will also be able to accommodate any newly developed non-lethal weapons such as lasers when these become

available. Thus, it is fair to say that the JSF, which is being developed primarily with conventional warfighting in mind, will be flexible enough to meet its counter-terrorism responsibilities if called upon to do so.

### **ISR Capability**

The AIR7000 project primarily concerns RAAF ISR capabilities and includes the possible purchase of a UAV for 'all weather, long endurance surveillance and reconnaissance tasks' as well as a manned aircraft geared primarily for maritime surveillance to replace the aging AP-3C Orion.<sup>109</sup> While the procurement of these two platforms is premised on the need to monitor Australia's northern approaches to protect it from conventional sea and air attacks, it will also prove extremely useful in assisting law enforcement and intelligence authorities to combat terrorism. These platforms will enhance Australia's domestic situational awareness as well as that of its surrounding areas. Also, if intelligence identifies terrorist activity in the near region, they may be employed abroad to monitor the situation, relay information, and even carry out strikes if necessary (in the case of a UAV fitted with strike capabilities, and assuming that permission for these actions is granted by the country in which the terrorist threat is located).

### **Air-to-Air Refuelling**

Air-to-air refuelling is an important capability to develop, both for conventional and terrorist threats alike, as it extends the range and persistence of air power platforms considerably. This is crucial if a potential terrorist threat is identified, requiring the sustained presence of an air platform able to monitor the development of the threat, and then respond with a precision strike if all other measures fail. The RAAF will be better equipped to do so in coming years with the introduction of new Airbus A330 tankers in 2009. These may be used in conjunction with the Hornets in the near term and the JSF, if and when it comes into operation.<sup>110</sup> Again this demonstrates that air power capabilities designed with more conventional threats in mind, and in this case defending Australia 'as far from our shores as feasible',<sup>111</sup> can be adapted for counter-terrorism operations.

### **Long-Range Airlift**

Long-range or 'strategic' airlift, that is the capacity to transport a relatively large expeditionary force far from Australia, has often been identified as a key RAAF weakness.<sup>112</sup> However, as far as counter-terrorism is concerned, current capabilities meet the demands relatively well. For example, if a significant terrorist development were identified abroad, and particularly in our immediate region, government would only need to deploy a small number of SF troops with the emphasis being on speed, mobility and force rather than numbers or depth of deployment. Currently, these demands would adequately be met by the RAAF C-130 Hercules. Nevertheless, if it is determined that the RAAF needs to develop its long-range airlift capabilities to better prepare itself for high-end, larger scale operations, it must do so. This will in turn enhance the RAAF's ability to assist other elements of national power in counter-terrorism operations (broadly defined) such as humanitarian assistance or coalition operations further afield. However, these should not be the determining factors in the procurement decision-making process.

## CONCLUSION

This paper has argued that although the odds of a conventional attack on Australia are currently minimal, the September 11, Bali and Jakarta terrorist attacks are indicative of the increased threat to Australian security interests posed by trans-national terrorism. Due to the apparent gravity of the threat, military assistance is increasingly needed to assist civil agencies with counter-terrorism. The ADF must be ready and able to do so.

However, this development does not necessitate a fundamental shift in Australia's strategic priorities. The future strategic environment is inherently uncertain and it would therefore be detrimental to Australia's long-term security to base its defence planning too heavily on the threat of terrorism while ignoring the (far more dangerous) possibility of conventional attack. Australia should therefore continue its underlying strategic reliance on air power to protect Australia from any credible attack from across the sea-air-gap to its north.<sup>113</sup>

Although air power, and the military more broadly, cannot and should not assume *primary* responsibility for protecting Australia from terrorist attack, the RAAF has unique resources at its disposal that should be exploited in a 'whole-of-nation' approach to counter-terrorism. This strategy necessitates seamless cooperation between the three ADF Services as well as between the military and civil agencies. Air power is an important force multiplier, making other elements of national power more effective in their counter-terrorism efforts. Airpower is increasingly able to contribute to counter-terrorism due to developments in platforms, imagery and weapons technology. It can target the terrorists themselves, influence states that support them and weaken public support for trans-national terrorist groups through humanitarian assistance. Tackling this 'second tier' is particularly important if Australia is to effectively reduce the terrorist threat over the long term.

However, Australian air power is limited in its capacity to assist in the fight against trans-national terrorism by budgetary limitations, characteristics of air power such as impermanence as well as by the inherent problems in fighting an asymmetrical, non-state adversary. In the Australian context, air power must also contend with domestic and international legal restraints that are not as readily adhered to by some other states. Although the military is becoming increasingly active against terrorist adversaries, legal jurisdiction for protecting Australian interests from terrorist attack lies primarily with civil law enforcement and intelligence and with their counterparts abroad. Therefore, it is difficult to discern what is required of the RAAF and more explicit guidance from government to this end would be beneficial.

The use of air power, as with all forms of military force, has implications that are not restricted to those effects it has on an adversary. If not applied with restraint, air power will provoke a hostile reaction from states, local and domestic populations and will alienate Australia from otherwise willing allies. As a result, any decision to use air power against a terrorist adversary must comply with the stringent criteria of the EBO strategy, taking into account the direct and indirect, physical and psychological effects that any given action will have.

Finally, the RAAF should not radically alter its force structure; nor has it been shown to seriously lack any capabilities in light of the recent terrorist attacks. By progressing with the current DCP, the RAAF will also be able to offer greater counter-terrorism assistance if it is so required. Nonetheless, due to the clear and ever-present danger of a terrorist attack, the RAAF must do what it can to optimise its platforms, weapons and training in order to contribute more effectively to counter-terrorism initiatives.

Australian air power alone will not protect us from the scourge of trans-national terrorism, nor is it a long-term solution to the terrorist threat; but it is a capable, accessible and essential counter-terrorism 'force enhancer' that should not be ignored.

## ENDNOTES

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- 3 For the purposes of this paper, terrorism shall be taken to mean 'premeditated, politically motivated violence perpetrated by groups or individuals acting outside of the legitimacy of a state, usually aimed at influencing an audience wider than that of its immediate victims, often by threatening harm'. Australian Air Publication 1000 (AAP 1000), *Fundamentals of Australian Aerospace Power*, Fourth Edition, Aerospace Centre, Canberra, 2002, p. 93. Trans-national terrorism, which shall be the focus of this paper, involves terrorists crossing national borders to carry out attacks. Their operations also typically span many different countries. See Jonathan White, *Terrorism: An Introduction*, 2002 Update, Fourth Edition, Wadsworth/Thomson Learning, Belmont, 2003, p. 207.
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- 17 Peter Layton, *Accepting Uncertainty? A Contemporary Methodology for Capability Development*, Paper No. 15, Air Power Development Centre, Canberra, 2004, p. 3.
- 18 Peter McLennan, *Dealing with Uncertain Futures in Defence Strategic Planning*, DrPhil thesis, Australian National University, Canberra, 2003.
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- 74 One wonders whether an air strike against an office block that killed 15 terrorist leaders as well as one neutral local civilian would be considered a success, if in ten years time that civilian's brother flew an aircraft into the White House.
- 75 Interview with Clive Williams, 22 March 2005.
- 76 In February, Australia signed its tenth Memorandum of Understanding on counter-terrorism with Brunei. See Alexander Downer, 'Australia and Brunei Sign Counter-Terrorism Pact', media statement, 15 February 2005, [http://www.foreignminister.gov.au/releases/2005/fa020\\_05.html](http://www.foreignminister.gov.au/releases/2005/fa020_05.html), accessed 4 April 2005.
- 77 In the immediate aftermath of Operation *El Dorado Canyon*, Libya's involvement in terrorism declined. However, Libya is since known to have been involved in the killing of at least 189 US citizens (and many more others) through terrorist violence. Michele Malvesti, 'Bombing bin Laden: Assessing the Effectiveness of Air Strikes as a Counter-Terrorism Strategy', *The Fletcher Forum of World Affairs*, Vol. 26:1, Winter, 2002, pp. 19–21.
- 78 Todd R. Phinney, *Air Power Versus Terrorism: Three Case Studies*, thesis presented to the School of Advanced Air and Space Studies, Air University, Alabama, June 2003, <http://66.102.7.104/search?q=cache:SfMvCMRrQygJ:https://research.maxwell.af.mil/papers/ay2003/saas/phinney.pdf+airpower+and+terrorism&hl=en&start=1>, accessed 19 April 2005, p. 41
- 79 David Ochmanek, *Military Operations Against Terrorist Groups Abroad: Implications for the United States Air Force*, RAND, Santa Monica, 2003, <http://www.rand.org/publications/MR/MR1738/MR1738.pdf>, accessed on 18 April 2005, p. 3.
- 80 IAF air strikes against Palestinian insurgents have caused widespread support for Islamic terrorist groups. See Corum and Johnson, *Airpower in Small Wars*, p. 429.

- 81 See Matthew Lacy, 'Al Qaeda's Global Insurgency: Airpower in the Battle for Legitimacy', *Air and Space Power Chronicles*, online journal, 16 July 2003, <http://www.airpower.maxwell.af.mil/airchronicles/cc/lacy.html>, accessed 2 May 2005; and Clive Williams, 'September 11 Revisited, One Year On', in Clive Williams and Brendan Taylor (eds.), *Countering Terror: New Directions Post '911'*, Canberra Papers on Strategy and Defence, No. 147, Strategic and Defence Studies Centre, Australian National University, Canberra, 2003, p. 11.
- 82 Fealy, 'Terrorism in Indonesia', pp. 35–36.
- 83 Malvesti, 'Bombing bin Laden', p. 22.
- 84 *ibid.*, p. 22.
- 85 Martha Crenshaw, [http://apsaproceedings.cup.org/Site/papers/018/018012\\_CrenshawMa.pdf](http://apsaproceedings.cup.org/Site/papers/018/018012_CrenshawMa.pdf), accessed 17 August 2004.
- 86 Killing terrorist targets may be a tactical military success and will give the defending state some 'breathing space'; however, this is largely unhelpful over the long term if it does not discourage others from replacing them. Aldo Borgu, interview conducted by author with Aldo Borgu, Program Director, Operations and Capability Program, Australian Strategic Policy Institute, Barton, 29 April, 2005.
- 87 However, the US is reportedly developing the 'HardSTOP' munition, which is able to penetrate multi-storey buildings and destroy small areas within the building, without damaging adjoining rooms or threatening other civilians in the building. See Michael Sirak, 'US Reveals Urban Warfare Munition', *Jane's Defense Weekly*, Vol. 42, No. 14, April 2005, p. 7.
- 88 For a discussion of the limits to air power in urban, complex warfighting environments, see Corum and Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists*, p. 428.
- 89 In World War II, air power was used to target cities; during the Vietnam War it was used to target fielded forces and bridges; in Kosovo it was used to strike portions of buildings and vehicles within convoys; future air power counter-terrorism operations will undoubtedly be targeting individuals. See Ochmanek, *Military Operations Against Terrorist Groups Abroad: Implications for the United States Air Force*, p. 17.
- 90 Searle, 'Making Air Power Effective Against Guerrillas', p. 3.
- 91 Interview conducted by author with Sanu Kainikara, Deputy Director of the Air Power Development Centre, Canberra, 31 March 2005.
- 92 This is not an entirely new concept. Indeed Clausewitz once noted that 'a favourable state of peace' is the true goal of any state involved in a conflict. However, defence planners too often think primarily in terms of operational and tactical objectives. See Corum and Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists*, p. 426.
- 93 *ibid.*, p. 426.
- 94 Edward A. Smith, *Effects Based Operations: Applying Network Centric Warfare in Peace, Crisis and War*, US DoD Command and Control Research Program, 2002, p. xiv.
- 95 For a discussion of the logic of cascading effects, see *ibid.*, pp. 302–318.
- 96 Callum Brown, 'Causes and Effects', *AIR FORCE*, Vol. 47, No. 5, 7 April 2005, p. 21.
- 97 Department of Defence, *Australia's National Security: A Defence Update 2003*, p. 9.
- 98 Even the 2000 Defence White Paper notes that 'in general, the capabilities we develop in the ADF for defending Australia provide forces appropriate for these [counter-terrorism] tasks'. Department of Defence, *Defence 2000: Our Future Defence Force*, p. 49.
- 99 Stephens, A Threat-Based Reassessment of Western Air Power, p. 19.
- 100 Interview conducted by author with John Harvey, Director General of New

- Air Combat Capabilities, Department of Defence, Canberra, 12 April 2005.<sup>101</sup> Dibb, *The War on Terror and Air Combat Power: A Word of Warning for Defence Planners*, p. 4.
- 102 Dibb, 'A New Defence Policy for a New Strategic Era?', p. 67.
- 103 Senator Hill recently said that 'we await the arrival of the Joint Strike Fighter'. Clearly, this is a positive sign for proponents of the JSF deal. Senator Robert Hill, opening address to Air Force Conference, Melbourne, 14 March 2005.
- 104 Department of Defence, *Defence Capability Plan 2004–2014*, p. 45.
- 105 Interview conducted by author with John Harvey, 12 April 2005.
- 106 Ely Shkedy cited in Christian Lowe and Barbara Opall-Rome, 'Israel Air Force Seeks Expanded Anti-Terror Role', *Defense News*, Vol. 20, No. 13, 28 March 2005, p. 14.
- 107 Interview conducted by author with John Harvey, 12 April 2005.
- 108 Ochmanek, *Military Operations Against Terrorist Groups Abroad*, p. 26.
- 109 Department of Defence, *Defence Capability Plan 2004–2014*, p. 45.
- 110 Department of Defence, *Air 5402: Air to Air Refueling Capability*, <http://www.defence.gov.au/dmo/asd/air5402/air5402.cfm>, accessed 20 April 2005.
- 111 Alan Thompson, *Australia's Strategic Defence Policy: A Drift towards Neo-Forward Defence*, Working Paper No. 29, Australian Defence Studies Centre, Canberra, November 1994, p. 2.
- 112 See for example: Borgu, *Structuring the ADF for Australia's New Strategic Environment*, p. 8, or Canberra Bureau Report, 'Tsunami Highlights Deficiencies in Military Lift', *Australian Defence Business Review*, Vol. 24, Nos 1/2, February 2005, p. 8.
- 113 Department of Defence, *Defence 2000: Our Future Defence Force*, pp. 84–85.