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**A HANDMAIDEN'S TALE  
AN ALTERNATIVE VIEW OF LOGISTIC  
LESSONS LEARNED FROM INTERFET**



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## A Handmaiden's Tale

### An Alternative View of Logistic Lessons Learned from INTERFET

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While some Australian defence analysts are already attempting to wave away the Australian Defence Force's participation in INTERFET as an aberration, a survey of the logistics lessons learned suggest that the logistic framework of the Australian Defence Force was fully exercised in the provision of logistic support for East Timor. The weaknesses exposed in the current logistics system in the support of INTERFET are consequently worthy of further exploration – whether or not one agrees that the nature of the Timor deployment is indicative of Australia's future contribution to the security of the region.

This paper examines the critical contribution logistics makes to coalition operations and raises some strategic logistic issues arising from the Timor experience that require further consideration by the Australian Defence Organization. The proposition that modern, integrated logistic services represent a military edge and a valuable strategic capability worthy of concentrated attention in its own right is offered as an alternative to current practice which invariably casts logistics as 'an enabler': a handmaiden to the politically appealing warfighting technology that dominates capability considerations in the Australian Defence Organisation.

[This paper was completed while the author was the Chief of Army Visiting Fellow at the Australian Defence Studies Centre for 2000.]



## INTRODUCTION

The Commander of the International Force East Timor (INTERFET) officially handed over command to the Commander of the United Nations Transitional Administration East Timor (UNTAET) on 28 February 2000. Amid the media coverage of the handover ceremonies and the accompanying welcome home parades, one could be forgiven for assuming that the Australian Defence Force's (ADF) exit strategy in Timor had been fully realised, and that all aspects of the transfer to United Nations (UN) authority, arising from Australia's coalition leadership, had been finalised. In reality, a cadre of Australian logistics troops and logistic staff officers remained in East Timor until the UN could stand up comprehensive logistic support arrangements for UNTAET. This logistic handover was not completed until 1 July 2000.

This paper will discuss issues arising from Australian coalition operations in East Timor offering observations on areas that have not been reflected in the logistic lessons published or currently under discussion in Defence.<sup>1</sup> The paper will generally concentrate on aspects of land logistics.<sup>2</sup> The decision to concentrate on a single environment has been influenced by the relative complexity of coalition operations in a land environment where ad hoc partnerings are increasingly common and the opportunities for combined exercises are generally rare. The decision to narrow the focus of the analysis on the logistic arrangements is also premeditated. While some Australian defence analysts are already attempting to wave away the ADF's experience in INTERFET as an aberration, a survey of the logistics lessons learned suggest that the ADF's logistic framework was fully exercised in the provision of logistic support for East Timor. The weaknesses exposed in the current logistics system in the support of INTERFET are consequently worthy of further exploration – whether or not one agrees that the nature of the Timor deployment is indicative of Australia's future contribution to the security of the region.

This paper will examine the critical contribution logistics makes to coalition operations and raise some strategic logistic issues arising from the Timor experience that require further consideration by the Australian Defence Organization (ADO). The proposition that modern, integrated logistic services represent a military edge and a valuable strategic

capability worthy of concentrated attention in its own right is offered as an alternative to current practice which invariably casts logistics as 'an enabler': a handmaiden to the politically appealing warfighting technology that dominates capability considerations in the ADO.

## LOGISTICS IN COALITION OPERATIONS: AN OVERVIEW

In his 1985 doctoral thesis on coalition operations in Korea, Jeffrey Grey identified logistics as a key element in the success of coalition operations.<sup>3</sup> The coalition architecture of the Korean campaign can generally be characterised as a multinational coalition where the requirement for international representation outweighed military practicalities in the selection of coalition members. Patrick Walsh argues in his normative assessment of coalition architectures, that unresolved tensions between the political and military requirements in the Korean campaign produced a gap between political and military requirements of the operation and that gap contributed to the significant losses sustained by national contingents which arrived ill-prepared for war in the Korean theatre.<sup>4</sup> According to Walsh, the lack of synergy between the warfighting capabilities of many of the coalition members encouraged Macarthur to use US units for much of the heavy fighting in Korea.<sup>5</sup>

On a scale of coalition architecture that places autonomous or unilateral action at one end and integrated multinational operations at the other, Walsh concludes that Korea was basically an autonomous action by the US that was justified on the world stage by the presence of other nations. Many of the coalition armies barely contributed to the military action underway. Nevertheless, the coalition held together for the duration of the conflict. Walsh argues that the willingness of the US to outfit and sustain those contingents which arrived poorly equipped for the fighting, was a principal contributor to the stability of a coalition which, for the first time, saw a large number of non-technical armies alongside the US forces on what was largely a technically-oriented battlefield.<sup>6</sup>

The Gulf War was also characterised by a requirement for international endorsement of a US-led coalition of 'many flags'. But unlike Korea, the US was able to draw on the experience of forty years of highly politicised coalition maintenance in the North Atlantic

Treaty Organization (NATO), as well as the unexpected luxury of time. Each contributor could be diligently placed on the ground so as to balance political sensitivities against the military requirements to produce a 'fighting coalition'. Although the Gulf War coalition was constructed on the premise that national contingents would provide their own logistic support, the US underwrote much of the military logistic effort for many of the coalition members.<sup>7</sup> In the end, the relatively small number of allied casualties in Operation Desert Storm forestalled a test directly comparable to Korea in either the military effectiveness of the multinational coalition, or the logistic framework established to support it. But the weight of opinion in the lessons published after the Gulf War comes down heavily in support of the proposition that the Desert Storm coalition worked well, because one nation – the US – was prepared to take the lead in the provision of logistic support.<sup>8</sup> For Walsh, the Gulf War represented a better-integrated coalition operation than Korea. However, like Korea, the US decision to underwrite the coalition logistics effort can again be considered a major contributor to coalition stability.<sup>9</sup> These two operations, analysed in some detail by Walsh, can be contrasted with a number of far less successful coalitions, many of which have been attempted under UN mandates. Two particular failed operations are of interest with respect to East Timor. The first example, the force raised for the United Nations Operation in Somalia (UNOSOM II), is significant because the military were called to operate in a failed state where the country's infrastructure had been destroyed. The second example, the Organisation of African Unity Force (OAU) attempt at peace enforcement in Chad, provides an example of a regional coalition operation, led by a nation other than the US.

UNOSOM II has become something of a benchmark for failed UN multinational operations. As a measure of US commitment, 'crossing the Mogadishu line' has become entrenched in the US (and UN) political lexicon.<sup>10</sup> The political profile and significant command and control issues associated with the failure of UNOSOM II have obscured a number of important lessons in other areas: logistics lessons among them. Nevertheless, evidence of the logistic contribution to coalition stability is still discernible. When UN forces deployed to Somalia, any existing infrastructure had been almost completely destroyed by warring factions prior to the arrival of international forces. Significant US logistic support was required to allow humanitarian activities to proceed. Roger Palin has argued that the

subsequent unilateral withdrawal of the US contingent triggered the immediate collapse of the multinational force. Up to that point this force had included 'first world' troop contributors such as France, Germany, Belgium and Sweden, all of whom were sheltering under the US logistics umbrella.<sup>11</sup>

In the less well-publicised case of the OAU, the agreement to commit to an African-led operation in Chad was contingent from the outset on the provision of financial and logistic support from the West. Substantial military and contracted logistic support was provided to each of the contributing African nations by the US, UK and France.<sup>12</sup> Nevertheless the inability of Nigeria, in its capacity as lead nation, to coordinate this assistance and create a workable command and control structure (including a workable logistic command and control structure) for the armies involved, has been identified as contributor to the collapse of the OAU coalition and the failure of the mission.<sup>13</sup>

The attention given to logistics in Walsh's analysis of the coalition architecture of the two successful operations (Korea and the Gulf) is important in that it goes some way to balancing the score sheet for logisticians whose contributions are generally more meticulously recorded in failure than in success. The amount of evidence produced, particularly with respect to failed UN operations, that can be attributed to logistic failures has led Kofi Annan to characterise logistics as: 'the glue which binds fighting forces together and makes them effective – or not'.<sup>14</sup> This brief survey of the role of logistics in coalition operations is intended not to draw attention to the contribution that logistics plays in support of military operations, although this is clearly a key issue, but to emphasise the strategic significance of logistics in ensuring the *stability* of a coalition. Viewed in this light logistics should be considered a significant component of coalition construction and maintenance. Additionally, it can be argued that logistics can only become more important to coalition operations as the technological gap between the US and other armies widens. In a recent assessment of problems of coalition operations in Europe, the US Army War College singled out logistic support issues as a key constituent in determining the strategic direction of a coalition operation. Logistics was also considered second only to the maintenance of a common goal as a determinant of coalition success.<sup>15</sup>

## COALITION LOGISTICS AND INTERFET

The INTERFET coalition shares a number of features with the examples of successful US-led coalitions discussed briefly in the previous paragraphs. As in Korea and the Gulf, the coalition was largely a political creation. Recent US reports have suggested that coalition partners should be selected in accordance with the capabilities they can provide in support of a concept of operations outlined by the designated Commander of the

mission.<sup>16</sup> But this approach to coalition building presumes one has the time (and the diplomatic clout) to pick over the capabilities of potential contributing nations and select what is required from a full suite of military capabilities. In fact this is rarely the case when time is an issue, and it was certainly not the case in the construction of the INTERFET coalition. The political sensitivities of Australia's position in relation to Indonesia demanded the widest possible military representation in the construction of the coalition. Complementary military capabilities and issues of technical symmetry were not core issues in the selection of contributors for INTERFET.<sup>17</sup>

The prevailing logistic concept governing INTERFET was that logistics would remain a national responsibility, with each troop contributor accepting responsibility for the deployment and support of its national element. In reality the more usual model of coalition logistic support prevailed in East Timor. Australia, as the lead nation, underwrote much of the logistic effort in East Timor in a scenario that has more in common with the autonomous lead nation model used in Korea, (and arguably the Gulf), than any other model of coalition architecture.<sup>18</sup> Australia as lead nation also undertook to supply from her own resources those capabilities not covered in the promulgated 'shopping list' of capabilities for INTERFET. Not surprisingly, many of these gaps were in the combat support and combat service support areas, where the ADF deployed force-level logistic components additional to those integral to the Australian formation deployed.<sup>19</sup>

As in the Gulf coalition, the Commander of INTERFET used geography to work around the logistic pitfalls inherent in the coalition's make up. Major General Cosgrove disposed the national contingents in such a way that those armies deployed to be self-sustaining

and sharing relatively common equipment, doctrine and operating procedures were grouped together along the border with West Timor. Commentators on INTERFET have been quick to emphasise the impact of the specific national interests of the troop contributors in the allocation of the various Areas of Operation (AO) in support of INTERFET. However, they have been significantly less attentive to the practical military aspects of the pattern of deployment where logistics were an important consideration. In interviews with historian Alan Ryan in East Timor, the Commander INTERFET established that issues involving functional interoperability and logistic support played a key role in the siting of troop contributors.<sup>20</sup>

While this geographic approach worked well for INTERFET the risks attendant on this concept of operation would have been magnified if the East Timorese militia had mounted any serious opposition to INTERFET. As it turned out, even though the force was deployed under Chapter Seven of the UN charter with a mandate to 'use all necessary means to restore law and order in the territory',<sup>21</sup> the situation stabilised once Australian troops were on the ground, and the logistic system was not tested by a tempo of operations that called for high levels of ammunition usage or other combat supplies.

One of the first logistic lessons to be drawn from the ADF's experience with INTERFET should be that the concept of 'logistics as a national responsibility' in respect of coalition operations has strictly limited applicability. In reality a great many (probably the majority) of armies cannot support themselves logistically outside their national boundaries<sup>22</sup> and those few who still have even a limited ability to project themselves are valuable coalition members indeed. The logistic arrangements for INTERFET reinforce the primary lesson of earlier deployments; namely that the lead nation in a coalition should anticipate that it will be expected to provide for less prepared contingents. This support will be required either directly through the provision of consumables such as fuel, rations and water, or indirectly as a result of the adoption by many Armies of the 'dufflebag and checkbook' approach to military logistics championed by Gus Pagonis after the Gulf War.<sup>23</sup>

This lesson takes into account the numerous but unsuccessful attempts by both the US and the UN to

insist that multinational contingents come well prepared for the mission, duties and theatre locations. Within the short time frame available to pull the INTERFET coalition together, the ADF made a number of attempts to ensure potential INTERFET contributors were prepared through briefings delivered to Defence Attaches and surveys of the logistic requirements of the contingents.<sup>24</sup> But in the absence of any independent capacity for detailed assessment of the logistic capability of contributing nations – some from outside traditional ‘alliance’ relationships with no standing logistic arrangements in place – the ADF was always at risk of being landed with a significant logistic bill in support of INTERFET.

As other lead nations had done before us, Australia was required to bring many of the INTERFET coalition members up to a point where they were materially prepared to operate in East Timor at the same time as meeting the increased preparedness requirements of the ADF. This placed considerable strains on both the support area and land logistic systems that have been progressively reduced in accordance with a policy approach that characterises the ‘logistic tail’ as an overhead to be reduced rather than an asset that distinguishes those armies that can respond quickly and operate independently in a range of scenarios from those that cannot.<sup>25</sup> The ability to coordinate offshore military logistic support for the ADF as well as provide for the other contingents in the coalition demonstrated a significant (if undervalued) capability in the ADF. Australia’s ability to provide a range of military logistic support was important to the success in East Timor and historical lessons suggest that the INTERFET coalition could not have been established or maintained unless the ADF was capable of accepting this role.

### **PLANNING PRIORITIES POST INTERFET**

INTERFET has produced a string of commentary sifting for lessons either newly learned or relearned from the deployment. Clearly, one of the lessons affirmed by INTERFET was Australia’s preference for coalition activities in the service of our national interest. The Australian Army has always fought as part of a coalition. Australia’s military history is characterised by couplings with other nations and successive White Papers have shared the underlying tenet that Australia could not be expected to act unilaterally in the exercise

of military power. Nevertheless, the ADF effectively went into East Timor without the benefit of a military doctrine explaining how coalition operations would be performed. There was no apparent template for operations in concert with regional nations despite decades worth of regional engagement. Nor had there been any consideration of scenarios that might call for Australian leadership of a regional coalition despite the recent experience in Bougainville.<sup>26</sup> At the same time, faced with thoroughly documented examples of multinational missions where contributing nations turn up poorly equipped to conduct operations, the ADF proposed a ‘text book’ concept of logistic support for INTERFET that relied on troop contributing nations being largely self-sustaining. The explanation for this apparent lack of development lies in a concept of coalition operations that has remained firmly focused on operations with great powers and traditional allies typified by our relationship with the US and the other nations of the American, British, Canadian and Australian (ABCA) group.<sup>27</sup>

Nevertheless, work is proceeding on the basis of the lessons learned thus far. Some elements of coalition warfare are currently under consideration with the ADF showing an increased interest in the development of an indigenous doctrine for coalition operations. Additionally there are exercises proposed within the current bilateral framework that will include leadership of a regional coalition in their scenarios. However here is little indication of a commensurate degree of interest in the area of coalition logistics despite a growing body of international opinion that coalition success hinges on the application of high quality logistic support.

Public comments by the Secretary of the Department of Defence have confirmed that weaknesses were revealed in the ADF’s logistic capability by the Timor deployment but these weaknesses have not been elaborated. The ADO has generally confined discussion of logistic lessons to broad comments on the requirement for better interface with the national infrastructure, allusions to sustainment costs and issues affecting internal coordination and control. Notwithstanding the requirement for work in all of these areas, the most important logistic lesson to be drawn from INTERFET may well be that, unless alternative models of coalition logistic support to that of the ‘lead nation’ are actively encouraged, the logistic support provided under INTERFET may be more

indicative of Australia's contribution to any future regional coalitions than the ADF may wish to contemplate.<sup>28</sup> The potential implications of this lesson for the development of indigenous logistic capability are only confirmed by reference to evolving US attitudes to regional security and the potential impact of those attitudes on Australia's traditional reliance on US logistic support in any coalition operation.

### IMPACT OF US TRENDS ON AUSTRALIAN LOGISTIC CONSIDERATIONS

One significant side effect of the public interest generated by INTERFET was rising criticism in the Australian press of the level of US support for Australia during INTERFET. Indeed, the US Ambassador to Australia took the unusual step of publicly protesting – in editorials of national newspapers and in public speaking engagements – accusations that the US did not do enough in East Timor.<sup>29</sup> The Ambassador is correct in suggesting commentators in the Australian press have probably underestimated the importance of the various US contributions to the operation in East Timor. Ironically, this failure is most likely attributable to the fact that US contributions on the ground in Timor were characterised largely by 'tail' rather than 'teeth' capabilities. Nevertheless, recent developments suggest that the US is developing a position in relation to regional engagement and coalition operations in a way that has both direct and indirect implications for traditional Australian approaches to logistic support.

Central to the developing US position is the discrimination applied to the identification of American interests in documents such as the *National Security Strategy for the New Century*.<sup>30</sup> The document separates those issues that are considered of vital interest to the survival of the US from those considered 'important to national well being' or 'humanitarian' in nature. The strategy indicates that the US response will be determined in each case on the category of US interest a particular crisis engages. In this context it is significant that the *National Security Strategy for the New Century* characterised the Timor crisis as important (but not vital) to US interests. Moreover, the paper identified the Timor crisis as one that required only a 'relatively small' commitment from the US military. An interesting insight into the US Presidential response to the crisis in East Timor is provided by

journalist William Shawcross who travelled with Kofi Annan in the course of the preparation of his latest book. Shawcross records:

Annan told President Clinton that the Australian [Prime Minister] wanted the US to participate in an international force. Clinton worried about the reaction in Congress and feared that people would say that East Timor was a long way away and that the United States could not be the world's policeman... Clinton [subsequently] promised to *try* to give material support to the [East Timor] force.<sup>31</sup>

The difference in the level of military response deemed appropriate by the US and Australian governments on the outbreak of the Timor crisis, combined with the ever present potential for unilateral US withdrawal under domestic pressure as demonstrated by Somalia, suggests it may no longer be acceptable for Australia to continue to gamble on the availability of comprehensive logistic support from the US for every situation where Australia's military interests may be engaged. This is particularly the case in an environment where emergencies in our region, evidenced by Timor and more recently by crises in Fiji and the Solomon Islands, are more likely to fall into areas categorised as important or humanitarian rather than *vital* by the US.

If the ADF were to consider according some priority to the development of a higher level of logistic independence a number of options in pursuit of regional interest and engagement could be opened up. Australia has, in the past, made contributions in the way of logistic and technical staff to UN missions in the region. Regional contributions have also been made in circumstances where humanitarian assistance has been required. Timor is only the latest and the most extensive of these contributions. J.N Mak has argued that in spite of recent purchases of conventional defence technology, many regional armies have retained an approach to force structure built on a legacy of counterinsurgency operations. According to Mak these numerically large regional armies lack the elements of military logistic support currently available to the Australian Army, an army with a history of fighting in both conventional and counterinsurgency scenarios.<sup>32</sup>

Mak's analysis is supported by a survey of the contributions to the UN by our regional neighbours.

While the nations in our region are contributing to multinational forces under the auspices of the UN, their commitments are characterised by individual observers or arms contingents that suggest a force structure short on logistic assets.<sup>33</sup> Seen in this light, Australian logistic capabilities represent a potential complementary capability that the ADF can offer the region. Indeed, in circumstances where the deployment of combat troops might be considered inappropriate in a regional setting, the deployment of logistic units allows a useful and less 'threatening' alternative contribution to a regional coalition.

The issue here is not one of maintaining or developing military logistic capabilities for their own sake. The logistic requirements of the ADF like those of any defence force should be shaped by the particular requirements of our environment as much as by issues of doctrine and readiness. By any reckoning, the environment in which the ADF – in particular the Australian Army – is required to operate and train is unique in the region. It is characterised by vast distances, harsh conditions and rudimentary infrastructure. The requirement to operate in this sort of environment provides justification for the maintenance of military logistic capabilities that may not be required by many of our neighbours.

The experience of Timor suggests Australia should seek to preserve the option for a military response based on partnerships with states smaller, and less logistically capable than the US. However, if options for alternative military partnerings are to remain open, the ADO needs to follow up public admissions of the strains imposed on the current logistic framework in support of what was (in military terms) a small, low tempo, peace-enforcement operation. There needs to be a strong commitment of resources to upgrade current logistic capabilities, and a reassessment of the priority accorded to logistics in the force structuring debate.

The first section of this paper has highlighted the contribution that logistics, taken in its broadest sense, makes to the successful pursuit of Australian interests at the strategic level. In particular, it has highlighted the importance of logistics in the conduct of coalition operations, which represent Australia's 'preferred approach' to warfighting. I have argued that the Timor deployment demonstrated the value of a well-developed logistic capability and suggested a number of external factors that should be taken into account when considering indigenous logistics concepts. Most

importantly, I have suggested that the ADO has missed some important factors in its analysis of logistic lessons learned to date that, if left unattended, could affect the priority accorded to logistic issues in any remediation being undertaken post-INTERFET. The following section of the paper will suggest some reasons why the Defence organisation may respond unsatisfactorily to the logistic lessons of Timor. Principal among these reasons is the current approach to capability within the ADO and the absence of a cogent logistic doctrine at the strategic level to inform the discussion.

### LOGISTICS AND CURRENT APPROACHES TO CAPABILITY

In the opening chapter of *Military Logistics: A Primer on Operation, Strategic and Support Level Logistics*, Michael Coles discusses the impact of culture on the formulation of an organisation's strategies, objectives and targets from a logistic perspective.<sup>34</sup> Coles stresses that 'a strong belief in the value of preparedness may significantly slant an organization's conduct and its formulation of objectives, targets and strategies toward preparedness issues'.<sup>35</sup> If this is accepted, then it could also be argued that a strong belief in the value of equipment (particularly as an expression of military capability) might significantly slant an organisation towards a preoccupation with technology and materiel.<sup>36</sup> The ADO is such an organisation.

For evidence of the ADO's equipment-centric approach one needs look no further than public statements by senior Defence bureaucrats. In a well-publicised address to the Canberra Press Club, the Secretary of Defence, Mr. Alan Hawke spoke at length on some of the budgetary pressures affecting the Department. Central to this concern was the issue of block obsolescence of a range of military equipment.<sup>37</sup> More recently, in an address to the Royal United Services Institute (RUSI), Dr Hugh White identified five broad capabilities requiring government decision in the context of the developing White Paper. Four of these capabilities were addressed largely in terms of equipment types.<sup>38</sup> So prevalent is the approach that journalists and, to a lesser extent, academics wishing to engage in the defence debate also adopt an equipment-centric approach.<sup>39</sup> One has only to look at the commentary invoked by the release of the 2000 Defence Discussion Paper to witness the wish lists of equipment required, supplanting discussion of whole

capabilities. Although many will argue that this represents a type of defence 'shorthand', it has the effect of grossly simplifying the discussion and conjures up the old prohibitions against 'sowing an act to reap a habit'.<sup>40</sup>

The organisational influences that have nurtured this relatively narrow view of capability are easy to understand. Two of the three services are highly technologically and equipment-dependent. Additionally, the expense involved in the purchase of major pieces of capital equipment tends to dominate the minds of politicians, bureaucrats and military professionals in a small, relatively cash-strapped military that has always struggled over choices of new or expensive technologies. The steady erosion of political and public confidence in the management of equipment projects within the ADO engendered by the Collins debate has served only to sharpen the focus on the equipment issue, with the end result that the materiel aspects of the logistic support function receive priority within the ADO.<sup>41</sup> The recently announced reorganisation of the functions of the Defence Acquisition Organisation (DAO) and Support Command – Australia (SPT COMD–A) is, at least partly, a manifestation of this preoccupation.

But neither the expense involved in the purchases, nor the political pressure to squeeze more savings from the logistic tail<sup>42</sup> really explains why the ADO allows the force structuring debate to be constrained by such a narrow and largely program-driven view of capability. In an organisation that beats a tattoo of 'commercial best practice', the ADO has been slow to internalise the axiom that capital equipment constitutes a baseline. In capability terms it is a start, rather than an end point. In modern management theory it is the envelope of services that surround the equipment that provides a 'competitive advantage' in business and offers opportunities for a potential capability edge in the military. One of the drivers of this sort of differentiation is logistics.<sup>43</sup> While the discourse on logistics in the Defence environment invariably acknowledges that poor quality logistics can 'lose the war', the reverse – that high quality logistics can 'win the war' – is rarely articulated. Nevertheless, it is in the development of a modern integrated logistic *system* that the ADF will find many of the answers to the agility it seeks.

Coles' observation implies most organisations will be affected by a prevailing culture and the ADO is not alone in allowing a particular world view to dominate

its planning considerations. Many US commentators have complained of similar blind spots in their own defence organisation and James Winnefeld has been particularly critical of the tendency of US military planners to elevate the means available for warfighting above the ways in which wars are fought in discussion on capability.<sup>44</sup> There may be some lessons for the ADO in Winnefeld's observations. So dominant is the equipment culture in ADO capability considerations that demands arising from the particular *way* in which defence forces fight receives almost no analysis at all.<sup>45</sup>

This oversight is particularly important in consideration of land logistic capabilities. A large proportion of the land logistic effort involves the delivery of services associated with provisioning, distribution and maintenance. The amount of effort involved in this activity is often only demonstrated in the *way* an army actually operates when deployed. It is an activity rarely exercised in peacetime.<sup>46</sup> If no method is available to articulate land logistic requirements systemically, in a manner that demonstrates Army's *way* of warfighting, it should not be a surprise that land logistic requirements receive cursory treatment in equipment-dominated capability fora.<sup>47</sup> The ADO's lack of attention to the *way* in which it fights may go some way to explaining why the organisation did not appreciate how depleted its logistic capability had become until these realities were demonstrated in East Timor. The traditional method by which a *way* of warfighting is articulated in the military is through the development and promulgation of doctrine.<sup>48</sup>

## DOCTRINE AND LOGISTIC CAPABILITIES

By any method of measurement one might choose to apply, the ADF's record with respect to the development of logistic doctrine has been poor. The apparent lack of interest in the development of an indigenous doctrine for coalition logistic operations has already been mentioned in the first part of this paper, but the shortfall extends far beyond this. Michael Evans has recorded the gradual erosion of logistics as a significant element in the various iterations of Army's fundamental doctrines of land warfare. Evans concludes that some twenty-five years of doctrine, including logistic doctrine, requires revision to meet new strategic conditions.<sup>49</sup> Recognition of the absence of a mature ADF doctrine addressing logistics at the strategic level has led Support Command - Australia to issue a framework for internal use focusing on material logistics in a joint environment.<sup>50</sup>

In an environment where the development of logistic doctrine attracts so little priority there is a risk that the reorganisation of individual components of the logistic continuum post-INTERFET will proceed in a vacuum: unaligned with any real strategic vision. Two examples will serve to illustrate the potential impact of isolated decisions on logistic capabilities. The first example will consider the impact of Army's position on force structuring for conventional warfare espoused in *Land Warfare Doctrine 1: The Fundamentals of Land Warfare* (LWD 1).<sup>51</sup> The second example looks at the evolving ADF policy on the use of contractors in an area of operation.<sup>52</sup>

The Australian Army's keystone doctrinal document, LWD1, is based on the principle that force structuring in the land environment will be shaped by conventional warfighting requirements. This decision has significant ramifications for the way logistics is approached within the land army. As a general rule, a conventional approach will see logistic units and logistic support considered largely in relation to the combat unit or combat formation it is required to support. In these circumstances, both the preparedness and resourcing of the logistic elements are also largely determined by reference to the priority accorded the combat organisation. Thus logistic units in support of a high readiness brigade would generally attract more resources than those attached to a brigade with lower readiness. Additionally, in a conventional warfighting scenario the level of logistic support available is proportional and relates to the size of the total force element group. A battalion group in a conventional scenario would not normally attract the same *range* of logistic services as a brigade or division. Operations other than war (OOTW), whether conducted independently or as part of a coalition, produce a different dynamic.

In the first instance it is not unusual for support elements to deploy without their conventional 'brothers in arms' in OOTW coalition scenarios. The ADF has made a number of contributions in this vein to recent UN missions.<sup>53</sup> Analyses of UN coalition operations invariably place a high value on the contribution of these combat support and combat service support elements relative to the more readily available (and politically appealing) combat contributions.<sup>54</sup> In circumstances where governments might wish to consider contributing logistic, rather than combat elements to UN missions, preparedness and resourcing

levels derived from conventional arms/service relationships may not be sufficient to allow this option to be exercised. This would most certainly be the case in the ADF if anything other than a very short-term commitment were contemplated.

In OOTW where arms and services deploy together, conventional force structure relationships provide no real yardstick for the assessment of the range and depth of logistic support required. While the ADF deployed only a battalion group to Somalia, the significant logistic challenge of supporting an operation an ocean away, in a theatre where the host country infrastructure had been destroyed, justified the dispatch of a much more robust logistic component than actually deployed.<sup>55</sup> Logisticians at the time suggested that a larger proportion of the brigade and formation level support be deployed in support of the 1RAR group.<sup>56</sup> The ADF does have the option to mix and match across traditional 'lines of support' in circumstances where small numbers of troops are deployed at short notice. However, deployment for short periods to a environment where the infrastructure is poor<sup>57</sup> means that this 'flexibility' quickly evaporates with only a modest increase in the size of the combat force deployed (as the logistic difficulties incumbent on supporting an infantry brigade in Timor exposed).

A conventional approach infers a lead-time for the mobilisation of logistic specialties that are usually assigned a lesser priority in the traditional 'order of march'. But as Jennifer Taw has pointed out, the demands of OOTW significantly changes the order in which logistic units are called out. Analysis of the (now extensive) US experience in logistically supporting OOTW, led Taw to conclude that the conventional 'order of march' did not always apply to OOTW and she has recommended a reassessment of conventional attitudes to both preparedness and regular/reserve ratios for Armies faced with OOTW.<sup>58</sup> Similar issues have been raised with reference to elements in the Logistic Support Force in the course of the INTERFET deployment.<sup>59</sup> Taw goes on to observe that in the US experience, 'specialist' capabilities, particularly those supporting more than one Service, do not always make the single service priority lists in defence forces focused on conventional operations. This proved to be the case even though these shared capabilities were often key capabilities for the conduct of OOTW.<sup>60</sup> Again, this observation has been validated by lessons learned from INTERFET, specifically with reference to the joint

movement and 'logistics over the shore' (LOTS) capabilities.

The point of this example is not to mount a case for force structuring based on OOTW, but rather to demonstrate that single service doctrine can be value laden. The 'dynamics' of the conventional warfighting doctrine that Army has adopted, has implications for the resourcing and readiness of logistic capabilities. These relationships may not be immediately apparent to the rest of the ADO, but the impacts would need to be considered in any assessment of higher logistic doctrine that looked to draw on capabilities that are largely provided from within the land force.

The issue of commercialisation and the related issue of contractors in the area of operations has been addressed in policy but does not appear to have been formally addressed in relation to logistic doctrine or logistic force structure at this stage.<sup>61</sup> Yet, in the aftermath of the INTERFET deployment, no single issue has generated as much heat as the issue of commercialisation. Logistic staff are openly questioning the extent to which support to INTERFET would have been possible if the program of personnel downsizing and commercialisation of logistic capabilities had moved somewhat faster than it has. Lessons learned at the tactical and operational level have suggested the rump of the ADF's deployable logistic capability had difficulty meeting the Army's requirements in an environment where the operational situation initially precluded the deployment of other than military logistic assets.

The logistic requirements for INTERFET were satisfied by stripping other parts of the ADF to meet the deficiencies: a short-term option that was available because the tempo of operation permitted the situation to be managed in this way.<sup>62</sup> The pressures of logistic sustainment were undoubtedly a key factor in the negotiation of a hand-over date between INTERFET and UNTEAT. These pressures were amply demonstrated by the deployment of additional Australian logisticians charged with 'hurrying up' the UN bureaucracy and facilitating the earliest possible installation of UNTEAT's logistic support. Nevertheless, the issue of how to maintain some of the Army's 'one off' logistic capabilities over the length of the East Timor commitment remains largely unresolved at this stage.<sup>63</sup>

Advocates of commercialisation have been quick to respond that industry was 'not given a chance' to demonstrate what it could do in support of INTERFET. Although these objections appear problematic in the face of historical evidence and in light of the speed with which the East Timor crisis developed,<sup>64</sup> the fact remains that the policy and doctrinal groundwork in support of commercialisation in the ADF has not progressed with anywhere near the priority accorded to the actual outsourcing and downsizing of uniformed logistic services. It should be of some concern to strategic planners within the ADO that most of the activity on the issue of commercialisation appears to be occurring in the realm of policy rather than doctrine, given the relationship between doctrine and the ADF way of warfighting I raised earlier. While it is undoubtedly true that contractors can perform many of the individual functions conducted by uniformed logisticians at the tactical, operational and strategic level, a group of contractors does not constitute an integrated logistic capability any more than a pile of building materials constitutes a house.

Most importantly the ADO needs to internalise the fact that that decisions on commercialisation of logistic capabilities impact on military operations in very direct way. In his book *Deliver us From Evil*, Shawcross discusses the wisdom of a US humanitarian strategy in Somalia that saw the majority of the food stations established in the capital Mogadishu. Mogadishu became a magnet, drawing people out of the countryside and stimulating a population explosion that complicated the security situation in a city described by Shawcross as a 'concrete snakepit'. Professional aid workers had warned the US military of the dangers of this approach, but Shawcross alleges it was the US logisticians who insisted on the need to centralise support and control Mogadishu.<sup>65</sup> In the requirement to *seize the host nation infrastructure* one recognises the Pagonis brand of chequebook logistics influencing, in part at least, this decision by the US military.<sup>66</sup>

Clearly the ADO cannot afford to hold all of the logistic support it may require in uniform on the basis of 'just in case'. A balance must be struck. But the decision to commercialise needs to be pursued with an eye to more than the cost-cutting achievable by outsourcing individual functions. Well-considered logistic doctrine can assist in ensuring those decisions are better informed. Unfortunately, there is currently little evidence that the policy governing commercialisation

is evolving in other than a strictly functional way in response to what is in reality a highly complex transorganisational development issue for the ADO.<sup>67</sup>

In the second section of this paper, I have attempted to offer some reasons why the ADO is in danger of misreading the logistic lessons from Timor. First among these is an embedded culture that is preoccupied with the pursuit of equipment-based solutions to the point that other significant drivers of differentiation, such as those provided by high quality logistic services, are undervalued. A second major contributor to organisational 'blind spots' is likely to arise from the consistent failure of the ADO to apply a priority to the development of a strategic logistic doctrine. Doctrine is the vehicle for articulating the *way* in which defence forces fight and the development of a cogent logistic doctrine can go some way to balancing the narrow equipment-centric view that dominates capability considerations in the ADO. The discussion of the potential impact of doctrine and policy affecting the logistic continuum which has been developed independently by both Army Headquarters and National Support, serves to illustrate the dangers of the ADO being presented with a *fait accompli* that could seriously affect the military options available. The final section of this paper will examine two opportunities, outside the realms of force structuring and doctrine, for revitalising the logistics issues associated with coalition operations: interoperability<sup>68</sup> and wargaming.

## INTEROPERABILITY

In interviews conducted during the Timor deployment, the Commander INTERFET identified the importance of functional interoperability in the deployment of contingents in the INTERFET coalition.<sup>69</sup> This is not surprising, as issues of standardisation and interoperability have been raised in almost every analysis of lessons learned associated with the conduct of coalition operations.<sup>70</sup> But despite the clear relationship between interoperability and coalition operations there is little evidence of any heightened interest in the subject post-INTERFET. Part of the difficulty lies with the fact that stakeholders in the issue are spread across an number of agencies within the ADO.<sup>71</sup> Both the limited understanding of the contribution of logistics to coalition operations and the

prevailing emphasis on the US as the primary coalition partner, have undoubtedly contributed to the organisational lacuna in this area.

In July 1998, US Secretary of State Madeleine Albright emphasised that Australia should continue to pursue interoperability with the US if the ADF wished to be retained as a partner in the US alliance.<sup>72</sup> The ADO followed up this pronouncement by issuing priorities for the development of interoperability, which assign the highest priority to maximising interoperability with the US followed by interoperability with New Zealand. Consideration of interoperability with regional neighbors, 'specifically' ASEAN, has also been assigned a *high* priority.<sup>73</sup> Although the shades of gray accorded to these priorities may be more clearly elaborated in classified versions, the public version leaves an uncomfortable impression that there is very little definition applied to the ADO's current priorities for interoperability. Additionally, while accepting that interoperability can be pursued across a range of activities – operating procedures, training and doctrine as well as equipment-related issues – there appears to be little agreement, in the public documents at least, on the priorities to be accorded across these functional areas.<sup>74</sup> Interviews suggest the default position appears to be that the ADO will concentrate on interoperable processes and use US dominated fora such as the Pacific Area Senior Officers Logistic Seminar (PASOLS) as the primary medium for discussion of the subject.<sup>75</sup>

Viewed realistically, according priority to maximising interoperability with the US will leave little in the way of resources for pursuing interoperability with other potential coalition partners. Unless priorities are well defined, the ADO risks being caught between chasing expensive US capabilities and dependence on the US military allocating sufficient resources to the development of 'backward compatibility', with little redundancy for the pursuit of other options.<sup>76</sup> There is a good case for suggesting that the ADO should at the very least be applying as much effort to the development of backward compatibilities with potential regional partners, as it is currently applying to interoperability with the US and ABCA members. It is difficult to speculate on possible alternatives for the ADO as so little of this information is publicly available but alternative approaches have been suggested by academic and research literature that are worthy of further examination.

One option is, rather than focusing on broad national priorities and automatically defaulting to the easier option of interoperable processes, the ADO may like to consider identifying interoperability opportunities on a commodity basis. Both researchers from the US-based research organisation RAND, and commentators on multinational operations such as Roger Palin have suggested that basic commodities and services offer the best opportunities for interoperability and cross-servicing agreements.<sup>77</sup> This approach has the advantage of reducing interoperability – an issue that sometimes appears too big to handle – to manageable proportions in pursuit of practical outcomes. As Gustafson and Kaplan have pointed out, mundane agreements can have a disproportionate effect as evidenced by the 150 standardisation agreements (STANAGS) arising from a single agreement on fuel fittings in the NATO environment.<sup>78</sup> Of course, prioritisation along these lines ‘would require a systematic analysis of some of the principal opportunities to find out to what extent coalition logistics is an end worth struggling for’.<sup>79</sup> Unfortunately, as a general rule, the ADO does not apply such rigour to the analysis of logistic issues.

Alternatively, Gustafson and Kaplan considered the opportunities for research centred on globalisation and technical convergence giving rise to what they termed ‘incipient interoperability’.<sup>80</sup> The potential for interoperability developing along these lines was recognised in the 1994 Defence White Paper that saw interoperability with Asia developing principally through convergence in commercial, training and research areas.<sup>81</sup> This view appears to be supported by Mak’s recent analysis of priorities among South East Asian states.<sup>82</sup> Clearly, developing the concept of incipient interoperability demands an investment in environmental scanning and analysis on a far greater scale than is common in the logistic considerations of the ADO. But arguably, the investment could return dividends, not only in the identification of areas of convergence applicable to interoperability in coalition operations with regional nations, but also in terms of areas for potential interface with Australian industry and indicators for the development of logistic concepts for the twenty-first century. The potential synergies of an approach to interoperability along these lines make a convincing argument for the allocation of resources to investigate further the impact of convergence on logistics in the ADO. But at the risk of repetition, the ADO as a general rule does not apply this type of rigour to the analysis of logistic issues.

### FOCUSSED LOGISTIC WARGAME (FLOW)

Some of the opportunities offered by the development of a more analytical approach to logistics and the particular opportunities associated with the development of logistic models have been highlighted by a recent decision to approve Australian participation in US-sponsored FLOW. This joint war game, based on the US Military Strategy for 2010, was originally commissioned by the Commander of the US Joint Logistic Services in an attempt to quantify, for appropriation purposes, the level of logistic and financial resources the US military required to support their various military contingencies. The data requirements for the establishment of the game suggest the US are reopening the debate on coalition interoperability and investigating the possibility of shared stock visibility between partners in coalition operations. This has raised some understandable concerns within the Australian logistic community partly because the current state of logistic information systems makes it somewhat difficult to extract the data required, and partly because of the risk involved in revealing details of current stocking levels to the other nations involved in the game.<sup>83</sup>

But other potential impacts from participation in FLOW were also revealed during a briefing on the game from the US developers in Canberra in April 2000.<sup>84</sup> According to the US briefing team, FLOW promises a demonstration of the impact of a cut off in US supplies, shared equipment and services to alliance partners. Although RAND flagged the requirement for the US to develop this capability in respect of its NATO allies in earlier investigations into interoperability,<sup>85</sup> the commissioning of FLOW appears to provide the first opportunity to test scenarios where the US and allies were concurrently applying for the use of key US logistic assets. Interestingly, US briefings on the results of the 1999 wargame suggested that the US *does not* have the capability of unfettered operation in the full range of its own scenarios, while at the same time providing lift and logistic support to traditional alliance partners.<sup>86</sup> The 2001 war game will be the first to involve coalition aspects in the scenario and the ADF would be well advised to ensure the mechanisms for gathering and extrapolating the lessons from the war game in a way that is capable of informing the debate on the development of indigenous logistic capability, force structure, doctrine and planning (as well as ‘playing along’ with the US logistic scenario).<sup>87</sup>

## CONCLUSION

Given that financial pressures are likely to continue and Australia's continuing commitment to coalition operations, a reordering of the priorities currently accorded to logistics is required.

In the first instance, the ADO should recognise the benefits that accrue to a military that maintains a readily deployable logistic capability, and seek to modernise the capabilities that currently exist. These capabilities make Australia a valuable coalition member in a range of scenarios both within our region and without. At the same time the ADO needs to apply concentrated attention to the requirements of coalition logistics. This can be achieved in part by applying a greater priority to the development of an indigenous doctrine for coalition operations, including a detailed analysis of logistic requirements. It may be in Australia's interest to further investigate models of logistic cooperation, beyond those represented by that of the lead nation. At the very least, some consideration should be given to keeping logistic options open for partnering with countries smaller and less logistically capable than the US.

My argument is not for unrestrained development of logistic capabilities, but for the development of a cogent philosophy by which logistic capabilities are selected, structured and maintained. Much work needs to be done in the area of logistic doctrine to guide these decisions. The failure to apply the appropriate priority in this area will leave the logistic requirements of the ADF unarticulated and a potential capability edge unexploited. The absence of a developed and mature logistic doctrine leaves the ADO free to pursue its preoccupation with pieces of equipment rather than total capabilities. This equipment-centric approach, combined with the inevitable pursuit of personnel savings in the merger of Support Command – Australia and the Defence Acquisition Organisation, carries some risk that those elements of Support Command

specifically concerned with the provision of services could be greatly undervalued with significant impacts for the total logistic capability. To avoid this situation, the ADO needs to reconsider its traditional attitudes toward logistics. In the words of one senior officer, logistics needs to be considered not as 'the tail' that can be docked with impunity but rather as 'the neck' that connects the head to the body.

US developments and the lessons of Timor suggest the ADO also needs to reconsider the priority it applies to logistics in the realm of strategy. In an environment where the US is leaning toward regional solutions to regional problems – re-examining the benefits of burden sharing through interoperability and raising questions about its ability to concurrently conduct its own operations and support its traditional allies – the ADO cannot continue to cast logistics in the role of enabler for more important 'capabilities'. The inability of the ADO to support the Australian Army deployed offshore beyond a certain time limit, without guaranteed access to a larger logistic system, significantly reduces strategic flexibility. Arguably, the dependence on US logistics forces the ADO into a position where logistic issues become a significant consideration in decisions on military intervention, and exit strategies are increasingly shaped by concern for logistic sustainment issues. This has happened to the extent that this 'enabling capability' casts a shadow over the development of both political and military options.<sup>88</sup> This should be sufficient encouragement for the development of a more sophisticated approach to logistic issues within the ADO: an approach that elevates a handmaiden to an equal partner in a more inclusive approach to capability development.

It is a lack of knowledge of the principles and practice of military movement and administration – the 'logistics' of war, some people call it – which puts what we call amateur strategists wrong, not the principles of strategy themselves which can be apprehended in a very short time by any reasonable intelligence.<sup>89</sup>

## NOTES

- <sup>1</sup> In the preparation of this working paper the author had access to tactical, operational and strategic logistic lessons learned circulated in both draft and final form by defence agencies including the Army's Combined Arms Training and Development Centre (CATDC), Support Command – Australia, Australian Defence Headquarters and Headquarters INTERFET as well the benefit of interviews and briefings by various defence logistic agencies. This paper would not have been possible without the considerable cooperation of defence logistic personnel. Nevertheless any errors in the paper should be attributed to the author.
- <sup>2</sup> Logistics can be defined as 'the science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense those aspects of military operations which deal with: (a) design, development, acquisition, storage, movement, distribution, maintenance, evacuation and disposition of materiel, (b) movement, evacuation and hospitalisation of personnel, (c) acquisition or construction, maintenance operation and disposition of facilities; and acquisition and furnishing of services'. *Australian Defence Force Publication (ADFP) 101, Glossary* (Canberra: Director of Publishing Defence Centre Canberra, 1994), p. L-111.
- <sup>3</sup> Jeffrey Grey, 'British Commonwealth Forces in the Korean War: A Study of a Military Alliance Relationship', Unpubd doctoral thesis, Canberra: University of New South Wales, 1985. Coalition Operations are defined as 'operations conducted by forces of two or more nations, which may not be allies, acting together for the accomplishment of a single mission'. *Australian Defence Force Publication (ADFP) 101, Glossary* (Canberra: Director of Publishing Defence Centre Canberra, 1994), p. C-7.
- <sup>4</sup> Patrick Walsh, *Military Coalition Building: A Structural and Normative Assessment of Coalition Architecture* (Ann Arbor: UMI, 1999).
- <sup>5</sup> In discussions with Omar Bradley, Macarthur implied that 'coalition units in Korea served a symbolic operational role and fulfilled a political gesture [but] were useless from a military point of view'. Walsh, *Military Coalition Building*, p.108.
- <sup>6</sup> Ibid, pp.108–122.
- <sup>7</sup> The Gulf coalition was supported by financial contributions from trust fund contributors but much of the specialist military equipment came from the US. The US also coordinated much of the in-theatre contracting with the host nation. See William G. Pagonis with Jeffrey Cruikshank, *Moving Mountains: Lessons in Leadership and Logistics from the Gulf War* (Boston: Harvard Business School Press, 1992) and United States General Accounting Office, 'Desert Shield/Desert Storm: Logistic Buildup and Sustainment', in *Military Logistics: A Primer on Operational, Strategic and Support Level Logistics*, ed. Michael Coles (Canberra: ADSC, 1996) pp.76–78.
- <sup>8</sup> Almost all articles touching administrative aspects of coalition operations in the Gulf draw this conclusion, but for particular and detailed discussion see Wayne A Silkert, 'Alliance and Coalition Warfare', *Parameters*, 27 (1993); Bruce Watson, Bruce George, Peter Tsourias, B.L. Cyr, *International Analysis Group on the Gulf War* (London: Greenhill Books, 1991), and Thomas J. Marshall, Phillip Kaiser and Jon Kessmeire, *Problems and Solutions in Future Coalition Operations* (Carlisle: Strategic Studies Institute, US Army War College, 1997).
- <sup>9</sup> Walsh, *Military Coalition Building*, pp.108–122.
- <sup>10</sup> For a discussion of this issue see William Shawcross, *Deliver us from Evil, Warlords and Peacekeepers in a World of Endless Conflict* (London: Bloomsbury, 2000).
- <sup>11</sup> Roger.H.Palin, *Multinational Military Forces: Problems and Prospects*, Adelphi Paper 294, (Oxford: Oxford University Press, 1995), p.43.
- <sup>12</sup> The French provided financial assistance. The various armies were also provided with support from the West. UK assisted Nigeria; the US, Zaire; and France, Senegal. Nigeria was the lead nation and did end up bearing heavy costs when the OAU proved unable to support the mission. It appears logisticians were not available in sufficient numbers and did not have the skill to pull these resources together into a workable logistic framework for the operation. See Paul Meslam Demsa, *International Peacekeeping Operations: Sinai, Congo, Cyprus, Lebanon and Chad: Lessons for the UN and OAU* (Ann Arbor: UMI, 1989), pp. 185, 203–5, 190–195, 204–215.
- <sup>13</sup> Ibid, p. 203.
- <sup>14</sup> Kofi Annan quoted in Shawcross, *Deliver us from Evil*, p. 102.
- <sup>15</sup> Marshall, Kaiser, and Kessmeire, *Problems and Solutions in Future Coalition Operations*, p.3.
- <sup>16</sup> The requirement for political leaders to be open to the idea of rejecting a potential coalition partner when the military disadvantages of participation outweigh political gains has been canvassed by Marshall, Kaiser and Kessmeire, *ibid*, p.62. Arguably this approach has been practised indirectly in the Gulf

War and in operations in Bosnia where certain contributing nations have been denied the opportunity to operate their aircraft.

<sup>17</sup> For a general discussion of this issue see Alan Ryan, *From Desert Storm to East Timor: Australia, the Asia – Pacific and the New Age Coalition Operations*, Study Paper Number 302 (Canberra: Land Warfare Study Centre, 2000) p. 15. The situation with respect to the INTERFET coalition was confirmed during a Military Strategy Branch presentation to the Technical Cooperation Program Joint Systems and Analysis Group, DSTO Salisbury, 28 April 2000.

<sup>18</sup> A detailed analysis of the INTERFET coalition architecture is contained in the forthcoming Land Warfare Studies Centre Study Paper Number 305 by Alan Ryan. For discussion of broad costs see Lincoln Wright ‘Aussie Soldiers May Face Longer East Timor Stay’, *Canberra Times*, 13 May 2000. Wright costs support to other members of the coalition in the order of 10 million dollars. Discussions with logisticians and finance staff within Defence suggest this is a conservative estimate.

<sup>19</sup> Military Strategy Branch presentation to the Technical Cooperation Program Joint Systems and Analysis Group, DSTO Salisbury, 28 April 2000. A list of the Australian logistic contribution is appended to this paper.

<sup>20</sup> Interview with Major General Peter Cosgrove quoted in Alan Ryan’s presentation to the Technical Cooperation Program Joint Systems and Analysis Group, DSTO Salisbury, 28 April 2000. As a general principle the importance of interoperable systems, including logistic systems, increases as the intensity of the operation increases to the point that logistic issues prescribe commanders’ options and affect the strategic direction of a coalition operation. For a good discussion of the relationship between logistic support, interoperability and levels of war see Trevor Taylor, *Defence Technology and International Integration* (London: Francis Pinter, 1982). The issue is also covered in a general way in Marshall, Kaiser and Kessmeire, *Problems and Solutions in Future Coalition Operations*, pp. 59–64. It is fair to say that the relatively low tempo of the INTERFET operation has contributed to a general tendency to underestimate the significance of logistic issues in many of the analyses of lessons learned from INTERFET within the ADO.

<sup>21</sup> Shawcross, *Deliver us from Evil*, p. 360.

<sup>22</sup> Marshall, Kaiser and Kessmeire, *Problems and Solutions in Future Coalition Operations*, p.20.

<sup>23</sup> Pagonis projects that: ‘The Army of the future will be a projection force, projecting power into a region on a rapid basis rather than a forward fielding force.

This means in future conflicts the first job of the logistician will be to capture the host nation infrastructure’. Pagonis and Cruikshank, in *Military Logistics*, p. 145. Unfortunately, General Pagonis’s prediction was not corroborated by the subsequent US intervention in Somalia where the US found little infrastructure to capture! Somalia provided an object lesson for all defence planners in the difficulty of forecasting logistic support requirements for operations that invariably call for a tailored solution. In this particular case Pagonis’s statements also illustrate the ever-present danger of applying an old lesson to a new war.

<sup>24</sup> Military Strategy Branch presentation to the Technical Cooperation Program Joint Systems and Analysis Group, DSTO Salisbury, 28 April 2000.

<sup>25</sup> For a short summation of the arguments for revisiting the tooth to tail ratio see Les Aspin and William Dickinson, *Defense for a New Era, Lessons of the Persian Gulf War, House Armed Services Committee Report* (Washington: Brassey’s, 1992), pp.33–39. Kevin Lewis also argues persuasively against simplistic attacks on the growth of ‘overheads’. Lewis suggests that not all growth in the logistic tail in technically competent defence forces is automatically ‘a bad thing’ arguing that US capabilities in areas like strategic lift and aerial refueling actually cement US super power status. Kevin Lewis, ‘The Discipline Gap and Other Reasons for Humility and Realism in Defence Planning’, in *New Challenges in Defence Thinking: Rethinking How Much is Enough*, ed. Paul K. Davis (Santa Monica: RAND, 1994), p.127.

<sup>26</sup> The Chief of the Defence Force, Admiral Chris Barrie confirmed that a gap existed in Australia’s doctrinal thinking in this respect in an interview with Radio National on 14 December 1999. Subsequently the staff of the Deployable Joint Force Headquarters (DJFHQ) which formed the nucleus of HQ INTERFET confirmed that they had (fortuitously) been exercised in a coalition lead nation scenario as part of Exercise Rainbow Serpent 1999. LWSC presentation to the Technical Cooperation Program Joint Systems and Analysis Group, DSTO Salisbury, 28 April 2000.

<sup>27</sup> This focus was confirmed by the Chief of the Defence Force in an interview with Radio National on 14 December 1999. The major military publications dealing with logistics in a coalition scenario are the American British Canadian Australian (ABCA) checklist *Coalition Operations Handbook* (Arlington: Primary Standardization Office, 1999) and four pages in *Logistics in Support of Joint Operations*, Australian Defence Force Publication (ADFP) 20 (Canberra: Director of Publishing, Defence, 1999).

- <sup>28</sup> Roger Palin has analysed the lead nation model and a number of other possible models including regional associations, framework – nation and multinational models in his monograph. Palin, *Multinational Military Forces*, pp. 22 and 56.
- <sup>29</sup> HE Genta Hawkins Holmes, 'The Australian – American Alliance in the 21<sup>st</sup> Century: Where Do We Go From Here?' *Journal of the Royal United Services Institute*, 21 (2000), 51–54.
- <sup>30</sup> *A National Security Strategy for a New Century* (Washington: White House, 1998).
- <sup>31</sup> Shawcross, *Deliver Us From Evil*, pp. 358–9. Emphasis added.
- <sup>32</sup> J.N.Mak, 'The Security Environment in South East Asia', *Maintaining the Strategic Edge: The Defence of Australia in 2015*, Canberra Papers on Strategy and Defence No 133, ed. Desmond Ball (Canberra: SDSC, 2000), pp.99–126.
- <sup>33</sup> For an overview of regional contributions to UN operations see <http://www.un.org/> (accessed 31 March 2000).
- <sup>34</sup> Michael Coles, 'A Planning and Control System for Defence Logistics Support', *Military Logistics*, p.7.
- <sup>35</sup> Ibid, p.7. In organisational development terms this reflects the organisation's 'enacted environment'. Generally the enacted environment must accurately reflect the general and task environments of an organisation if decision making is to be effective. Thomas G.Cummings and Christopher G.Worley, *Organisational Development and Change*, Sixth Edition (Cincinnati: South West College Publishing, 1997), p. 455.
- <sup>36</sup> In this context it is interesting to note the previous Commander of Support Command – Australia and current VCDF noted in an article for *Australian Defence Magazine* that 'the ADF had significant shortfalls in knowledge capital, especially integrated logistic management ...[and] high levels of proficiency in technical functions such as engineering and maintenance'. The ADF would not be the first organisation to allow areas of relative strength to consume its interest at the expense of equally important functions where levels of proficiency were not so high. MAJGEN D. Mueller, 'Support Command Thinks Business', *Australian Defence Magazine*, 6 (1997), 26.
- <sup>37</sup> Alan Hawke, 'What's the Matter – A Due Diligence Report' presented to the National Press Club, 17 February 2000, <http://www.defence.gov.au/media/2000/sec1.html> (Downloaded 16 March 2000)
- <sup>38</sup> Dr Hugh White 'Australia's Future Defence' *Journal of the Royal United Services Institute*, 21 (Canberra: RUSI, 2000), pp. 89–93.
- <sup>39</sup> Examples are widespread. Typical is Steven Loosley's recent discussion of the White Paper 'Military Strategy Calls for Concord' *Australian*, 27 June 2000, p.13. *The Australian Defence Force Capability Fact Book* (Canberra: Department of Defence, June 2000) issued in conjunction with the Discussion Paper is a good example of the focus on platforms.
- <sup>40</sup> Sow an act, and you reap a habit. Sow a habit and you reap a character. Sow a character, and you reap a destiny ... or in the case of the ADO, a pervasive organisational culture.
- <sup>41</sup> A close look at recent public statements tends to confirm this position. A context test of the Secretary's comments to the Canberra Press Club are instructive in this respect. Although logistics is mentioned it quickly loses centre stage. 'Acquisition and logistics reform are among the Minister's highest priorities. He has sought advice on moving to a single procurement organisation. And he is determined to engineer reform of the way the Defence Acquisition Organisation conducts its business.' Hawke, 'What's the Matter', p. 4.
- <sup>42</sup> The latest reshuffle in Defence promises further reductions to overhead particularly in the merger of DAO and SPTCOMD–A see Robert Garran, 'Defence Shake-up Shrinks Military to 48,000' *Australian*, 27 June 2000, p. 2.
- <sup>43</sup> For a discussion of the importance of tailored services in industry see Joseph B. Fuller and Richard O'Connor 'Tailored Logistics: The Next Competitive Advantage' *Harvard Business Review*, May–June (1993), pp. 87–98. This is not inconsistent with the ADO's recent championship of people and the 'knowledge edge'. As economist Brian Arthur has pointed out, logistics belongs largely in the 'knowledge world'. For a discussion of Arthur's position and links to innovation in successful firms see Bob Hall and Teresa Parker, 'Unlocking the Secrets of Increasing Returns', Ernst and Young Centre for Business Innovation, [www.businessinnovation.ey.com/journal/issue4/features/organic/loader.html](http://www.businessinnovation.ey.com/journal/issue4/features/organic/loader.html) (downloaded 17 July 2000). The point was not lost on Gus Pagonis during the Gulf War: 'Logistics at its heart is people – it is not an exact science', Pagonis and Cruikshank, *Moving Mountains*, p. 201.
- <sup>44</sup> For a discussion of a similar imbalance within the US military see James. A. Winnefeld, *The Post Cold War Force Sizing Debate, Paradigms, Metaphors, and Disconnects* (Santa Monica: RAND, 1992), p.37.
- <sup>45</sup> Ibid, p.38. This oversight may also explain why the ADF's preferred way of warfighting – coalition operations also failed to attract comprehensive attention prior to mounting of INTERFET.

- <sup>46</sup> The existence of an 'exercise mentality' among Army units was a common observation of military logisticians interviewed in the course of preparations for this paper.
- <sup>47</sup> In the absence of an agreed framework, capability submissions dealing with land logistic requirements invariably default to a (sub optimal) equipment-focused approach rather than a more systemic approach.
- <sup>48</sup> Michael Evans has described modern doctrine as a triangular dialogue between past experience, operational requirement and technological feasibility that links doctrine development with an army's ability to learn, anticipate and adapt. Michael Evans, *Forward from the Past: The Development of Australian Army Doctrine 1972–Present*, Study Paper No 301, (Canberra: Land Warfare Study Centre, 1999), pp. 4 and 79.
- <sup>49</sup> Evans, *Forward from the Past*, 5–68 and 79.
- <sup>50</sup> Support Command – Australia, *Framework for Strategic and Operational Level Logistic Support of Joint Operations*, unpublished paper April 1999. According to the foreword, this document is intended to: 'promote discourse on logistic issues and fill a gap until ADF doctrine and understanding of logistics in war at the higher levels has matured' (p.1).
- <sup>51</sup> Australian Army, *Land Warfare Doctrine 1, The Fundamentals of Land Warfare* (Sydney: Doctrine Wing, Combined Arms Training and Development Centre, 1999).
- <sup>52</sup> The latest policy statement on this issue was issued by National Support Division as Defence Circular 40/99 on 2 Dec 99.
- <sup>53</sup> Most often, communications, engineering and medical personnel are deployed, but operational movement staff are also routinely deployed.
- <sup>54</sup> See Graham Cheeseman, *Army's Fundamentals of Land Warfare: A Doctrine for New Times?* (Canberra: ADSC, 2000), p.12; Palin, *Multinational Military Forces*, p.38; Jeffrey Record, *The Creeping Irrelevance of U.S. Force Planning* (Carlisle: Strategic Studies Institute, US Army War College, 1998), p.11, and Jennifer Morrison Taw, 'Planning for Military Operations Other than War: Lessons from US Army Efforts' in *Maintaining the Strategic Edge: The Defence of Australia in 2015*, Canberra Papers on Strategy and Defence No 133, ed. Desmond Ball (Canberra: SDSC, 1999), p.217.
- <sup>55</sup> The austere conditions under which Australian troops operated is well-captured in Bob Breen's book *A Little Bit of Hope*. Breen devotes a large part of the book to the discussion of the significant logistic problems associated with the deployment. The book also draws attention to the level of support provided by the US, which was generally confined to consumables with the proviso that provision of this support did not interfere with US operational priorities. Bob Breen, *A Little Bit of Hope* (Sydney: Allen and Unwin, 1992), pp. 225–282.
- <sup>56</sup> Lines of logistic support for Army can be generally summarised as 1<sup>st</sup> line (Tactical Level) integral logistic elements, 2<sup>nd</sup> line (Tactical or Formation Level) Combat Service Support Battalions, 3<sup>rd</sup> line (Operational or Force Level) Force Support Battalions, 4<sup>th</sup> line (Strategic or Base level) Integrated Logistic Units. Support Command – Australia, *Framework*, p. 2–6.
- <sup>57</sup> Although this is not always the case it is worth noting that many of the ADF's most recent overseas deployments, Cambodia, Somalia, Rwanda, Bougainville and Timor, have been in countries where infrastructure was either rudimentary or destroyed.
- <sup>58</sup> Taw, *Planning for Military Operations Other than War*, p. 218. Observations relating to the requirement for logisticians to be at readiness levels commensurate with the requirements of the combat units supported were also drawn by MAJGEN M.S.White, the Commander of the UK Force Maintenance Area in the Gulf War. See M.S.White, *Gulflogistics: Blackadders War* (London: Brassey's, 1995), p. 249.
- <sup>59</sup> The examples repeated referred to by Australian Army logisticians include the Petroleum Platoon, Terminal Squadron and the Bath and Shower Platoon!
- <sup>60</sup> Taw, *Planning for Military Operations Other than War*, p.224.
- <sup>61</sup> The latest policy document on the issue at the time of writing appears to be Defence Circular Memorandum 40/99 dated 2 December 1999. The issue is mentioned in the framework document produced by Support Command – Australia that sees contractors operating at the strategic, operational and tactical level. But there is no consideration of how the functions to be allocated to contractors are to be chosen, or how this is aligned with force structuring and doctrinal positions within the Single Services. Support Command – Australia *Framework*. p. 2.13.
- <sup>62</sup> The lack of rotation forces and 'surge capacity' is a consistent refrain in the logistic lessons learned published post-INTERFET.
- <sup>63</sup> Examples include petroleum and terminal elements whose functions cannot be entirely replicated by contractors and which are also required for

- concurrent activities such as those underway in Bougainville.
- <sup>64</sup> Problems of industry responsiveness particularly under time pressures are covered in some detail by both US and UK commentators. In particular see White, *Gulf logistics*, p.247 and Aspin and Dickinson, *Defense for a New Era*, pp.33–36. For an external assessment of the ADFs (poor) record in integrating industry as the ‘fourth arm’ in national security planning see Peter La Franchi ‘Warning on Industry Relationship’ in *Financial Review*, 1<sup>st</sup> Edition, 26 May 2000, p. 85. La Franchi covers Dr Ross Babbage’s presentation on the issue at the Australian Defence Studies Centre Conference, ‘The Revolution in Military Affairs’, May 2000.
- <sup>65</sup> Shawcross, *Deliver Us From Evil*, p. 9.
- <sup>66</sup> Pagonis and Cruikshank, *Moving Mountains*, p.145.
- <sup>67</sup> Ross Babbage has identified the need for the ADF to develop a capacity ‘to build and manage complex business partnerships’, if industry is to be the fourth arm in Defence (summarised in La Franchi, *Financial Review*, p.85). But preliminary studies in organisational development suggest these sorts of partnerships are generally built on ‘loosely coupled and nonhierachical’ arrangements (Cummings and Worley, *Organisational Development* p. 453) which are, generally speaking an anathema to Defence and are certainly not reflected in the doctrinal framework currently proposed by Support Command – Australia: Support Command–Australia, *Framework* 2-5 & 2-6.
- <sup>68</sup> Interoperability is defined as ‘The ability of systems, units or forces to provide the services to and accept services from other systems, units or forces and to use the services so exchanged to enable them to operate effectively together’: *ADFP 101, Glossary*, p.1-8.
- <sup>69</sup> Interview with Major General Peter Cosgrove quoted in Alan Ryan’s presentation to the Technical Cooperation Program Joint Systems and Analysis Group, DSTO Salisbury, 28 April 2000.
- <sup>70</sup> Specifically M.S.White, *Gulf logistics*, p.247 and Watson, George, Tsourias and Cyr, *International Analysis Group on the Gulf War*, pp. 116–8 but also Andrei Demurenko ‘Multinational Operations: Organising the Interaction of Nations Participating in Multinational Operations’, *Journal of Slavic Studies*, 10 (1997) 79–89, and Nicholas Anderson ‘Multinational Deployments in Operation Joint Endeavour’ *Army Logistician*, Nov/Dec 96, pp. 15–20. The last two articles deal with Bosnia.
- <sup>71</sup> Responsibility for the issue remains divided between the Single Services who manage their own Service to Service contacts with other navies, armies and air forces epitomised by the American, British, Canadian and Australian (ABCA) Program run by Army and the international agreement and training aspects conducted respectively by the staff of National Support and International Policy Division.
- <sup>72</sup> Australia/US Ministerial Consultations Joint Communiqué, Sydney, 31 July 1998.
- <sup>73</sup> National Support Division Presentation on International Logistics, 2 March 1999.
- <sup>74</sup> In the absence of any overarching guidance in this area organisations appear to be deciding their own priorities. For example the Army’s decision to move the ABCA representatives from Canberra to the Combined Arms Training and Development Centre at Puckapunyal appears to signal priority being accorded to the development of training and doctrine. This has occurred despite the fact that the Australian Army actually chairs the logistic working group within the ABCA.
- <sup>75</sup> There are a number of issues arising from this course of action including the difficulty of producing outcomes among the large and eclectic membership (twenty-four countries are involved and nations with defence agendas as diverse as Bangladesh, China and Tonga are all equal participants). The dominance of the US, and the fact that the seminar is conducted largely under the umbrella of CINCPAC which may (or may not) accurately reflect the broad priorities of the US Department of Defense are other issues. For a discussion of the sometimes significant differences between the strategies of the various US Commanders In Chief (CINC) see William.W. Mendel and Graham H. Turbiville, *CINC’s Strategies* (Carlisle: Strategic Studies Institute, US Army War College, 1997) and William.W. Mendel and David G.Bradford, *Interagency Cooperation: A Regional Model for Overseas Operations* (Washington: Institute for National Strategic Studies, National Defense University, 1995). Unclassified information on PASOLS is available at <http://www.defence.gov.au/pasols>.
- <sup>76</sup> See David S.Alberts, John J.Garstra and Frederick P. Stein, *Network Centric Warfare: Developing and Leveraging Information Superiority*, (Washington: CCRP, 2000), p.226. In response to inquiries by the author the US representative attending the Technical Cooperation Program Joint Systems and Analysis Group at Salisbury in April this year indicated there was little evidence of any priority being accorded to this issue in the Pentagon at this stage.
- <sup>77</sup> See H. Wayne Gustafson and Richard J. Kaplan, *A Survey of Coalition logistic Issues, Options, and Opportunities for Research* (Santa Monica: RAND, 1990), p. 49 and Palin, *Multinational Military Forces*, p. 43.

- <sup>78</sup> Gustafson and Kaplan, *A Survey of Coalition Logistic Issues*, p. 49.
- <sup>79</sup> Ibid, p. 33.
- <sup>80</sup> Ibid, p.49.
- <sup>81</sup> Discussed by Derek Woolner, 'Back to Asia: Developments that Shape the Future Australian Defence Force', *Australia's Strategic Dilemmas: Options for the Future*, (Canberra, Australian Defence Studies Centre, 1997), p.112.
- <sup>82</sup> Mak. 'The Security Environment in South East Asia', pp. 99–126.
- <sup>83</sup> These concerns have been summed up nicely from a US perspective by Bruce Bennet, Sam Gardiner and Daniel Fox: 'Clearly the US needs to understand the forces of its prospective coalition partners: how they operate and what their strengths and weaknesses are . . . A tremendous tension is evident in making such evaluations – if the US properly evaluates the forces of a prospective partner it will undoubtedly identify many deficiencies but if these deficiencies become publicly known confidence in the ally may be undermined to such a point that the US is unwilling to support it'. Bruce Bennet, Sam Gardiner and Daniel Fox, 'Not Merely Planning for the Last War' in *New Challenges for Defense Planning: Rethinking How Much is Enough*, ed. Paul K.Davis (Santa Monica: RAND, 1994), pp. 477–515.
- <sup>84</sup> Attended by the author in Canberra on 4 April 2000.
- <sup>85</sup> The recommendations were made a decade ago: see Gustafson and Kaplan, *A Survey of Coalition Logistic Issues*, p.15.
- <sup>86</sup> The point made during the presentation on FLOW 2000 on 4 April 2000 was that at current levels there will be a significant conflict between US in theatre requirements and deployment assistance for alliance partners who have traditionally depended on the US strategic lift if the scenario envisaged by US 2010 of one plus one other ever comes to fruition.
- <sup>87</sup> This is a tall order for the one senior officer engaged in the game! It is worth noting that DSTO has made some effort to identify potential areas for the application of logistic models and the requirement was the subject of the Technical Cooperation Program Joint Systems and Analysis Group, held in DSTO Salisbury, 28 April 2000, attended by the author. Unfortunately, the scientists were provided with very little to go on.
- <sup>88</sup> Commentators like Michael Ignatieff and Jeffrey Record have been critical of the post-cold war US policy – characterised by instant intervention and quick exit – arguing that, in failed states in particular, such 'tactics' are not conducive to strategic decisiveness. This 'outcomes' issue aside there is significantly more risk involved in applying this sort of tactic to the ADF where logistic risk assessment in particular is a very underdeveloped art form. See Micheal Ignatieff, *The Warrior's Dilemma, Ethnic War and the Modern Conscience* (New York: Metropolitan Books, 1997), p. 105 and Jeffrey Record, *The Creeping Irrelevance of US Force Planning* (Carlisle: Strategic Studies Institute, US Army War College, 1998), p. 10.
- <sup>89</sup> General Sir Archibald Wavell, *Generals and Generalship*, (Harmondsworth: Penguin, 1941), p.26.