NOTICE TO CONTRIBUTORS

Within its pages the journal seeks to encourage discussion and debate across a range of Defence related topics and issues through stimulating and engaging articles for those with an interest in defence and security matters. The journal has a diverse readership. The ADFJ does not seek to promote and/or comment on Defence policy.

The ADFJ is a refereed publication. It is published three times a year in March, July, and November. The format of the journal can accommodate short and long articles. As a general rule, however, articles over 5,000 words will not normally be accepted.

Contributors are solely responsible for matters of fact and argument. They should take care to ensure that their work is balanced and supported by referenced argument. The journal has a preference for articles that are accessible. Graphics, tables and diagrams should be kept to a minimum and will only be included if they directly support the argument made in the text. Contributors should arrange their submissions to include a clear introduction and conclusion. Subheadings are acceptable but should only be used to increase efficiency of argument and to assist the reader.

Although the ADFJ does not have a stipulated referencing system, contributors should conform to a consistent format that enables readers to check the veracity of their work. The use of op. cit. and loc. cit. should be eschewed in favour of an abbreviated title of the work being cited. Endnotes and a bibliography, as well as a brief biographical note, are required when submitting articles.

The production team welcomes discussion with potential contributors and from its readership alike on developing themes for future editions.
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Chairman’s Comments

This is the second edition of the *Australian Defence Force Journal* in its new format. Elsewhere you will find a brief overview concerning further details of the Readership Survey. I expect that the direction in which the *Journal* is being taken means that it ought to better meet your interests and needs. In particular, we are attempting to stimulate debate about the major issues with which those of us in the Defence community are involved. To this end, we are introducing a section, which I intend to be included in each issue of the *Journal*, entitled ‘Professional Research Notes’. This section aims to highlight some of the work currently being conducted around Australia on Defence related research topics. I encourage those of you with a relevant interest to make contact with the researchers listed in each issue in order to stimulate debate or if appropriate, to forward to the Editor your own research interests and contact details for inclusion in the *Journal*.

The *Journal* has a wide readership with particularly diverse interests, as was made clear by the responses we received in the Readership Survey. This issue of the *Journal* includes articles on strategic leadership, military history, and a particularly important but often overlooked aspect of military training. Finally, it was evident from the Readership Survey that many of you enjoyed the book reviews that have been a regular feature of the *Journal* since its earliest days. Complementing our two articles on strategic leadership, there are book reviews on three outstanding leaders: Generals Eisenhower, Monash and Eather.

This edition reflects a recent decision by the Board of Management to arrange articles thematically wherever possible. Our ability to sustain this initiative is obviously reliant on the availability of quality articles. I therefore urge you all to participate in shaping the future of the *Journal* by submitting articles or perhaps alerting us to articles you have seen elsewhere that you believe could be reproduced. The Board would value your assistance in encouraging those with a story to tell to do so through the pages of the *Journal*.

As always, your comments and suggestions about the *Journal* are most welcome.

M. F. Bonser, AO, CSC
Rear Admiral, RAN
Commander Australian Defence College
Chairman Australian Defence Force Journal
Letters to the Editor

Dear Editor,

Employment of Australian Helicopters in Vietnam

I write regarding Brigadier J.R. Salmon’s letter *(ADFJ Nov–Dec 03)* addressing my article on the ‘Employment of Australian Helicopters in Vietnam’ and to thank him and several others who have provided feedback and comments on the article. These responses have been most valuable and have collectively enhanced the information that was available to me at the time the article was written. This is a very positive thing for I believe that such exchanges are at the heart of the *ADFJ*’s raison d’être.

I was encouraged that Brigadier Salmon was able to largely agree with my conclusions. Conversely, his and other feedback has also made me conscious that my assessment did not reflect the full remit of individual efforts by certain senior leaders to achieve the acquisition and integration of this essential capability. Theirs was a particularly complex responsibility and I must in fairness acknowledge this, and apologise where I may have been unfair to them in my critique. I do this without reservation and again reiterate my thanks to those who have pointed it out.

Brigadier Salmon’s letter cemented my belief that the introduction of a rotary wing capability into the Australian Defence Force, particularly during a time of conflict, was resource intensive, doctrinally demanding, and intellectually challenging at all levels of command. Similarly, as a case study, the employment of Australian helicopters in Vietnam is instructive to present members of the ADF because it demonstrates that complex military challenges do have solutions. Reaching these solutions involves a complex interplay of factors that can ultimately only be solved by the efforts of our people at all levels. We remain fortunate that now, as then, ours are of very high quality.

Chris Field
Lieutenant Colonel
Townsville, QLD

Dear Editor,

The ‘New Look’ Defence Force Journal

I was delighted to receive the first issue of the *Australian Defence Force Journal*, No. 164 with a ‘new look’. It is now looking more like a professional journal—a sober study in black and white so to speak.

I sometimes wonder if contributors and readers appreciate the full advantages the *ADFJ* offers. As contributors to and readers of the *Journal* we can enjoy several advantages that are sometimes overlooked. It improves our methods of research, it improves our style of writing and it expands our knowledge.
One of the best ways of expanding our knowledge of a subject and improving our methods of presenting this knowledge is by writing a paper on the subject. The ability to write and to write well is one of the greatest assets an officer can have and the higher an officer climbs the ladder of promotion, the more valuable this asset.

But to write well is not something that can be gained at an Army school in a crash course of 10 days’ duration. This task of learning to write and to write well is something that lasts at least as long as the officer’s official life. Cardinal Newman (1801–1890) that outstanding English scholar and theologian, and author of that widely known hymn Lead Kindly Light confessed in his old age that nothing he ever wrote was accomplished without difficulty. On the other hand Anthony Trollope (1815–1881) trained himself to write by a quicker method.

But this line of thought must end by mentioning a more modern author, Herbert Casson. He was a business efficiency specialist, a prolific writer on all aspects of his profession. His style was simple, crystal clear, concise and coherent. He warned that ‘anybody can write but few can write well’. In his or her intellectual development an officer cannot afford to write other than well. But there are many other aspects involved in this art of writing well which space forbids any discussion here.

This discussion closes with a short reference to the words Education and Training because their meanings are different and this is not always self-evident. Experts rarely bother to define these two terms and they sometimes convey the idea that Education and Training are synonymous terms. The words Education and Training are not synonymous and their purposes and methods are different. Training may be described in contradistinction to Education, as being mechanical and does not require any understanding of what is being learned. Tennyson had Training in mind when he wrote long ago:

‘Their’s not to reason why.
Their’s but to do and die.
Into the Valley of Death
Rode the six hundred.’

If contributors write well, readers alone will always study with greater interest and learn more from well-written articles in the ADFJ.

Dr Warren Perry, MBE, ED, BEc, MA, Litt. D. (This is an abridged version of Dr Perry’s letter)
Readership Survey Results

The production team has completed the analysis of your responses to the ADFJ survey. Over 500 people responded to the survey. We thank everyone for their comments. The survey results confirm that the general direction the Board of Management has set for the Journal is appropriate. There is however still room for improvement.

Many respondents said that they appreciated the clear and succinct manner in which most articles are presented. There were a number of you who felt that occasionally articles are ‘too academic’ and ‘too theoretical’. Several respondents felt that too many articles contained unnecessary buzzwords and jargon. It is also clear that you want a balance between articles that cater for specialised interests and those of a general nature. On the whole, the respondents want a larger number of shorter articles and a balance in representation for all three Services. A significant number of you stated that the Journal was a useful vehicle for professional development because you find it informative, relevant and an important forum for sharing ideas and encouraging debate.

The production team will act on your suggestions in order to deliver a more accessible and enjoyable journal. A detailed report based on the Readership Survey is available on request:

publications@defence.adc.edu.au

or by mail

Australian Defence Force Journal
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General Schwarzkopf: Shaping the Political Environment of the 1991 Gulf War

Michèle Piercey

War is too important to be left to the Generals.

Georges Clemenceau

Introduction

Many observers regarded the Gulf War of 1991 as an opportunity for the United States to finally put behind it the legacy of Vietnam. Though few in the early 1990s would have doubted global American military supremacy, the humiliation of defeat and ignominious departure from Vietnam 19 years earlier played on the national conscience as the United States emerged victorious from the Cold War. Therefore it seems fitting that the General who would lead Coalition forces in the first Gulf War had himself been deeply affected by his own experiences in Vietnam. By the time General Schwarzkopf took command of Allied forces in the Gulf, he had no intention of allowing the myriad political pressures with which he was inevitably faced to go unchecked as he had seen occur in Vietnam. Instead, he realised that he needed to shape the political context of his mission to ensure that there was a minimum of political interference with his military freedom of action.

Though the American military chain of command was structured so that the Chairman of the Joint Chiefs of Staff (CJCS) had the most formal political responsibilities in supporting Gulf operations, this did not completely insulate Schwarzkopf from domestic political influences. Additionally, with 22 troop-contributing nations (TCN) operating from the Saudi Arabian Headquarters, Schwarzkopf was required to carefully negotiate the minefield of making and building a coalition of disparate TCN with significant political and cultural sensitivities. This necessitated a degree of political and public relations savvy that the United States military did not possess during the ill-fated Vietnam adventure. When Schwarzkopf led the consecutive missions to defend Saudi Arabia and then to liberate Iraqi-occupied Kuwait in Operation Desert Shield/Storm (DSS), he sought to manage the political environment in order to minimise political interference on his campaign.

This article examines the impact of political influences on Schwarzkopf’s performance. For the purposes of this article, performance is taken to mean the command decisions he made and the directions he issued in the process of planning and executing both operations. The political influences examined will include the expression and pursuit of vested interests in aspects of operational planning and execution by state actors, specifically Saudi Arabia and the United States.

This article argues that Schwarzkopf, having learned from Vietnam the dangers of confused or contradictory political direction underpinning military action, sought where possible to actively shape the political context of the first Gulf War to the advantage of the mission.
begins by examining the domestic political influences brought to bear on Schwarzkopf’s plan and the reactive steps he was forced to take at one stage to avert the arrogation of the military planning process by the Secretary of Defense. In contrast, it also examines two of the General’s most highly politicised relationships, with the Coalition’s Saudi hosts and with the media covering both operations. In both relationships, he made relatively minor concessions and adjustments to his plans, but was ultimately successful in maintaining his basic freedom of action.

**Domestic political tensions**

Having directed the military to apply force to attain national objectives, governments generally seek to impose certain constraints on the application of that force in the achievement of the political objective. Recent history is replete with examples where, in the opinion of the military, politicians have sought to influence tactical outcomes inappropriately. Grenada and Vietnam are oft-cited examples of this phenomenon, where ‘the civilian authorities pre-empted military strategic and tactical goals down to platoon and individual aircraft and ship level’.  

In 1991, a new generation of political leaders appeared to be much more wary of overstepping the mark from civilian direction to political interference than they had been in the Vietnam days. American President George Bush and Secretary of Defense Richard Cheney were determined to let professionals run the war and avoid political micromanagement of the battlefield. Moreover, Schwarzkopf was not required to wage the war on the political front unassisted. CJCS General Colin Powell was formally responsible for military coordination with the Washington political machinery. With Bush’s avowed determination not to interfere unnecessarily with the planning and execution of the campaign, Powell and Schwarzkopf had significant freedom of action. ‘There was unity of purpose between them: they were running the show.’ For his part, Powell was by all accounts ‘highly successful in running interference for Schwarzkopf in Washington and guiding the war’s progress without usurping the prerogatives of the theatre commander’.

There were a few notable exceptions to this arrangement. On one occasion early in the build-up, Schwarzkopf came under significant political pressure from the Defense Department to attack Iraq-occupied Kuwait with far fewer troops than he thought advisable. This was a particularly sensitive issue for Schwarzkopf. After an incident in 1965 where he famously refused to commit South Vietnamese troops to an engagement because of inadequate air support, he explained his decision as follows: ‘You’re talking human lives, and my responsibility is to accomplish the objective with a minimum loss of troops under my command. That’s my job—not just accomplishing the mission.’ Schwarzkopf was adamant that DSS would only proceed when the odds were clearly in the Coalition’s favour, and it had the freedom of action and the firepower to succeed.

When Powell relayed a message from Cheney to prepare an offensive plan based on the forces already in country for the defence of Saudi Arabia, Schwarzkopf was incredulous. He insisted that the plan was not viable without a significant increase in forces to put to the task. Powell agreed strongly, but warned that a plan, however ill advised, would at least have to be briefed. When the plan was briefed to the Pentagon, military planners were dismayed by the inability of Cheney and Defense bureaucrats to grasp the depth of their reservations. As
Schwarzkopf explained, 'I think the people at the table quite frankly just didn’t understand… They probably are displaying their lack of knowledge of military options'.

What happened next caused Schwarzkopf and Powell grave doubts about Cheney’s sincerity about not wishing to interfere with the military operation. Amidst direct personal criticism of Schwarzkopf for his unwillingness to attack without the odds clearly in their favour, Cheney prepared his own plan, and briefed the President. Cheney’s plan, in the view of Powell, Schwarzkopf and their staffs, was ‘as bad as it could possibly be’. But of greater concern to Schwarzkopf was that the delineation of roles in wielding the military instrument had been blurred. To that point, ‘the President had been presidential, the Secretary of Defense had concentrated on military policy. CJCS had served as the facilitator between military and civilian leadership, and [Schwarzkopf] as theatre commander had been given full authority to carry out [his] mission’. That role clarity had been muddied by Cheney’s actions.

Schwarzkopf’s own staff gave Powell the necessary ammunition to defeat Cheney’s plan at the Pentagon, and Schwarzkopf’s insistence that he needed more troops to complete the offensive was eventually heeded in Washington, due in no small part to Powell’s skilful political wrangling. This may have been a reflection of the institutional power of the CJCS or the realisation by Pentagon planners of the risks of blurring the political–military distinction. Schwarzkopf resented the extra time and effort he had had to devote to fighting the ill-conceived plan, and likely became more resolved to avoid allowing the mistakes of the past to be repeated in the Gulf.

**International political challenges**

It was politically important that the United States convey the message that the Gulf War was not a unilateral American adventure. This relied in large part on making and maintaining the multinational coalition of troop-contributing nations particularly the Arab states. Moreover, the success of any planned defence of Saudi Arabia, and later the offensive and liberation of Kuwait, was predicated on unfettered Coalition access to Saudi Arabian territory from which to base operations. The sensitivities of an Arab state serving as a staging base for a predominantly Western offensive against another Arab state were significant. Schwarzkopf played a supporting role in Secretary Cheney’s mission to Saudi Arabia to persuade King Fahd of the importance of defending the country against continued Iraqi aggression. Pyle characterises the King’s dilemma as follows:

The Middle Eastern political landscape was already being altered dramatically; taking the easy way out by appeasing Saddam might alter it permanently to the disadvantage of Saudi Arabia and its allies. But to side with a Western power against Arab brothers was a risky undertaking, sure to feed the deepest feelings of fundamentalist xenophobia and resentment.

Nonetheless, the United States was ultimately successful in eliciting the King’s consent to begin the build-up of troops in the Saudi desert. As the ‘front man’ of the Coalition when the operation commenced, it was critical that Schwarzkopf remain positively engaged with Saudi Arabia, though he admitted that on occasions this proved a ‘ticklish business’. On his orders, Allied forces went to significant lengths not to offend Saudi cultural sensitivities, but
this was only partly successful. Schwarzkopf conceded that although he had ‘banned alcohol and sexy magazines, lectured the troops on cultural sensitivity and had a primer distributed called *The Military Guide to Arab Culture*… nothing was going to eliminate the culture shock completely’.21

The Iraqis played on the cultural fear that the large Western presence generated in Saudi Arabia.22 Schwarzkopf was concerned that the Saudis would try to further limit the freedoms of Allied troops, for example by forbidding non-Muslim religious worship. Such a situation would have been ‘unacceptable’ to the American public and disastrous for Allied morale.23 Schwarzkopf had to dedicate more time in his discussions with the Saudi commander Prince Khalid to addressing Saudi cultural concerns than discussing battle plans. It was time consuming, but Schwarzkopf realised that he had to maintain cultural and political harmony to ensure continued Saudi support.24

A more serious threat to Schwarzkopf’s freedom of action to plan and execute the liberation of Kuwait arose in September 1991.25 In addition to reserving control over Arab forces, Prince Khalid insisted that King Fahd be consulted over any planned offensive launched from Saudi soil.26 This was strongly resisted by Schwarzkopf, who sought the support of Washington to secure his ultimate control over all operations. According to one source, ‘Schwarzkopf asked President Bush personally to persuade the Arab leaders that the US command must be given the freedom of action to plan the operation as they saw fit, even if this meant a full-scale invasion of Iraq with Arabian troops taking part. The alternative could be an unacceptable level of casualties.’27

Schwarzkopf made a number of small adjustments to his command and control arrangements to give Arab forces a larger say in the offensive without compromising his freedom to control the overall campaign. He had recognised the value of placing national forces under the command of their own countries in Vietnam. As such, he saw the merit of placing Arab forces under the command of the Saudis as they had asked. ‘Within their own sandboxes they could do their own thing, while he orchestrated the overall campaign.’28

Schwarzkopf adjusted the scheme of manoeuvre to accommodate the political realities of operating in the staunchly Muslim Middle East, while remaining true to the fundamentals of his offensive plan. He concluded that for any plan to be accepted by most of the Arab populations, there had to be a highly visible level of Arab participation. Most importantly, he concluded, Kuwait City would have to be liberated by Arab forces.29 Given significant training, equipment and doctrinal interoperability problems between the Arab forces and Western troops, it would have been simpler to array all Arab forces on one flank of the battlefield, minimising these conflicts.30 As the Arabs would need US assistance to help them breach Iraqi defences, Schwarzkopf plugged the Saudi-led Arab forces into the 1st and 2nd United States Marine Corps Divisions to ensure that Arab troops could liberate Kuwait successfully.31

This should not be taken to mean that Schwarzkopf and his planners complied uncritically with every request from TCN in order to maintain the Coalition. On occasion, the interests of Coalition partners conflicted and Schwarzkopf would attempt to strike a balance between these interests. Though the French had originally agreed to place their forces under Saudi command, they later thought better of it since ‘as much as Paris chaffed at the thought of
putting French soldiers under American command, Khalid’s limited military experience was a greater worry’. The Saudis were dismayed to lose the only Western force under their command, but much as Schwarzkopf acknowledged the importance of maintaining good relationships with Arab TCN, he also recognised that ‘meeting French concerns was a political prerequisite’. Though diplomatically fraught, Schwarzkopf explained that the French Division was better suited to join the XVIII Airborne Corps attack, thus ‘easing the French out of a jam’.

Though by no means as sensitive as dealings with the Saudi hosts and Arab forces, Schwarzkopf made other adjustments and accommodations with non-Arab TCN in order to maintain the alliance. For example, after Commander of British Forces in the Gulf, General de la Billière, informed Schwarzkopf that British voters would prefer not to see their forces in a ‘supporting role’, Schwarzkopf reassigned British troops to the major attack with VII Corps. The salient point here is not that Schwarzkopf obliged every international politically motivated request as it was made, but that he made those changes that were required to maintain the Coalition and his freedom to prosecute the campaign, without compromising the fundamentals of his plan.

Public information management

A further example of Schwarzkopf’s shaping of the political environment was his intent to influence the media campaign proactively, rather than being shaped reactively by its reach and capacity for agenda-setting. Schwarzkopf had learned this lesson in Vietnam, when both military and civilian administrations were woefully unprepared for the policy challenges of the so-called ‘TV War’. As Powell put it, ‘in this new media environment we had to learn something as old as Clausewitz: how to make the people understand and support what we were doing’. Since Grenada, the military had become more adept at regulating media access to the battlefield in an attempt to limit the damage unfettered media access could do to political and public support, morale and operational security. Schwarzkopf recognised that wide public support would minimise the likelihood that his political masters would seek to interfere with his freedom of action to fight the Gulf campaign.

While there were numerous examples of Schwarzkopf’s admonitions to his staff to deal carefully with the media especially in relation to operational secrecy, DSS media policy was more proactive than simply ensuring operational security. Though the Pentagon sets wartime information policy and media relations are normally run out of Washington during major military campaigns, Schwarzkopf insisted that authority for media management and release of information would switch to his Riyadh Headquarters once the offensive commenced. Powell has pointed out that he, Cheney and Schwarzkopf were acutely aware that their communications with the media were also with the American people and foreign nations as well as the enemy. Schwarzkopf chose not to risk the possibility that a Pentagon spokesman might get the message wrong and compromise his communications with any of those groups.

Though Schwarzkopf was inclined to regard the press as ‘troublemakers’, he also saw the danger in excluding them too much and creating what he called an ‘ugly press’. Schwarzkopf deemed Cheney’s imposition of a 48-hour information blackout at the beginning of Desert Storm a mistake.
Storm ‘excessive’ and gave a short media briefing five hours after the attack began. Though short on detail, he was able to put across that the campaign was going well; his willingness to speak to the press, albeit guardedly, and his engaging manner ensured that the opening hours of the offensive, as well as his generalship, were favourably reported. His apparent obligingness with the international media may have been construed as genuine concern that the world and the American public were well informed about the unfolding battle. An alternate interpretation might be that Schwarzkopf assessed that as long as the public and the politicians were satisfied with the conduct of the campaign, he would be left to conduct the war as he saw fit. It was therefore in the interests of the mission to give the press enough to report in the opening stages that they did not seek to fill the vacuum with speculation or second-guessing.

The vague and generally positive slant of the scant information Schwarzkopf offered would not satisfy the media for long as they clamoured for detail. The press ‘pool’ system that had been employed by the Pentagon since Grenada was criticised as being a tool for control rather than facilitation of media access. Moreover, detail about the actual conduct of the war was sketchy. Schwarzkopf’s characteristic dislike of enemy body counts stemmed from the American practice in Vietnam of inflating or fabricating numbers of enemy dead as an artificial and highly unreliable measure of the success of American operations. He steadfastly refused to be engaged by the media on the numbers of Iraqi dead. Parrish argues that this lingering distaste was the reason why ‘every military officer who briefed reporters during Desert Storm adamantly refused to talk about the number of Iraqi soldiers who had been killed’. Schwarzkopf’s reluctance to go into any detail in this regard has been criticised by some as unwillingness to air publicly the brutal realities of the military campaign he was commanding, lest those details invite domestic opposition to the necessarily violent nature of the liberation of Kuwait.

The media pool system, together with Schwarzkopf’s retention of close control over the release of campaign information led to a highly sanitised version of war reporting. It seems likely that the Bush Administration had a political interest in maintaining the domestic perception of a precise, relatively humane war. As long as Schwarzkopf assisted that objective, it could be argued that he had reason to believe that he would be left to execute his plans with minimal political interference.

**Conclusion**

This article has examined a number of key political relationships that General Schwarzkopf managed during his command of Coalition troops against Iraq in the first Gulf War. It has argued that Schwarzkopf learned in Vietnam of the dangers of undue political influence over military operations, and that he sought where possible to shape these influences to cause the least possible disruption to his military freedom of action. He was not willing to fight a war with ‘one hand tied behind his back’.

There were limits to the extent to which he was able to control these influences, particularly at the domestic political level. In this regard, he relied on Chairman of the Joint Chiefs of Staff, General Powell, to serve as the main interface between the political and military layers. Though the President and the politicians claimed to share Schwarzkopf’s and Powell’s concern
that the theatre commander would be left to run the operation, there were instances in which this was not followed through. Schwarzkopf narrowly avoided having an attack plan foisted on him by the civilian Defense Secretary. It is not known whether Schwarzkopf would have run with a plan that he felt was unworkable, but given his strong feelings about the Vietnam misadventure, it is possible that he (and Powell) would have refused to attack using Cheney’s plan. It seems likely that this experience caused him to be even more wary and more proactive in shaping his political environment where possible.

On the other hand, Schwarzkopf identified a number of opportunities in which he was able to shape political factors with potential to affect the campaign rather than passively waiting for them to make their effects felt. Two relationships that he managed to good effect were the delicate coalition with the Saudis and other TCN, and the potentially turbulent media relationship. The deterioration of either of these would have been disastrous for the campaign, and might well have caused politicians to reach down to interfere with his freedom of action if it was perceived that he was not managing them effectively. In the event, media coverage was overwhelmingly positive, and he was praised for ‘exercising diplomatic skills worthy of a statesman to persuade the Arabs that Washington was not dictating the war plan’. Both examples demonstrate that Schwarzkopf shaped the political context of the Gulf War to enhance his operational freedom of action.

*Michele Piercey has a degree in politics from the Australian National University and is completing a Master of Strategic Studies part time. Since joining the Department of Defence in 1998, she has held a variety of appointments including a rotation as a civilian monitor with the Peace Monitoring Group Bougainville, and manager of the Defence Business Continuity Project in 2003. She is a member of the Australian Command and Staff College class of 2004 at the Australian Defence College.*
NOTES

6. ibid., p. 216.
14. ibid., p. 426.
15. ibid.
18. ibid., p. 78.
19. ibid., p. 80
22. ibid., p. 389. For example, the Iraqi TV station broadcast material about American soldiers defiling Saudi Arabian holy sites.
23. ibid.
24. ibid., p. 386. Schwarzkopf writes: ‘I kept reminding myself that I had a lot of guys who could do the military planning, but I was the only one who could reassure the Saudis that the Dallas Cowgirls were not going to come over and corrupt the Kingdom.’
25. R. Pyle, 1991, *Schwarzkopf: The Man, the Mission, the Triumph*, p. 98. At that stage, Schwarzkopf insisted that the possible liberation of Kuwait was purely hypothetical.

26. ibid., p. 98.


29. H.N. Schwarzkopf and P. Petre, 1992, *It Doesn't Take a Hero*, p. 413. He held an ‘Arab reaction seminar’ in October 1990 in order to identify the most pressing political issues likely to arise in Arab states as a result of an offensive against Iraqi-held Kuwait.


31. ibid., p. 170.


33. ibid.

34. ibid.


43. ibid., p. 267.

44. ibid., p. 268.

45. ibid., p. 269.


47. ibid., p. 48.

BIBLIOGRAPHY


Rear Admiral Woodward: Political Influences during the Falklands War

Major Darren Moore

The attack on Goose Green reflected haste and underestimation of the enemy by those who set it in motion … this episode was a classic demonstration of the risks and complications which can set in when a military operation is being conducted to serve an urgent political purpose.

Max Hastings and Simon Jenkins

Introduction

In mid 1982, over 1,000 British and Argentinian soldiers were killed in a dispute over a desolate, strategically unimportant chain of islands in the South Atlantic, home to a mere 1,800 people. The official cost to the British taxpayer to regain the Falkland Islands was £1.6 billion, to mention nothing of the ongoing cost of garrisoning the islands. However, the human and financial cost of the conflict was a secondary consideration among the warring parties, because the Falklands War was above all a politicised conflict. The Argentinian junta ordered the invasion of the Malvinas (Falkland Islands) to divert public attention from growing internal economic and political troubles. This invasion represented an embarrassing political and diplomatic failure by several British governments to resolve the long-standing dispute with Argentina over these islands. The dispatch of the British Task Force diverted the attention of the British public away from this failure and tapped into the nationalistic surge engendered by the invasion. Ultimately, a military defeat resulted in the political loss of power for the Argentinian junta. In Britain, however, a military victory strengthened the political standing of the governing Conservative Party, and in particular the public and political standing of its leader, Margaret Thatcher. The overtly political nature of this conflict ensured that the military commander’s freedom of action was greatly impinged upon by political considerations.

This article examines the impact of political influences on the performance of Rear Admiral John Woodward, the commander of the British Task Force sent to recapture the Falkland Islands. I provide a synopsis of Woodward’s naval career and role in the conflict. This is followed by an outline of the political dispute that culminated in the Argentinian invasion. Finally the impact of political influences on the performance of Woodward during the Falklands conflict is examined.

Rear Admiral Woodward’s naval career

Admiral Sir John (Sandy) Woodward entered the Royal Naval College in 1946 and retired in 1989 as Commander-in-Chief Naval Home Command. During his long career, Woodward commanded surface and submarine vessels ranging from a guided-missile destroyer to a nuclear attack submarine. In 1982, Woodward was appointed Flag Officer, First Flotilla, one of three sea-going admirals in the Royal Navy. Woodward’s flotilla was exercising off Gibraltar...
when the Argentinians invaded the Falklands on 2 April 1982 and as the Flag Officer closest to the front line (though some 6,000 miles away) he was to lead the force in accordance with the practice of the Royal Navy.  

**Political background to the Falklands conflict**

The Falkland Islands lie in the South Atlantic, about 650km due east of southern Argentina. The first recorded landing on the islands was by a British navigator in 1690. Argentina laid claim to the islands in the early 19th century following independence from Spain and from 1826 to 1831 maintained a colony on the Falklands. In January 1833, following the destruction of the Argentinian colony by an American warship in 1831, arising out of a dispute over sealing rights, the Royal Navy reasserted Britain's right to the islands. There has been a British presence on the islands ever since.

Britain largely divested its colonial possessions in the decades following the end of the Second World War, reflecting her realignment from a global to a regional power, whose sphere of interest was increasingly concentrated on Europe. Various British defence committees recognised that the contraction of British power meant that the Falkland Islands were barely defended and that Argentina could easily occupy them by force.

Between 1965 and 1979 the British Foreign Office pursued a variety of initiatives to explore ways by which an accommodation might be reached with Argentina. These initiatives included joint sovereignty and administration of the Falkland Islands with Argentina, direct transfer of sovereignty to Argentina, a lease-back arrangement, and encouraging closer economic and social links between the islands and Argentina to lessen their dependency on Britain. Due to the intransigence of the islanders, coupled with an influential lobby group in Britain and their supporters at Westminster, these initiatives were unsuccessful. By the late 1970s, the official British position was to drag out negotiations with Argentina over the future of the islands until the islanders and their supporters could be convinced of the apparent geopolitical reality of their situation. Argentina’s mounting frustration with the delaying tactics of the British Government encouraged it to investigate the possibility of resolving the dispute by military action, rather than through diplomatic channels.

Soon after the Thatcher government took office in May 1979, Nicholas Ridley, the responsible Foreign Office minister for the Falklands, visited Buenos Aires, emphasising an interest in pursuing economic cooperation with Argentina in the Falklands as a way of meeting the increasingly robust demands from Argentina. The Argentinians, however, insisted that sovereignty had to be part of the negotiations. From Buenos Aires, Ridley travelled to the Falklands where the islanders were reassured that their concerns would be fully taken into account in any negotiations with Argentina. Meanwhile, in a new assessment prepared for the incoming Conservative Cabinet, the Joint Intelligence Committee repeated its previous warning that Argentina would most likely hold-off on military action as long as it perceived that the British Government was willing to continue negotiations concerning the eventual transfer of sovereignty. The Foreign Office proposed that a lease-back option with Argentina be explored; however, this was not fully supported by the Prime Minister, and when the lease-back option was debated in Parliament in December 1980 it met with a savage reception.
Dillon comments in *The Falklands, Politics and War*, ‘As an epitome of Parliamentary ignorance and wishful thinking on foreign affairs, the discussion could hardly have been bettered’.\(^8\)

Following the political embarrassment in Britain arising out of the debacle at Westminster over the lease-back proposal, negotiations over the future of the Falkland Islands virtually ceased. Those supporters of the Falkland Islanders at Westminster who favoured continuation of British sovereignty had won a significant victory. Yet just a few months later, the Falklands lobby suffered a setback when the 1981 British Nationality Bill codified that the islanders were second-class British citizens, denying them the right of abode in the United Kingdom unless at least one grandparent had been born in the UK.\(^9\) Additionally, it was announced that the naval Antarctic survey vessel, HMS ENDURANCE was to be withdrawn, whilst the cash-strapped British Antarctic Survey announced that it was to close its South Georgia station. To those in Buenos Aires who closely watched evolving British policy towards the Falklands, it seemed that the British will to remain was diminishing.

In December 1981, a three-man military junta replaced the previous military government in Argentina. The new president was General Galtieri, Commander-in-Chief of the Army, whose position as head of the junta relied heavily on support from the Argentinian Navy. The Navy’s Commander-in-Chief, Admiral Anaya, was a hard-line supporter of Argentinian claims to the Malvinas,\(^10\) and this factor, together with the political failure to resolve the Falklands’ situation; the desire by the junta to demonstrate its power; and the signals emanating from London, strengthened the hand of those in Buenos Aires who wished for a military solution.

When it came, the Argentinian invasion of the Falklands on 2 April 1982 was swiftly accomplished and encountered little more than token resistance from the insignificant forces at the disposal of the Governor of the Falklands, Rex Hunt.

**Political interference**

The British Government’s sensitivities arising out of its political failure to prevent the Argentinian invasion of the Falklands meant that political considerations became paramount and impacted on Admiral Woodward’s freedom of action even before the two aircraft carriers, HMS INVINCIBLE and HMS HERMES, left Britain and the task force assembled off Gibraltar. In the wake of the British announcement of the dispatch of naval forces, large columns of trucks made their way to the ports of Plymouth and Portsmouth. Their cargo was stowed unmanifested aboard the ships. Given that Woodward and his warships would require several weeks to subjugate the Argentinian Navy and Air Force, his staff questioned whether it would be more sensible for the force to conduct vital training and to have the ships properly loaded in Britain, rather than to put to sea in a state of confusion. The response from government was that it was determined to send the task force to sea while the political and public will existed to launch it. If it dallied in England the vital impetus—the sense of national purpose—might slip away. Instead the ships were ordered to sail the moment they were loaded and therefore they would have to be reorganised and restowed at far-away Ascension Island in the mid South Atlantic.\(^11\) The lack of a suitable harbour at Ascension meant that the complex and time-consuming restowing operation would have to be accomplished by helicopter, thereby reducing the helicopters’ operating life when they arrived in the Falklands.\(^12\) The decision to
dispatch naval forces before they had been properly loaded illustrated that issues of military efficiency and effectiveness would be subordinated to the political will.

Political influence would continue to impact on Woodward’s ability to marshal and train his forces as they steamed towards the Falklands. On 14 April, Woodward lost three destroyers, two frigates and a tanker from the task force, which were ordered south 'with all dispatch'. The basis for this decision was the perceived political need to plant a strong naval force as far south as possible in case the United Nations imposed a moratorium on the further movement of military forces, pending a negotiated settlement of the dispute. Woodward, frustrated with the political and diplomatic manoeuvring wrote, 'It seemed that no sooner did I get some semblance of a battle group together than some new need caused it to be split up again'.

Minor political-based decisions would also have an unforeseen impact on the conduct of the operation. On 22 April, the 3rd Commando Brigade was suddenly asked if it would be ready to sail from Ascension Island in six hours or failing that, the next day. Training was cancelled; troops were hastily reboarded and the ships were made ready. That night they were stood down. London had apparently considered, and then rejected, a new means of increasing diplomatic pressure on Argentina. Unfortunately the alert meant that the scheduled test firing of Rapier ground-to-air missiles was cancelled. Consequently, as it was almost a year since the operators had their last live-firing exercise, it took some time for them to refine the art of visual tracking on the battlefield. Several days of Argentinian air attack passed before the Rapier operators achieved their first kill. This delay had disastrous consequences for the British ships sunk or damaged in San Carlos Water by the Argentine Air Force.

The execution of Woodward’s command, however, was not totally at the whim of the politicians. To a certain extent, the practicalities of military planning set the political agenda. Woodward assessed that by mid-to-late June the task force would be falling apart without proper maintenance and that the onset of the severe winter weather conditions would seriously degrade the ability of ground forces ashore on the Falklands. Woodward therefore planned backwards from the critical assumption that the land battle would need to be concluded by the end of June. The Argentinian centre of gravity was assessed to be its possession of Port Stanley. Woodward informed his political masters in London that the ground forces would need to be put ashore by around 25 May, thereby giving them a month to establish a beachhead, break out, surround the main positions and recapture Port Stanley. Woodward commented, ‘There were of course unknowns like the weather, enemy action, accidents, political initiatives and settlements. But here was a hard plan, give or take about ten days. It was a military plan from which there could be no political diversions if we were to fight and win.’ Woodward’s planning was later ratified by events as a severe blizzard descended on the Falklands the day after the Argentinian surrender.

The next political decision to impact on Woodward’s command was that to recapture South Georgia. The island of South Georgia is located 800 miles to the southeast of the Falkland Islands. Woodward considered South Georgia largely irrelevant to the capture of the Falklands, as it probably would have been surrendered automatically once the main Argentinian positions on the Falklands had been overrun. This operation represented a major diversion of his force assets and impaired his ability to fulfill what he saw to be his primary military requirement;
the work-up of the full task force. Accordingly, Woodward advised against the South Georgia operation. Max Hastings and Simon Jenkins in *The Battle for the Falklands* noted, “The decision to press ahead against South Georgia, like so many others of the campaign, was primarily political. The British public was becoming restless for action.” The operation started poorly with a 16-man SAS troop stranded on a glacier and the crash of two Wessex helicopters that had been sent to rescue them. Due to courageous flying by the one remaining Wessex helicopter, the SAS troops and the crews of the two helicopters were saved. After this initial setback, the South Georgia operation was accomplished with no British casualties and resulted in the destruction of an Argentinian submarine that had been delivering reinforcements to the island. Although superficially a success, the impact of the diversion of the frigates and other forces that took part in the South Georgian operation should also be considered. The primary criticism of Woodward’s performance as a commander related to the task force’s shipping losses (six ships were sunk and ten others sustained severe structural damage.) If Woodward had been able to conduct a full work-up of his forces prior to the arrival of the task force off the Falklands, then some of these losses may have been averted.

Another manifestation of political influence impacting on Woodward’s execution of his command was the attack on Goose Green. The 3rd Commando Brigade had landed at San Carlos Water on 21 May and had begun to establish a beachhead. Set against this British success, determined attacks by the Argentine Air Force over the next few days sank HMS ARDENT, ANTELOPE and COVENTRY, along with the container ship Atlantic Conveyor. The British Government desperately needed a military success to offset the public’s concern over the task force’s continuing losses. Woodward was becoming frustrated at the perceived lack of progress by the land forces and was under pressure from his superiors in London for his ground element to attack the Argentinians in force as soon as possible. Woodward’s deputy commander in charge of the ground element, Brigadier Julian Thompson, was ordered to attack the enemy base at Goose Green. Thompson replied that he regarded Goose Green as strategically irrelevant, as once Port Stanley fell, Goose Green would have to be surrendered. Thompson had planned to leave a small force to deter any enemy advance from Goose Green. Hastings and Jenkins note that, ‘After four days of almost unbroken bad news, London needed a tangible victory. If ever there was a politician’s battle, then Goose Green was to be it.’

British reconnaissance indicated that an Argentinian battalion held Goose Green. After a fierce battle, the 450 men of 2 Para defeated approximately 1,600 Argentinians. Goose Green proved to be the bloodiest land battle of the campaign; the British lost 17 men, including the commanding officer of 2 Para, while the Argentinians suffered 45 casualties. The administrative problem of clearing the war debris and minefields left by the Argentinians at Goose Green and the practicalities of dealing with the large number of prisoners meant that 2 Para could no longer fulfill the brigade’s original intention of withdrawing from Goose Green once it had been secured. The diversion of 2 Para slowed the main advance on Port Stanley, as other forces now needed to be moved into position.

**Conclusion**

This article has examined the impact of political influence on the performance of Rear Admiral Woodward as commander of the British Task Force sent to recapture the Falklands following the Argentinian invasion in April 1982. The approach taken was to examine several
key episodes of Woodward’s command where a political influence was discernable in the decision-making process.

An analysis of the diplomatic manoeuvring surrounding the long-standing dispute with Argentina over the Falklands, and the resulting lack of political will among successive British governments to enforce a decision due to its political cost, reveals a major failure by London to prevent the Argentinian invasion at the political–diplomatic level. An understanding of the political–diplomatic background to the invasion is vital for an understanding of the highly politicised environment in which the British task force was dispatched. The British Government was attempting to redress a political failure by the wielding of military force.

Woodward’s performance as commander during the Falklands campaign was hampered by political interference. Although the politicians agreed to his overall timeframe and concept for the execution of his mission, this was specifically due to their realisation that the weather and physical characteristics of the ships made any other plan untenable. However, when the opportunity presented itself, the politicians allowed political calculations to outweigh the practical military considerations advocated by Woodward and his staff. The ships left England without being correctly stowed and manifested, necessitating a laborious cross-decking operation when the ships arrived at Ascension Island, and the resultant heavy use of helicopters that impacted on the ground operation once ashore in the Falklands. Political influence would also have a severe impact on training, specifically when the Rapier batteries were unable to test-fire their weapons and the task force was unable to have a full work-up because a number of the frigates had been diverted for the South Georgian operation. If Woodward’s forces had been able to undertake the required training, then some of the British shipping losses may have been averted. Finally, the attack on Goose Green epitomises the danger of political influence on operational military matters. Although 2 Para was ultimately successful, their casualties were high and the action could have quite easily resulted in a British defeat as they were outnumbered four-to-one.

Much of the criticism directed at Woodward’s performance as a commander during the Falklands War needs to be examined in the context of his freedom of action. Political influences constrained and diverted his resources. A commander is merely an instrument for the execution of state policy—it is the politicians who often end up playing the tune.

Major Darren Moore is currently a student at the Australian Command and Staff College (ACSC) at the Australian Defence College. In 2001 his first book, entitled Duntroon: The Royal Military College of Australia 1911–2001, was published. Upon graduation from the ACSC, Major Moore will be employed in the Future Land Warfare Directorate of Army HQ.
NOTES


6. ibid., p. 20.

7. ibid., p. 23.


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Australian World War I Casualties: Social Impacts

Major Helen Doyle

Introduction

The cold, unrelenting reality of 59,342 dead and 152,171 wounded1 from World War I brought traumatic and enduring changes for Australian society. The tragedy for families of the dead and wounded is publicly recognised in the countless memorials, parks and community facilities across Australia named in honour of Anzac. Inscriptions such as ‘Tread gently o’er a soldier’s grave, a mother’s love lies there’ and ‘Father in thy heavenly keeping, we leave our soldier daddy sleeping’2 on headstones in war cemeteries throughout Gallipoli, France and elsewhere can only hint at the loss felt by the families. In many ways, however, death was a blessing: caring for a disabled relative was an ongoing emotional and financial burden for many families. Painful as they were however, visible injuries were easier to cope with than the invisible. There is no way of quantifying the total numbers of psychological casualties or the effects on their families.

Before the war, Australia was a young country, very much a part of the British Empire, yet possessing a burgeoning desire for nationhood and national identity. There were, however, class and political divisions appearing within Australian society. The dreadful casualties and the gradual but hard realisation of what the war actually meant, caused many to question Australia’s continued involvement. Fuelled by such contentious issues as conscription, class, religious and political differences and distrust caused by official censorship, Australian society was torn apart. The resultant divided society which shaped Australia’s politics over subsequent decades was the visible impact. The intangible impact was the development of the Anzac spirit as a form of secular religion3 which still pervades the Australian psyche.

This article seeks to determine the impact of Australian World War I casualties on Australian society during and after the war. Accordingly, the article identifies the pattern of responses to the casualties and relate these to the main themes in public opinion in Australia. Finally, the article concludes that the major impacts of the casualties sustained in the war were the political turmoil caused by conscription and their effect on national identity.

Casualties in context

Volunteers offered themselves from a wide variety of motives, from a spirit of adventure to ‘answering the call’. It is difficult to ascertain the exact degree to which the numbers of casualties affected the willingness of men to volunteer. In examining recruitment patterns during 1915 and 1916, it seems that the numbers coming forward to volunteer were influenced partly by changes in casualty levels, though other factors such as the raising of a 2nd Division during mid 1915 and the increase in size of the ALF during early 1916 also played a part. An early pattern emerged in which the number of volunteers waned until there was a major engagement. Following the outbreak of war, the initial wave of enthusiasm ensured that a
total of 52,561 men had enlisted by the end of 1914. This initial enthusiasm waned in early 1915; however, as Table 1 shows, enlistments increased after the landing at Gallipoli despite the heavy casualties from the major engagements there. From September to December 1915 enlistments steadily fell to under 10,000 per month but then rose again sharply to 22,101 in January 1916, the month after the evacuation from Gallipoli. In 1916, the rate of enlistments fell again, with the only exceptions being in May, September and October, which corresponded with the first Anzac Day in April 1916, and the battles at Pozières in August–September 1916 which cost 22,826 casualties in seven weeks. Enlistments reached a record low to that stage of the war at 2,617 in December 1916.

The recruiters were all the while actively seeking volunteers, but news of major engagements and large numbers of casualties no doubt gave an emotional hook with which to attract those who were willing but had not already volunteered. Their reasons for coming forward in response to these hooks included a ‘sense of tragic necessity’ to ‘fill gaps daily created in the ranks, or to avenge killed mates, or because the war would clearly demand greater efforts, or because a real man could not now hold back’.

Despite such sentiments, enlistment figures for 1917 were well down on those for the previous year, as Table 2 shows. The highest number of enlistments in 1917 was 4,989 in March. During the latter part of the year, numbers had declined noticeably, falling to 2,247 in December. The reasons for the fall are complex: important amongst them was the limited manpower pool available from Australia’s small total population at the time. Whilst the high casualty rates increased the pressure for more reinforcements, they must also have combined with a growing war weariness to deter some men from coming forward. In June 1916 Prime Minister Hughes had promised Haig and Joffre more men to replace the losses already suffered and those anticipated for the planned big push for Allied victory. By October 1917, Lieutenant General Birdwood, the British commander of the ANZACs, had advised that a minimum of

Table 1: Enlistments and significant events in 1915

<table>
<thead>
<tr>
<th>MONTH</th>
<th>ENLISTMENT</th>
<th>MAJOR EVENT OR BATTLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr</td>
<td>6,250</td>
<td>Landing at Gallipoli</td>
</tr>
<tr>
<td>May</td>
<td>10,526</td>
<td></td>
</tr>
<tr>
<td>Jun</td>
<td>12,505</td>
<td>10,000 casualties from 25 April to 25 June</td>
</tr>
<tr>
<td>Jul</td>
<td>36,575</td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td>25,714</td>
<td>Nek, Chanuk Bair, Lone Pine</td>
</tr>
<tr>
<td>Sep</td>
<td>16,571</td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>9,119</td>
<td></td>
</tr>
</tbody>
</table>
6,100 new men per month were required, far more than those actually coming forward. Clearly the voluntary system was proving inadequate to sustain the number of troops deemed necessary.

The most obvious impact of high casualty levels was the need for reinforcements, which in turn affected public opinion towards the war in two significant areas: Australia’s political environment and national will to continue with the war, and Australia’s national psyche. The legend of Anzac was born from the tragedy of Australia’s experience and has arguably become Australia’s secular religion.

**Political environment**

As the news of casualties reached Australia, prewar divisions in society began to widen and Australians began to question the reasons for continued involvement in the war. Disparate interest groups began to express their views more vocally, although the heated environment created extremes of views so that any dissent from patriotic support for the war became synonymous with treason. Hughes’ response to the call for more men was to propose the introduction of conscription. The acrimonious debate which followed the announcement of the referendum has been described as ‘eight weeks of hysteria’ that divided Australian society.

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**Table 2: Enlistments and significant events in 1917[^12]**

<table>
<thead>
<tr>
<th>MONTH</th>
<th>ENLISTMENT</th>
<th>MAJOR EVENT OR BATTLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar</td>
<td>4,989</td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>4,646</td>
<td>First Bullecourt—10,000 casualties</td>
</tr>
<tr>
<td>May</td>
<td>4,576</td>
<td>Second Bullecourt—7,482 casualties</td>
</tr>
<tr>
<td>Jun</td>
<td>3,679</td>
<td></td>
</tr>
<tr>
<td>Jul</td>
<td>4,155</td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td>3,274</td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td>2,460</td>
<td>Third Ypres—13,900 casualties, Menin Road, Polygon Wood</td>
</tr>
<tr>
<td>Oct</td>
<td>2,761</td>
<td>Broodseinde, total of 38,093 casualties since July</td>
</tr>
<tr>
<td>Nov</td>
<td>2,815</td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>2,247</td>
<td></td>
</tr>
</tbody>
</table>

[^12]: Table 2: Enlistments and significant events in 1917

[^11]: 6,100 new men per month were required, far more than those actually coming forward.

[^14]: Hughes’ response to the call for more men was to propose the introduction of conscription. The acrimonious debate which followed the announcement of the referendum has been described as ‘eight weeks of hysteria’ that divided Australian society.
The government itself was divided on the issue; whilst the Labor Party had supported compulsory military training when it was introduced in Australia in 1911, many in the party were opposed to the idea of compelling men to fight overseas. The Political Labor Leagues reaffirmed their 1916 State Conference resolution to ‘oppose by all means conscription of human life for military service abroad, to oppose all Labor members who voted for conscription or otherwise supported conscription, to oppose the endorsement of any conscription candidates.’ In addition, Hughes’ behaviour while visiting England and Europe, especially his ‘courting’ of royalty, angered many of his Labor Party colleagues who felt he was betraying the principles of the working classes. Hughes was expelled from a number of unions and from the Labor Party on 15 September 1916.

Divisions between the working and middle classes became a focus of the debate. The conservatives feared subversive socialist and communist influence in the unions’ objections to the war and conscription. The events in Russia in 1916 and the revolution in 1917 were clear concerns. The great strike of August–September 1917 involving 95,000 workers appeared to confirm these suspicions. On the other hand, the unions saw the war as a form of exploitation of the working man and as being for the benefit of the middle class and ‘imperialists’. They feared the importation of cheap labour to replace the conscripts while they were away fighting and Hughes was accused of ‘robbing Australia of its white blood and leaving it open to the coloured workers of the world’. There were fears for the sanctity of the White Australia Policy and it was claimed that by sending Australian workers to the battlefields of France, Australia would remain the servant of English capitalism.

Religious division was also rife. Protestants, who were also generally of English background, tended to support the war effort and conscription. Catholics, generally of Irish background, tended to disagree with Australia’s participation in the war and were almost overwhelmingly anti-conscription. Their views were also affected by events in Ireland, specifically the Easter Rebellion and the domination of Ireland by the English. Archbishop Mannix, a strident anti-conscriptionist, first became prominent at this time.

The level of propaganda both supporting and opposing conscription was immense and the debate was acrimonious. Both sides resorted to physical and emotional intimidation. It has often been said that the first casualty of war is the truth. Hughes used the Commonwealth Censor to promote his own message and suppress or hinder that of the anti-conscriptionists. He also invoked the War Precautions Act which gave the government wide powers to make regulations to secure public safety, including prohibiting criticism of the wisdom of the war and the methods used to wage it. He ordered the delay of release of bad news such as casualty statistics and most significantly, he suppressed the release of the soldiers’ vote on conscription when it became clear that he had failed to obtain the overwhelming endorsement for conscription that he desired.

The public remonstrations over this issue were the visible injuries to Australian society. A much deeper wound was the distrust with which the people regarded their government that had used censorship ostensibly to protect the liberty of Australia and the Empire, but in doing so, had trampled the liberties of the people.
Secular religion

Before the war, Australia was searching for a national identity. It found this in the trials of the First World War in the form of the Anzac legend and its public celebration on Anzac Day. Four thousand soldiers marched on the first Anzac Day in Sydney in 1916. In a speech on the eve of this first Anzac Day, the Minister for Defence told Australians that 'the thunder of the cannon had not been necessary to inspire them with a conception of their duty. What had happened on 25 April 1915 was proof that Australians had regained that spirit of their forebears which had enabled them to overcome “with indomitable pluck the awful hardships of a pioneering life.”' In London, Prime Minister Hughes addressed Australian soldiers on Anzac Day 1916 saying 'The Australians, thanks to the Anzacs, have now “put on a toga of manhood.” ... In the presence of the mighty dead, Australians should dedicate themselves to their nation, their Empire and their liberties.' Australians were indebted to the returned servicemen and the families of those who did not return on two counts; firstly for the sacrifice of going to war and secondly, for providing the basis of national identity.

A number of welfare strategies were created as a practical means to repay this debt. The Defence Act 1903 made provision for death or incapacity while on active service outside Australia and a limited scheme of war pensions had been announced in 1914. Public pressure forced increases in the original levels of these pensions. The public also responded by contributing to the Soldier’s Repatriation Fund which the government initially hoped could be maintained as an expression of community benevolence without government assistance. Once again public pressure forced government action and it became a publicly funded instrumentality that was merged with the Repatriation Commission in 1919. Clearly the public expected the federal government to respond to the needs of returned soldiers and their dependents and also accepted that the benefits should be more generous than other welfare provisions.

Associations of returned servicemen started to form from 1916. The most dominant of these was the Returned Soldiers’ and Sailors’ Imperial League of Australia (RSSILA), later known as the RSL which was a federal organisation. The original reasons for forming a federal body were concerns over government provisions for pensions and benefits; a desire to counter a negative image of returned servicemen and the drive to support the war effort, and the conscription proposal. The RSL was originally formed as a non-political pressure group. It became obvious, however, that the RSL needed to become a political body in order to achieve its aims. In May 1918 the central office issued a circular to branches advising that the RSL would become a non-party political organisation giving free licence to its members to pursue matters outside the platform of the League according to conscience and political conviction.

The RSL became the peak representative body with direct access to government seeking improvements to benefits including the establishment of schemes such as War Gratuities, the War Service Homes Act, preferred employment for ex-servicemen, education at public expense for children of soldiers who had died or were wholly incapacitated. The RSL also became the custodian of Anzac Day commemorations which developed as a kind of ‘saints day’ in the new religion. The commemoration of Anzac Day became the primary tool with which to perpetuate the Anzac legend.
After the war

The divisions in Australian society caused by the conscription debate took a long time to heal. Superficially, Australia’s loyalty to Britain was strengthened, but nationalism and the desire for a separate Australian identity grew stronger as a result of the experience of the First World War. This was not an immediate effect as Australia was still very willing to declare its support for England at the beginning of the Second World War. The seeds were sown, however, with the public’s general disapproval of conscription having its origins in the effects of casualties during 1914–18.

The casualties created a new and ongoing welfare demand. In April 1918 a Repatriation Department was established to administer the majority of government provided benefits. On disbandment of the AIF in March 1921, it took over the Army general hospitals which then became the basis of the Repatriation General Hospitals located in each state. In 1939 there were still 2,000 servicemen from World War I under treatment in Australian hospitals with nearly 50,000 attending as outpatients. The number of pensions reached a peak in 1931 when there were 283,322 of which one third were drawn by servicemen and the remainder by wives, widows or children of dead or disabled servicemen. The cost of this was just under 8 million pounds. In 1942, there were 220,339 pensions from the First World War at a cost of £7.5 million.

The RSL continued its role as a lobby group for returned servicemen, achieving a great deal of success as a result of its direct access to the Prime Minister and other ministers. The RSL also secured permanent representation on the Repatriation Commission and has been able to influence decisions on benefits for ex-servicemen in this way. For example, the war widow’s pension remained larger than any similar pension until 1973. Another voluntary organisation formed in the postwar years directly as a result of casualties was Legacy which adopted the care of deceased ex-servicemen’s dependants as its primary function.

The desire to commemorate the dead was a strong force in the postwar years. The sheer numbers of casualties from World War I, combined with the fact that the bodies remained in foreign countries, reinforced the notion of national sacrifice. Commemoration took many forms: public memorials recording the names of local residents who had died, and gardens or community facilities named in honour of Anzac or particular places of significance. The Australian War Memorial was built as a national memorial and was opened on Armistice Day in 1941. Australia also developed connections with the places Australian soldiers fought, particularly in France and Turkey. The Commonwealth War Graves Commission established war cemeteries and memorials at the location of significant battles. Anzac Day is still celebrated in some of these places. Anzac Day is arguably Australia’s national day and while it commemorates all Australians who have died and fought for their country, its origin is firmly entrenched in the First World War.

Conclusion

The immediate impact of the casualties from the First World War was the requirement for more volunteers. While Australia was initially enthusiastic about the war, public opinion started to change as a result of the number of casualties: latent divisions in society began to
surface. As it became more obvious that the rate of reinforcements could not be sustained by volunteers, conscription was proposed. The acrimonious debate that ensued split Australian society. Conscription, when tied to the idea of compelling men to fight overseas (as opposed to National Service to bolster homeland defence), has been a contentious issue in Australia ever since the time of Billy Hughes. The sensitivities surfaced again in relation to the Vietnam War.

The impact of casualties on the national psyche was complex in other ways apart from the issue of conscription. As a young country, Australia was searching for a national identity. A common perception of the time was that nationhood was won by proving itself in war. The Gallipoli Campaign gave Australia its baptism and Australians continued to prove themselves throughout the remainder of the war. This coming of age was the essence of the Anzac legend. The immense personal cost to soldiers and families was recognised by Australian society. A detailed welfare system was developed to provide for returned servicemen, widows and dependants. The community also displayed a strong desire to commemorate the sacrifice which took the form of memorials, both in Australia and overseas, the Australian War Memorial, and war cemeteries. Anzac Day became a national day of observance.

The servicemen themselves also formed their own associations, the RSL being the most prominent. The RSL developed into a powerful political organisation with direct access to government, that it used to lobby for the welfare of its members. The RSL became the custodian of the Anzac Day commemorations and the Anzac legend. All of these were direct impacts of the casualties from World War I and combined to help shape Australia’s national psyche.

Major Helen Doyle enlisted in the Australian Army in January 1982. She was commissioned in December 1982 and allotted to the Royal Australian Army Ordnance Corps. She has had a variety of regimental, training, personnel and staff appointments and attended Command and Staff College at Queenscliff in 1998. Major Doyle was posted to the Defence Personnel Executive and late in 1999 deployed to Bougainville. In 2000 she took leave to work with the Murray–Darling Basin Commission on a project relating to cultural heritage and natural resource management. She returned to Defence in 2002 and was posted to the Deployable Joint Force Headquarters. Major Doyle is currently studying medicine at the University of Queensland under the Army's graduate Medical Scheme.
NOTES


2. Inscriptions from headstones in Beach Cemetery and Shrapnel Valley Cemetery.


6. Enlistments for the first three months of 1916 were: January: 22,101, February: 18,508, and March: 15,587.

7. Enlistments for these months were: May: 10,656, September: 9,325 and October: 11,520.


10. C.E.W. Bean, *Anzac to Amiens*, p. 289. A special draft of 20,000 men was requested to bring the five Australian divisions to strength and then 16,500 men per month for the next three months.


14 ibid., p. 32.

15 ibid., p. 34.

16. ibid., p. 37. On 22 September there were rumours that Hughes had arranged to import 1,000 Maltese labourers.

17. ibid., p. 38.

18. ibid., pp. 36–37. Clark describes some of the techniques used to intimidate, including opponents of conscription being tarred and feathered, and pressure on women in posters and poems such as the following: 'Why is your face so white, Mother? Why do you choke for breath? 'Oh I have dreamt in the night, my son./ That I doomed a man to death.'


23. ibid., p. 16.
24. ibid., p. 17.
29. ibid., p. 530.
30. ibid., p. 529.
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The Allied Geographical Section, 1942–46: Forgotten by History

Captain Reuben Bowd

Introduction

In London, three years after the Second World War, Cyril Falls, Chichele Professor of the History of War at Oxford, gave an address to the prestigious Royal Geographical Society entitled ‘Geography and War Strategy’. In it he asserted that ‘geography will always hold the key to strategic problems’. In the discussion that followed, Field Marshal Lord Bernard Montgomery of Alamein, Chief of the Imperial General Staff, said:

Victories in battles win wars. That being the case, I feel the making of war resolves itself into very simple issues, and the simplest in my view is: what is possible and what is not possible, I would say that three things matter most. I am assuming, of course, that the weapon is a sharp weapon and not a blunt one; that is to say, that you have good armies and so on. I am assuming that you have a good command set up to wield the weapon; and finally that the allied solidarity is complete. Assuming that what is possible will depend firstly on geography, secondly on transportation in its widest sense, and thirdly on administration. Really very simple issues, but geography I think comes first.¹

In the annals of popular military history, pride of place goes to exploits of major combat units and formations, decisive battles and covert special operations forces. What is often overlooked in the recounting of events is the tireless contribution of a cast of thousands who are overshadowed, often unjustly, by the combat elements that prosecute the war. Success in battle is more often than not attributed to factors such as good generalship, superior combat forces and the lethality of the weaponry brought to bear against an enemy. Seldom is much heard of the work of specialist planning staffs, members of smaller unique units, headquartered many miles, perhaps thousands of miles, rearward of the front line working painstakingly during the weeks and months leading up to that cataclysmic event when combat forces take to the field. It is the accuracy of their work that inevitably distinguishes victory from defeat.
Nothing of any substance has ever been written on geographical intelligence in the Southwest Pacific Area (SWPA) of operations during the Second World War. This article examines a unique, yet largely forgotten organisation that played an important role in ensuring victory in the war against Japan. This inter-Service and inter-allied unit, the Allied Geographical Section (AGS), was established in 1942 by General Douglas MacArthur’s Intelligence Chief, Colonel (later Major General) Charles Willoughby, to address the paucity of even the most basic geographic, anthropologic and hydrographic intelligence available in SWPA. Since the end of hostilities, the unit has been largely forgotten in military historiography both in Australia and overseas, evading scholarly attention because it was not as marketable or exciting as other units like the Coastwatchers. Regardless, it was this unit that formed the basis for a great deal of our current intellectual knowledge of the Pacific and which developed, in the absence of any other comparative model, a foundation for future postwar geographical intelligence techniques and organisations both in Australia and the United States. At the time of its dissolution, the AGS was an organisation that, by virtue of its work and achievements, was unparalleled by any other in history.

Geographical intelligence has played, and will always play, an important role in determining success in battle. Accounts of military commanders using it to their advantage, or ignoring it to their peril abound and predate even the earliest recorded campaigns in history. Other agencies existed during the Second World War that also dealt with geographical intelligence. These included the Inter Service Topographical Department (ISTD), the British counterpart of AGS in Oxford and India (where it formed part of British Admiral Louis Mountbatten’s South East Asia Command), the Netherlands East Indies Forces Intelligence Service (NEFIS), the Joint Army Navy Intelligence Studies (JANIS), the Office of the Chief Engineer (OCE), and the Royal Australian Air Force Objective Folder Section (OBFOL). None covered the breadth of field that was by its very nature the responsibility of the AGS, and given the unique circumstances faced in SWPA it is unarguable that the AGS outperformed them all in type, quality and quantity of product. On occasions, some of these agencies were discovered to be passing AGS work off as their own. Only two bodies are worth noting as pre-dating the Second World War agencies. These were, the French Army’s Service Géographique, that prepared the first operational terrain maps after the Flanders Campaign of 1915, the disastrous consequences of which were largely attributable to the effects of geography. The German general and political geographer Karl Haushofer established the second body, the Institut für Geopolitik, after the First World War to collect information of even the minutest detail on every place in the world. Its aims were later perverted by the Nazis to justify many of their foreign policy objectives like Lebensraum.

Prior to the Pacific War, the requirement for geographical intelligence was somewhat under-appreciated. However, at this early stage, the Australian Army was more preoccupied with gathering information on territories within continental Australia (in preparation for possible military operations on home soil) than on external areas. The focus of military attention soon shifted to the northern approaches to Australia when, on 7 December 1941, the Pacific War commenced and Japan embarked on offensive actions. Demand for geographic intelligence resulted, and the relative paucity of such information immediately became apparent. Unlike the European theatre, that had been exhaustively mapped and studied over previous centuries, SWPA was at the time largely unmapped and unexplored. This presented obvious
challenges to fighting forces, both Allied and Japanese, who would shortly deploy troops to live, fight and die in areas which had until recent weeks been unheard of. Information was so scarce that the Office of Strategic Services (OSS), predecessor to the Central Intelligence Agency (CIA), interviewed Charles Nordoff and James Hall, Authors of the *Bounty Trilogy*, to gain information on future operational areas. Meanwhile, officers of Task Force 6814 were forced to rely on prewar literature and tourist brochures to obtain basic information on areas where they were to fight.⁸

In recognition of this situation, in March 1942 Colonel Willoughby convened a conference between representatives of the Dutch, American and Australian armed services and by doing so set the scene for the foundation of the AGS. Subsequently, on 28 March 1942, Lieutenant Colonel William Gray, the intelligence staff officer at Army Headquarters, issued instructions for the preliminary organisation of the Section following receipt of a memorandum from the Deputy Director of Military Intelligence, Colonel Caleb Roberts. This memorandum instructed Gray to assign a single officer the immense task of compiling all available information on New Guinea and the Australian mandated territory of Timor.⁹ Lieutenant Francis Williams, a one time Rhodes Scholar who had prior to the war been the Australian Government Anthropologist in Papua, got the job. Williams had previously served with the First Australian Imperial Force in France and with Dunsterforce in Persia, and was soon joined by many other personnel of enviable academic and professional qualifications in his newly assigned task.¹⁰ In fact, during the course of the war numerous prominent people served within the ranks of the AGS including ex-administrators of occupied territories, prominent members of the scientific community, academics, ex-mariners, authors, members of the oil and mineral industry, and illustrators. Dr Ronald Murray, a medical research officer from the University of Sydney’s School of Public Health and Tropical Medicine also complemented the AGS workforce and produced medical aspects of its reports. Among many who were already leaders in their chosen fields, like the Geologist Arthur Wade (after whom the mineral ‘Wadeite’ is named), were others who were to experience future professional recognition like AGS Intelligence Officer, Sergeant Eric Willis, who later became the 21st Premier of New South Wales.¹¹

On 17 June 1942, MacArthur’s Headquarters called for the establishment of a Combined Geographical Intelligence Section (that would become the AGS), by issuing the first of three directives. Vision became reality when, on 19 July 1942, a second directive was issued, formally giving birth to the concept by raising a new unit, the Allied Geographical Section.¹² General Sir Thomas Blamey was asked to provide the unit’s Director and initially placed Lieutenant Colonel (later Colonel) Evan Mander-Jones in temporary command.¹³ On 1 August 1942, Mander-Jones was replaced by Major (later Colonel) William Jardine-Blake (1894–1971)¹⁴ who retained command of the section for the remainder of the war. Prior to joining the AGS, Jardine-Blake had trained as a solicitor and had lived and worked with the British Colonial Service in Solomon Islands. He had seen service during the First World War at Gallipoli and in France and was typical of the type of person best suited to such intelligence work.

The AGS was initially housed at Victoria Barracks in Melbourne before it relocated to Brisbane with Headquarters SWPA on 3 September 1942 and took up residence in the Brisbane Permanent Building and Banking Company building (now the Bank of Queensland) at 115 Queen Street.¹⁵ In September 1944 it relocated to the United States Camp at Victoria Park on the outskirts of Brisbane, prior to the establishment of Forward Echelon AGS in the
grandstand at Santa Ana Race Track in Manila in June 1945. Additionally, from early 1943 it maintained a detachment in the Grace Building on York Street in Sydney and at 225 Domain Road South Yarra in Melbourne. The South Yarra residence, which became Headquarters Rear Echelon AGS following the move to Manila, had been home to NEFIS, whose geographical and mapping agencies formed part of AGS from March 1943. The AGS also maintained detachments with Headquarters SWPA and affiliated units in forward areas including Port Moresby, Holandia, Biak, Tacloban and Tolosa (Leyte). A liaison post was maintained at the Pentagon in Washington, DC and in late 1945 a representative was sent to Holland where a great deal of valuable information was obtained from The Hague and used to assist Allied re-occupation forces. Less formal liaison was also made with the Imperial War Cabinet in London, ISTD in Oxford and other intelligence agencies within neighbouring commands.  

The AGS also maintained a small detachment with the Royal Australian Navy Hydrographic Branch at 48 Milson Road, Cremorne in Sydney preparing and revising naval charts and publications for the use of maritime forces in SWPA. Similarly to the rest of the AGS, the Hydrographic Detachment was manned by personnel whose qualifications in related areas were unparalleled. For example, the Honourable Sir Hubert Murray was an ex-administrator of Papua who had, in addition to extensive experience of areas under study, served as captain and navigator of the government vessel in and around New Guinea and had previously published *Sailing Directions on the Territory of Papua* in 1930. The reports of the detachment appeared as Australian Hydrographic Publications. 

Numerous problems confronted the AGS and arose primarily because of the inter-Service and inter-allied nature of the organisation. In Jardine-Blake’s opinion, the Dutch were generally uncooperative and from the time of their earliest involvement in the Section ‘evidence was accumulating that the Dutch regarded all intelligence relating to the Netherlands East Indies as their prerogative and appeared to deprecate the intrusion of Allied officers into this field’. He went on to observe that the ‘general attitude [of the Dutch]… was in conflict with the three directives which governed geographical intelligence and which had been directed to, amongst others, the Dutch Command’. It was not until September 1942 that a Dutch officer was assigned to the AGS on a part-time basis. This proved an entirely unsatisfactory arrangement as competing work priorities meant that this officer was seldom seen working with the AGS. 

The Dutch had established a small intelligence agency known as the NEFIS in March 1942 following their evacuation to Australia. The geographical intelligence products produced by the NEFIS ‘did not conform to AGS standards or priorities and were of very indifferent quality’. However, if harnessed correctly, NEFIS had a capable map-making and aerial photo interpretation group that would be of considerable value to the AGS. In March 1943 the NEFIS geographical section and the AGS were directed to combine into a Melbourne Detachment under command of the Assistant Director of NEFIS, Army Captain (later General) Simon Spoor. However, the detachment proved largely ineffective. In October 1943, Jardine-Blake met with Vice Admiral Conrad Helfrich, Commander-in-Chief of Dutch Forces in the Far East, and Air Force Lieutenant General Ludolph van Oyen, who had been appointed overall commander of Dutch Army Forces in Australia. During this meeting it was agreed that a reorganisation of the Melbourne Detachment should occur and that the staff and resources of the detachment were to be placed under the direct command of the AGS. Accordingly, on 10 December 1943...
the required coordination occurred when an Australian, Major Ernest Francis, was appointed as Officer Commanding in Melbourne. On Dutch insistence the detachment became known as the AGS (NEI Detachment). In Jardine-Blake’s opinion, full cooperation of the Dutch Services remained difficult to achieve and that nationality had only minor representation in AGS throughout the war.\textsuperscript{23}

Having said this, some prominent Dutch personnel like Captain Spoor\textsuperscript{24} who briefly commanded the Melbourne Detachment, and Lieutenant Commander Fritz Wissel,\textsuperscript{25} a Dutch naval aviator and explorer who had discovered the Paniai Lakes (for some time named the Wissel Lakes) in Hollandia were highly capable members. Spoor rose rapidly through the ranks and became the Director of NEFIS in January 1944 and by 1946 was a Lieutenant General commanding the Dutch re-occupation forces in the Netherlands East Indies (modern-day Indonesia).

Also, the counter productive and competitive rivalry that existed between the various service and theatre intelligence agencies served to complicate the already difficult task assigned to the AGS and prevented full exploitation of all available intelligence. For this reason particular emphasis was placed on the development of sound relationships between the AGS and other intelligence agencies. Jardine-Blake opined that ‘cooperation with some branches of the Services, notably United States Engineer Intelligence, Royal Australian Air Force (RAAF) and the Dutch Services, remained unsatisfactory throughout [the war].’\textsuperscript{26}

In the United States, geographical intelligence is the realm of the Engineer Services, and to that end the United States Army Engineers in Australia sought to secure control of the AGS. Despite this, and upon Australian insistence, the AGS became a component of military intelligence directly responsible to Willoughby’s Intelligence Command. However, although attempts for control persisted, the Engineers did contribute to the AGS through Engineer ‘Annexes’ that supplemented AGS studies with valuable data and photographs unavailable at the date of publication.\textsuperscript{27}

The Royal Australian Air Force (RAAF) created an Objective Folder Section (OBFOL) at about the same time as the AGS (that later merged with the Central Interpretation Unit Allied Air Forces). OBFOL initially restrained itself to gathering air target information but soon began to stray into the geographical intelligence field, drawing objections from the AGS.\textsuperscript{28} This served to create hostility and resulted in some duplication of effort in direct contravention to the final directive establishing the AGS that had been agreed to by the Director of Intelligence Allied Air Forces, Air Commodore (later Air Vice-Marshal) Joseph Hewitt, on 6 October 1942. The first RAAF officer was not attached to the AGS until February 1943, and was soon withdrawn due to ambiguities surrounding his assignment. In February 1943, Hewitt was reassigned and replaced by Air Commodore Arthur Charlton. Charlton proved supportive of the AGS and contributed greater numbers of RAAF personnel, who from that time played an important role in the section, mainly as photo technicians, draftsmen and typists.

Another example of the counter productiveness of competing intelligence agencies was the Counter Intelligence Corps (CIC), situated just a stone’s throw away from AGS Headquarters.\textsuperscript{29} Between 1944 and 1945 CIC produced 12 Area Studies on localities almost exactly duplicated by 30 AGS studies that were far superior.\textsuperscript{30} This occurred despite the fact that the AGS had been instructed to ‘constitute itself, not only as the producer of special terrain
studies, but as the coordinator of all geographical intelligence’, and to ‘be responsible for the preparation of all terrain studies required by [Headquarters SWPA] and subordinate commands’.31

Problems were also encountered with agencies outside the SWPA intelligence network. Unhealthy rivalry existed between MacArthur’s intelligence command and its Pacific counterpart, the Joint Intelligence Centre Pacific Oceans Area (JICPOA), under the Commander-in-Chief Pacific Ocean Areas, Admiral Chester Nimitz. For example, in May 1945, AGS representatives attended a conference in Hawaii with their JICPOA counterparts whereby an agreement was reached regarding the preparation of geographical studies should an invasion of Japan prove necessary. It was agreed that the AGS would focus on Japan’s geography while JICPOA would concentrate on the approaches to the islands. The two ‘rivals’ could not agree on who would prepare landing beach information, so both headquarters were to cover this aspect. However, a tentative agreement paving the way for personnel exchanges and the possibility of allowing for the complete interchange of material, and for the AGS and JICPOA to quote each other’s work at ‘appropriate places in the text and perhaps on the frontispieces’ was also discussed’.32

It is quite amazing that such ‘petty’ issues could serve to divide two Allied commands. Finally, in Washington, over 20 separate agencies were engaged in geographical intelligence work in a largely uncoordinated manner, with much duplication of effort and varying quality of product.33 Washington was a key source of information on the more developed parts of SWPA like the Philippines and for this reason an AGS Liaison Officer was assigned to Washington to exploit this material.

Manpower shortages presented further issues. The AGS required staff with longstanding professional and civil qualifications not normally forming part of regular military training. For this reason, many of the staff initially assigned to AGS were persons of superior professional standing, but possessed limited operational experience and did not fully comprehend military requirements. These members were trained and guided by professional military personnel and a set structure was utilised to guide in the production of publications in a standardised manner.
format. The Americans, although providing many personnel, were initially unable to fully contribute to manning the section due to more pressing operational demands. However, they made up for this by paying for the employment of civilian secretarial and subordinate staffs and by providing access to supply channels. Women’s Australian Auxiliary Air Force (WAAF) and Australian Army Women’s Service (AWAS) members contributed significantly to the Section’s workforce and became invaluable to the functioning of the AGS.³⁴

Three primary publications were produced by the AGS. These were

*Terrain Studies*, a series of Special Reports, and Terrain Handbooks. *Terrain Studies* were the most important work of the section and were designed to give detailed information on localities of interest whilst also providing general coverage of surrounding areas of less significance. They provided all available geographical information of value to staffs for operational and planning purposes.³⁵ The detail of AGS studies was impressive. For example, the study of Ambon Island included a sketch map of the infamous Tan Toey Prisoner of War Camp that housed captured Australians of Gull Force.³⁶ This sketch had been updated using information from bombing missions and in addition to identifying key camp improvements, defences and infrastructure, depicts even the location of a loan cherry tree planted at the camp. *Special Reports* met the needs of planning staffs with information on specific problems like landing beaches, airfields, and paratroop drop zones and other
diverse subjects including the railways of Java and Japan, and the water supply in Java. A number were prepared after Japan’s capitulation on areas including Korea, Manchuria and China. Terrain Handbooks were the ‘Baedekers’ of the assault forces. They were pocket-sized editions of Terrain Studies, designed for the operational stage and ‘doughboy or marine who hit the beaches’. Information intended for higher staffs was removed and they were supplemented by pertinent information for lower level commanders.37

Additionally, a number of Spot Reports, Special Publications and Ad Hoc Reports were produced for both SWPA and neighbouring commands. The AGS’s most notable publication, the four volume Annotated Bibliography of the South West Pacific and Adjacent Areas (reprinted as recently as 1990),38 is but one example of the Section’s Special Publications. For this work, the collective resources of over 70 Australian libraries were harnessed.39 Additionally, a number of booklets were designed to assist the assimilation of Allied troops in New Guinea and Java by covering broad areas including tribal culture, the best use and treatment of natives, useful local phrases and the importance of field hygiene. The AGS was also the primary source of geographic intelligence for the frequently produced ‘G-2 (Intelligence) Estimate of the Enemy Situation’, G-2 Information Bulletin’ and the ‘BLACKLIST’ operational estimates on Japan.40

The Section gained its information from a diverse range of sources. For example, it interviewed members of Krait Force, upon their return from Singapore Harbour, and from information provided by Sparrow Force in Timor it produced the most detailed map of Portuguese Timor of its time.41 It provided geographical intelligence to Military Intelligence Section-X, an agency concerned with the recovery of, and collection and collation of information on, Allied prisoners of war.42 The AGS also obtained the latest aerial photographs through liaison with various air forces and proved itself to be of immense value to the United States’ Fifth and Thirteenth Air Forces and the Sixth and Eighth Armies.43 Often information was exchanged with other intelligence agencies on a reciprocal basis.

The AGS also used informants (persons who had previously worked and lived in target areas but had evacuated to Australia) to confirm assessments and assumptions made in its publications and an Informants Register was maintained containing the names and contact details of over 10,000 people.44 Often the only photographs in existence were those held in private albums and the AGS intelligence officers and support staff would tailor these to their requirements and conduct rudimentary assessments on terrain and infrastructure pictured. The AGS intelligence officer allocated to prepare studies on an area in SWPA, in all likelihood knew more about that locality than anyone else in the world at that time.

Examination of any of the AGS publications shows them to be compilations of a high technical order and models of clear presentation. It is hard to imagine how a staff, which at its peak totalled about 300, managed to produce them in so short a time.45 During its existence the AGS prepared almost 300 major studies and reports of which hundreds of thousands of copies were produced. For this to occur the AGS had to develop a sophisticated publication process, utilise civilian contracted printers and stockpile massive quantities of paper. The AGS also needed to ensure the timely and efficient distribution of its product to units in the field via couriers and distribution officers. All of this had to be completed under seemingly impossible time constraints, weeks and sometimes only days were allowed for the compilation of a report, and no deadline was ever missed.46
The task of the AGS was a thankless one. It did not receive substantial feedback, in the form of praise or condemnation, on its work from forward areas primarily due to the pre-operational nature of its task. Once an operation commenced on a target area the AGS redirected its attention elsewhere and combat forces naturally became too preoccupied with the exigencies of warfighting to provide substantive feedback on the section’s work. Regardless, there was continuous demand for its products and many forward units regarded the value of AGS studies to be considerable and requested as many copies as possible. The AGS completed geographical assessments on the Kokoda Track, numerous areas of Papua, New Guinea, the Netherlands East Indies as well as other localities like Morotai, Timor, Solomon Islands and Borneo. Examples exist where commanders ignored AGS assessments with disastrous consequences.

By the end of the war the AGS had developed a complex and efficient organisation combining over ten functional sections to enable it to produce an output. To name a few, these included the Records and Map Section, Informants’ Section, Special Information Section, Amphibious Section, Editorial Section, Intelligence Officers’ Section, and a Geographical Place Names Section. On 21 September 1945, Lieutenant General Richard Southerland, Chief of Staff of MacArthur’s new command, Army Forces Pacific (AFPAC) advised Australian Army Headquarters that the AGS had completed its task and would be dissolved as an Allied body on 31 October 1945 (later extended to 30 November 1945). The Americans and Australians had agreed to share the financial burden of the Section and moves commenced to finalise the account.

The postwar legacy of the AGS in the American Army commenced on 2 June 1946 when Willoughby, noticing the intelligence deficiencies that existed since the dissolution of AGS, ordered the establishment of a Geographic Bureau which fell under control of the Allied Translator and Interpreter Section (ATIS) of Headquarters AFPAC. Like the AGS, the Geographic Bureau commenced its existence with a staff of just one officer. Willoughby instructed the Bureau to produce terrain studies in the same form as those previously prepared by the AGS. On 18 February 1947, the Bureau was renamed the Geographical Section and remained under ATIS until its transfer to the Plans and Estimates Branch of Theatre Intelligence on 8 December 1947. The new section updated previous studies and prepared reports on the Soviet Union, Japan, Korea, Manchuria and China.

In Australia the AGS became a unit attached to the Australian Army and was headquartered in South Yarra, Melbourne. In 1947 its permanent legacy was assured when its functions and responsibilities were incorporated into the Joint Intelligence Bureau (JIB). In 1970 the JIB evolved into the Joint Intelligence Organisation (JIO), and subsequently became the Defence Intelligence Organisation (DIO) in 1989.

The AGS also had an academic legacy. In 1946 the Commonwealth Government established Australia’s first research university, the Australian National University (ANU), to serve Australia’s postwar requirement for advanced research and post-graduate training. Its foundation schools included the Research School for Pacific Studies that covered the history, geography, economics and anthropology of the islands to the east and north of Australia. The AGS’ magnificent Annotated Bibliography, along with its other publications, became major reference works for research scholars. AGS publications were also used by the Australian
School of Pacific Administration that was established in 1946 to train patrol officers, teachers and administrative officers for service in Australian territories abroad.\textsuperscript{54}

The commendations afforded the AGS were numerous and the work of the Section was highly praised by various agencies and individuals both internal to SWPA and from other theatres across the globe. Its Director until June 1946, Colonel Jardine-Blake, became one of the few Australian officers to receive the prestigious United States Legion of Merit (in the Class of Officer) and was made an Honorary Colonel (Retired List). The Section’s second-in-command, Lieutenant Colonel Adam Smith, succeeded Jardine-Blake in June 1946 and served on until 23 August 1948.\textsuperscript{55} At this time the AGS vanished into history and into the memories of those who had served within its organisation.

What can be said of the overall efficacy of the AGS? At the very least, nowhere in the official histories, or other publications, is the failure to provide adequate geographical information on operational areas of SWPA cited as a legitimate cause of a setback or defeat. On the other hand, the Japanese had no agency equivalent to the AGS. In hindsight the Japanese point to a lack of geographical intelligence as a major reason for their dramatic defeats in the island campaigns.\textsuperscript{56} These defeats were accompanied by terrible personnel losses due to tropical disease and the environment. Also, there was a real thirst for the type of geographical information in forward operational areas that the AGS worked hard on and went some way to quench. The production of accurate geographical intelligence is important, extremely difficult and its many diverse elements are constantly changing. The AGS did not dissolve until it became, alongside ATIS, the most important organisation in MacArthur’s intelligence organisation and one of the ‘great unappreciated workhorses of the war’.\textsuperscript{57} Its functions and responsibilities were so great that postwar intelligence agencies could not be without them and therefore the legacy of the AGS survives to this day.

Geographical intelligence is as important in the conduct of present-day military operations as it was during the Second World War. To this end, according to Harold Winters in \textit{Battling the Elements} (1998), ‘despite the evolving technology in warfare, physical geography has a continuous, powerful, and profound effect on the nature and course of combat’.\textsuperscript{58} We can learn a great deal by looking to the past.

The illustrations in this article appear by kind permission of the Army History Unit.

\textit{Captain Reuben Bowd} (RAAOC) graduated from ADFA in 1998. In December 1999 he graduated from RMC–Duntroon. Captain Bowd has been posted to ALTC, Bandiana, 3 CSSB, Townsville, and is presently serving in 10 FSB, Townsville. He has seen operational service in Bougainville and Solomon Islands. In 2001 he returned to ADFA to undertake an honours year and, in addition to coursework, completed a thesis on the AGS. In December 2001, Captain Bowd was awarded first class honours and shared the LCF Turner Prize. In 2002 he was sponsored by the Army History Unit to produce a book on the AGS as part of the Canberra Paper series produced by the SDSC at the ANU. Captain Bowd maintains a keen interest in Australian military intelligence.
NOTES


3. For some examples of other agencies using AGS publications without acknowledgement see: Box G-1445, G-2 General Correspondence 1944–46 (LT COL McVittie’s Letters); Box s-451, AGS Correspondence 1944–45 (LO Major Pierce), National Archives and Records Administration (NARA) and s-454, AGS Informal Memo’s (LO USA Washington, D.C, LT COL Tobin), NARA.


8. Introductory notes in Q.S. Lander Papers, United States Army, Military History Institute (USAMHI), Carlisle, PA. Furthermore, many basic publications were relied upon, such as those referred to in the COL. Q.S. Lander and LT COL. R. Noonan files held at the USAMHI. These include Private Pillsbury Goes to Australia, designed to introduce soldiers to Australia, and ‘Nil Desperandum’: the Story of an Outcast in New Caledonia, translated into English by T. Lefaude in 1943 which commences ‘Once upon a time…’

9. Information sourced from: General Headquarters, Far East Command, Operations of the Allied Geographical Section, GHQ, SWPA, Volume VI, Intelligence Series, Tokyo 1948. (Typescript), [Hereafter cited as: Brief History]. To see memo signed by Colonel Roberts see pp. 1–2.


11. AGS Souvenir Book, (n.p: privately printed, [1945?]), Lists of Personnel. See also, Unit Regimental Orders located at the Museum of Australian Military Intelligence, Canungra, Queensland.

12. See, GHQ, SWPA, Directives, Brief History, Appendix II.


14. See also, record of service held at Soldier Career Management Agency (SCMA)/Central Army Records Office (CARO), Melbourne, copy dated 16 February 2001. Also see Record of Service First and Second World War as well as Legion of Merit Certificate dated 18 August 1944 provided courtesy of David Helfgott, North Bondi, Sydney (source: Australian War Memorial (AWM)). Date of death taken from ‘Surrey North Western’ Registration district, Sub-district ‘Woking’, Administrative area ‘County of Surrey’. See also, Colony of Fiji and Western Pacific High Commission, Civil List, Corrected
up to 1st January 1942, (Suva: By Authority—F.W. Smith, Government Printer, 1942), p. 292 located at the National Archives of Solomon Islands, Honiara.


16. For further information regarding AGS liaison posts and working locations refer to, *Brief History* (assorted pages) and various boxes located at NARA relating to Liaison Officers.

17. *Brief History*, pp. 48–49. See also, H.L. Murray Papers, National Archives of Australia.


20. *Brief History* (First Draft) located at MacArthur Memorial Library, Norfolk.

21. ibid.


23. See drafts of the *Brief History* located at the MacArthur Memorial Library, Norfolk, Virginia, and *Brief History* (assorted pages).


25. Information on Wissel is from various sources including: *Brief History* and information provided by Dr A.P. van Vliet, Director Institute for Maritime History, Royal Netherlands Navy.


27. *Brief History*, p. 31.


30. *Brief History*, p. 31.

31. GHQ SWPA, Directives, *Brief History*, Appendix II.

32. See Boxes G-1445, G-2 General Correspondence 1944–46 (LT COL McVittie’s Letters) and S-451, AGS Correspondence 1944–45 (LO Major Pierce), NARA.

33. Box S-201, GHQ SWPA—Liaison Military Intelligence Service 1943–44 (Captain Russell and Others), NARA.

34. See *Brief History* (assorted pages), and various files (including Regimental Orders) relating to personnel.

35. ibid., p. 20.

37. *Brief History*, p. 18.


40. Boxes G-1445, G-1455, T-1214, G-1453, s-132–136 and s-200, NARA, all contain information pertaining to the AGS supplement to the BLACKLIST and Order of Battle (ORBAT) 'G-2 Estimate of the Enemy Situation', and 'Information Bulletins' which were produced on each operation or locality of interest by G-2 SWPA.


42. Evidence from Boxes G-1446 and 1448 (MIS-X Publications General), NARA.

43. *Brief History*, pp. 33–34.

44. ibid., p. 14.


46. *Brief History*, p. 28.

47. See related chapters in R.R.E. Bowd, *A Basis for Victory: The Allied Geographical Section, 1942–46*, (Canberra: Strategic and Defence Studies Centre (Canberra Paper No. 157)) that will be published in 2004, for amplification on areas studied, and examples of when commanders failed to heed advice with disastrous consequences. Also, refer to *Brief History* (assorted pages).

48. *Brief History*, Appendix IV.

49. ibid., p. 61.

50. ibid.

51. ibid., pp. 61–62.

52. For further information refer: Francis, *Recollections*, p. 94; E. Andrews, *The Department of Defence, Volume V, The Centenary History of Defence*, (Melbourne: Oxford University Press, 2001), p. 187 and p. 265; DIO homepage: http://www.defence.gov.au/dio; and, E:\source\opera\REPORT\F Roles of Army Officers.doc dated 08 October 1999. See also Box s-454, AGS Informal Memo’s (LO USA Washington, D.C. LTCOL Tobin) and AWM 113 10/9/1 DMI and AGS files—transfer to AWM. This file also contains correspondence dated 25 March 1947 detailing the intention to incorporate the AGS into the JIB.


55. See AGS Regimental Orders located at the Museum of Australian Military Intelligence, Canungra, Queensland.


Injury Prevention: Physical Training in the Australian Army

Captain Rod Goodall

Introduction

The Australian Army is currently experiencing a time of elevated tempo. The involvement in hostilities in the Middle East, peacekeeping in East Timor, peace making in Solomon Islands, the ‘War on Terrorism’, and the uncertainty of the political environment in the Indonesian region, is placing a strain on human resources. A fit and healthy deployable force is a key prerequisite to success in these and other undertakings.

During the period 1994–2002, research conducted on the Australian Army has revealed alarming statistics in relation to injuries from physical training (PT) and sport. It appears that the very instrument used to provide for a fit and healthy deployable army is the architect of the injury problems.

Injuries resulting from participation in PT and sport are associated with the highest number of working days lost, hospitalisation days, sick days and light duty days. Injury resulting from physical activity accounts for more than three times the number of casualties than other specific activities (Defence Health Services Branch 2000). Further, the economic impact of these injuries places a serious strain on medical and compensation resources.

In light of the injury quandary, there is one mechanism of injury and injury type that stands out, which is lower limb non-contact slips, trips, and falls, that result in sprains and strains (Defence Health Services Branch 2000). It is possible that this is a result of poor neuromuscular control. Researchers are acknowledging this problem in many training regimens and sports (Lephart et al. 2002; Hewett et al. 2002; Griffin et al. 2000; Wedderkopp et al. 1999; Hewett et al. 1999; Caraffa et al. 1996; Tropp et al. 1985).

This article aims to highlight and investigate modifiable risk factors that relate to lower limb injury resulting from slips, trips and falls that cause sprains and strains in Army personnel. Neuromuscular research indicates that many people who are injured during vigorous physical activity lack critical neuromuscular control, planning strategies and specific lower body strength (Lephart et al. 2002; Hewett et al. 2002; Griffin et al. 2000; Hewett et al. 1999). It is believed that specific training regimes and education can improve the neuromuscular control, strategic planning and strength that are required for dynamic stability of the lower limb (Lephart et al. 2002).

For those in complex physical jobs like the Army, neuromuscular control, planning strategies and specific strength are of vital importance. Fundamental to every soldier’s performance is the ability to accelerate, decelerate, prop, turn, move over uneven ground, and land from height. Further, it is important for soldiers to understand basic biomechanical movement patterns to strategically plan efficient movement. These fundamental movement patterns are dynamic by nature, and because they generally happen at speed, have the potential to injure
soldiers if not conducted proficiently. By better understanding the key features of the skills required by soldiers and the reasons that they are failing at critical moments, the injuries focused on in this article (sprains and strains from non-contact, lower limb, slips, trips, and falls) may be reducible.

Specifically, this article will (1) identify and describe the extent of the problem of lower limb, non-contact injury within Army, (2) identify and explain the key features related to neuromuscular control, (3) examine the current physical training system, and (4) blueprint a basic overview for advancing the current training approach.

The injury focus

Before describing the extent of the problem of lower limb non-contact slips, trips and falls within Army, it is necessary to put into perspective the focus of this article in relation to where this problem originates, and establish the best domain for it to be corrected. A summary of reported casualties, by known activity grouping, shows that PT and sport collectively account for half the total casualties (Figure 1). Work related casualties (34 per cent) also exhibit a high number.

Of these casualties, slips, trips, and falls, resulting in sprains and strains, cause the most injury. This may mean that there is a deficiency in the physical training methodology. The conditioning that soldiers receive during PT should be related to the requirements of the soldier’s job. Soldiers, it could be argued, are not being adequately prepared during PT and this is having a flow-on effect to the workplace. It could be further argued, that this flow-on effect is influencing injury rates in sport as well. Therefore, this article will look at determining the best method of lowering the incidence of injury in PT, and this should have a flow-on effect to the workplace and sport. The desired outcome is soldiers who are

Figure 1: Summary of reported casualties by known activity grouping
(Defence Health Service Branch 2000)
specifically trained in neuromuscular control, strategic planning, and strength resulting in a lower incidence of injury during PT, sport, and the workplace.

**Extent of the problem of non-contact lower limb injury within Army**

Two reports and one review have been completed over the past decade that have specifically reported on and analysed Army injury rates. The reports and review are as follows:

- The Defence Health Status Report (DHSR) (Defence Health Services Branch 2000).
- The Monash Review (Sherrard et al. 2002).

These three documents give an account of the number and type of injury, and give direction and advice. Importantly, the documents give an indication that what has been tried in the past may only be a small part of the answer to the injury problems. It is important to note that the Defence Health Status Report (DHSR) and Monash Review (MR) are studies relevant to the Australian Defence Force (ADF). Although these documents do not discuss the Army injury rates in isolation, Army injury rates account for 71 per cent of the ADF reported injury rates and therefore the DHSR and MR are useful studies for this investigation.

The Rudzki Report (RR) was a detailed account of the injuries within the Australian Army during the period 1987–91. The report also made a comparison with the US Army experience in relation to its injury rates. The DHSR was a comprehensive summary of the health status of the ADF during the financial year 1997–98. It included all three Services of the ADF and was an inaugural report. The MR was prepared by researchers from the Monash University Accident Research Centre. The Defence Health Services Branch funded the MR in response to the DHSR.

The information from the two reports and the review establish a number of important details about injury within the Army. For example, the rate of reported injury in the ADF is the highest in the Australian workplace (Defence Health Services Branch 2000). The leading cause of injury in the reports was related to PT, sport, running and marching. The lower limb was the most common site of injury, and falls, slips and trips were the leading mechanism. The leading injury type was sprains and strains. The percentages pertaining to these injuries are described at Table 1.

The Rudzki Report (RR) and Defence Health Services Report (DHSR) made many recommendations about how to minimise the injury rates. Rudzki (1994) determined that injury prevention was best tackled by education, environment modification, changes to training methodology, and the regulation of training programs. Rudzki (1994) made reference to faults in the Army system of PT, but his main approach was risk management of the current training system, particularly injuries related to running.

The recommendations from the DHSR were similar to the Rudzki report, however the DHSR went further and discussed injury prevention (IP) in a broader and more comprehensive way.
Consequently, DHSR made a shift away from risk management, and recommended a more purposeful approach to IP. The DHSR maintained that smarter PT was necessary, with a focus on conducting PT and sport activities in a way that maximises the gains and minimises the risks (Defence Health Services 2000). The DHSR asserted that IP strategies must begin with an understanding of the risk factors integral to each activity and must find ways to minimise risk associated within each activity. In light of the risk factors, the report highlighted intrinsic causes, such as overuse, alignment abnormalities, muscle weakness and imbalance as being central to IP. The DHSR also identified common extrinsic factors, such as training errors, environment mal-conditions, poor equipment, fouls and illegal play as modifiable aspects in relation to IP.

In light of the evidence available and the fact that injury rates were remaining high, the MR was more in-depth in its examination of the literature, and focused on identifying problem areas and isolating important causal factors. The MR focused on evidence based interventions from within the literature. In this context, the MR stressed the importance of understanding specific injury locations with reference to the efficacy of interventions reported in the research literature. The MR established that programs designed to increase balance and neuromuscular control, such as balance board training and plyometric training appeared to be promising (Sherrard et al. 2002). The MR made the following suggestions:

- Introduce balance board training, particularly for females and players with knee instability.
- Train personnel, especially females, to land softly with knees and hips flexed and to land on the balls of the feet.

<table>
<thead>
<tr>
<th>Injury</th>
<th>% of Casualties Army average of all reported injury Rudzki 87/91</th>
<th>% of Casualties ADF average of all reported injury DHSR 97/98</th>
<th>% of Casualties ADF average of PT related injury Rudzki 87/91</th>
<th>% of Casualties ADF average of PT related injury DHSR 97/98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower limbs</td>
<td>39.6</td>
<td>31.5</td>
<td>47.9</td>
<td>48.0</td>
</tr>
<tr>
<td>Falls, trips and slips</td>
<td>16.7</td>
<td>21.4</td>
<td>29.0</td>
<td>29.0</td>
</tr>
<tr>
<td>Sprains and strains</td>
<td>14.0</td>
<td>52.2</td>
<td>30.0</td>
<td>48.5</td>
</tr>
</tbody>
</table>

Table 1: Comparison of casualties for all reported injury and all reported injury from PT

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- Introduce balance board training, particularly for females and players with knee instability.
- Train personnel, especially females, to land softly with knees and hips flexed and to land on the balls of the feet.
• Consider jump training, stretching and strength training programs for all players in jumping sports in order to decrease peak landing forces.

• Investigate females for imbalances between hamstring and quadriceps.

• Introduce drills that train players in take off and landing skills.

In regard to these suggestions, the MR did state that balance and plyometric training interventions are not proven, and only appear to be promising. However, Leiphart et al. (2002) from the Neuromuscular Research Laboratory in the United States, maintain that neuromuscular training programs, such as skill and agility training, assist muscles in providing dynamic stability by enhancing muscle reactive firing patterns. The MR research also established that other forms of training and education were important, such as adjusting training regimes, technique training, and educational awareness.

The discussion so far indicates that non-contact lower limb injury from slips, trips, and falls that result in sprains and strains is a major problem. These types of injuries have been put under investigation by many researchers (Leiphart et al. 2002; Leiphart et al. 1997; Hewett et al. 2002; Griffin et al. 2000; Wedderkopp et al. 1999; Hewett et al. 1999; Caraffa et al. 1996; Tropp et al. 1985; Tropp et al. 1984). The type of training approach advocated by these researchers and the MR, is neuromuscular control training, which includes technique training and awareness education.

Neuromuscular control training is a specialised training system that incorporates a complex internal ‘information processing’ system. It is therefore important to gain a basic insight into the processes involved. Hence, the next section will detail some important basic details about the sensory systems, for neuromuscular control, within the human body.

Key features related to neuromuscular control

The sensory systems for movement are made up of the proprioceptive, visual and vestibular systems. The proprioceptive system is the sensory mechanism by which changes in muscle length, limb speed, and joint position is projected to the central nervous system (CNS). This is done by specialised receptors located in muscles, tendons, and joints throughout the body (Leiphart et al. 1997). The second sensory system is vision, and it delivers information about the environment and shapes our perception of the environment. Visual acuity is often represented as the principal sensory system (Abernethy 1996). Finally, the vestibular system, within the inner ear, delivers information about the orientation and balance of the body in space (Leiphart et al. 2002).

The information that comes from the sensory systems is commonly known as ‘feedback’ information (Leiphart et al. 1997). The way that the CNS uses the information is called ‘feedforward’ information (Leiphart et al. 2002). These two methods of information supply are important to understand as they have implications as to the way we conduct neuromuscular control training, and why we need to train in specific ways.
The CNS is organised to process the sensory information received from the proprioceptive, visual and vestibular systems in three ways (Hewett et al. 2002, Lephart et al. 1997). The highest level of motor control directs voluntary movement and occurs at the cerebral cortex. This is the slowest level of motor control due to the distance nerve impulses are required to travel (Hewett et al. 2002). The second level is the lower brain level (basal ganglia, brainstem, and cerebellum) and is where the planning and modifying of motor activity occurs (Griffith et al. 2000). In this function, the lower brain is involved in the timing of motor activities, the learning of planned movements, and the control of complex motor patterns (Hewett et al. 2002). These motor patterns are then called upon, when required, as ‘feedforward’ motor patterns (Lephart et al. 2002).

Finally, the reactive response level is where reflexes are automatically actioned to protect joints and muscles from injury (Hewett et al. 2002). Reactive responses also play an important role in modifying movement patterns at the lower brain level (Hewett et al. 2002).

A very simple example of the interaction of the three levels of motor control occurs when we learn a new skill. For example, when learning to drive a car we are generally very conscious of all movement, our hand to the gear lever, putting on the brake and looking in the rear view mirror are all relatively slow and require high levels of conscious effort. This level of control mostly comes from the higher brain (cerebral cortex), and involves a relatively large amount of feedback from our sensory systems before feedforward information can be delivered (hence the relative slowness of movement). After several periods of practice, the lower brain establishes motor patterns and we find our movements becoming more coordinated, and less conscious thought is required. Feedforward pathways predominantly control this level of skill development. Importantly, this frees up our sensory systems and thought processes for other tasks. Finally, the reactive response level is constantly attentive to sudden changes that require immediate response, such as controlling a tyre blowout. Receptors in the muscles, tendons and joints sense sudden changes in the steering wheel, the vision system detects sudden movement changes, as does the balance mechanisms within the inner ear, all of which evoke a reactionary response.

It is now necessary to put the sensory systems and the levels of motor control into context with a training methodology. The sensory systems and the way that they interact with the levels of motor control are fundamental to neuromuscular control, but only form a small part of the ability of the CNS to acquire, accumulate and perform motor skills. The training environment, the people involved, and the equipment used also play a major role, particularly in the Army training situation.

Neuromuscular Control Training (NCT)

The hypothesis of this article is that soldiers are suffering sprains and strains during PT as a result of non-contact slips, trips and falls. It could be assumed that it is highly likely that a majority of these injuries are due to movement error. Hoffman (1983) suggests that movement error can result from a lack of critical ability (strength or flexibility etc.), skill performance deficiency (technique, perception, or decision error etc.), or psychosocial problems (attitude, motivation etc.). Philipp and Wilkerson (1990) categorise movement error as physiological
(lack of specific muscular strength etc.), biomechanical (lack of technique, timing etc.), perceptual (lack of awareness and discernment etc.), and psychosocial (attitude etc.).

The type of training regime advocated by the Monash Review (Sherrard et al. 2002) is broad in its range and includes: specific strength training, jump training, technique training, balance training, and educational awareness. Researchers commonly refer to this type of training as NCT (Lephart et al. 2002; Hewett et al. 2002; Ettlinger et al. 1995; Hoffman et al. 1995; Ekstrand et al. 1983). However, the assortment of approaches recommended by the Monash Review (MR), require condensing in order to provide a logical process. A movement error model, such as the one presented by Philipp and Wilkerson (1990), provides an excellent structure on which to shape the process of neuromuscular control as recommended by the MR. Following are the basic parameters of a training process, utilising the Philipp and Wilkerson movement error model:

- **Physiological**
  
  proprioceptive training—based on balance to improve ankle coordination and discrimination of foot placement

  plyometric training—based on jump training to strengthen lower limb musculature and speed of muscle reaction to dynamic tension

  agility and coordination training—based on decelerating, cutting, turning and pivoting

- **Biomechanical**

  landing, decelerating, cutting, turning, pivoting—based on biomechanical correctness

- **Perceptual**

  internal and external information—based on detection, discrimination, recognition, and identification of internal and external clues, including: vision and vestibular systems

- **Psychosocial**

  educational—based on understanding concerning personal awareness of injury risk.

**Physiological training.** The parameters of physiological training advocated above include balance, plyometric, agility and coordination training. Balance training, particularly on a balance board, has established efficacy in preventing knee and ankle injury. It appears that the main efficacy of balance training is the accuracy of foot placement, and the response time to perturbation movements (Waddington et al. 2000; Wedderkopp et al. 1999; Caraffa et al. 1996; Tropp et al. 1983).
Plyometric training is a method of exercise that trains muscles to produce maximum power output quickly, and is based on the stretch-shortening principle of elastic energy (Houglum 2001). It is generally achieved when conducting activities such as jumping, bounding, cutting, or hopping. Elastic energy is produced during rapid muscle lengthening (eccentric phase), which transfers to power during rapid muscle shortening (concentric phase). Plyometric training has an established efficacy amongst researchers in lower limb injury prevention (Lephart et al. 2002; Hewett et al. 2002; Griffin et al. 2000). It provides for improved mechanical and neurological functioning in a range of ways. For example, there is improved neuromuscular response (Houglum 2001), increased hamstring strength (Hewett et al. 1996), decreased landing forces (Hewett et al. 1996), improved coordination (Houglum 2001), and the development of neuromuscular motor patterns (Hewett et al. 2002).

Agility and coordination are an outcome of plyometric training (Houglum 2001, Tippett and Voight 1995). However, the distinction is made to include the motor movement requirements of soldiers, such as decelerating, cutting and turning. The outcome of agility and coordination training is a smooth pattern of activity with muscles working together with the right intensity and timing.

**Biomechanical training.** Biomechanics is the science that underpins technique (Hay 1985). Biomechanical training is fundamental to injury management in the injury domain of this article (lower limb, sprains and strains from slips, trips and falls). There is evidence that maintains validity in altering biomechanical risk factors through NCT (Sherrard et al. 2002; Griffin et al. 2000; Steel 1993). For example, (1) emphasising the importance of landing with knees tracking forward over the toes (Lephart et al. 2002). (2) Stressing the importance of landing technique and landing with the feet neutral, hips flexed at 33 degrees, moving through to 45 degrees on landing, and knees at 17 degrees, moving through to 40 degrees on landing (Steel et al. 1993). (3) Modifying cutting and turning technique by turning off a bent knee of more than 20 degrees (Sherrard et al. 2002, Lephart et al. 2002). (4) Lowering ground reaction forces by instructing subjects to land softly on the balls of the feet, bending the knees just before landing, and lowering the heels to the floor slowly (McNair et al. 2000). (5) Making ground contact at the toes rather than a flat-footed position when decelerating, this assists in bringing the centre of gravity forward rather than behind the knee (Griffin et al. 2002).

The significance of physiological and biomechanical training systems is that they underpin the neurological foundations of the feedforward and feedback mechanisms discussed earlier. By training the physiological and biomechanical requirements together, training follows a pattern of progression that supports the functioning of the sensory systems and the three levels of motor control. For example, early in the program or cycle, activities that allow for a slow progression and based on the correct biomechanical range of movement are conducted. This facilitates the information of joint position sense and movement through the proprioceptors, and acts to stimulate the cerebral level awareness (feedback) which facilitates the ‘laying down’ of motor patterns. Next, dynamic stabilisation activities are introduced that stimulate muscular coordination (plyometric activities). This further stimulates position sense (proprioceptors) but also stimulates balance and visual position sense. Motor patterns are further integrated between the lower brain and reactive levels (feedforward). Once the biomechanical and physiological requirements are configured, functionally specific activities can then be employed in exactly the way they will be required in the soldier’s job.
Perceptual training. Perception and neuromuscular control are related to awareness and discernment of internal and external stimuli (Abernethy et al. 1996). Perception is the key to using sensory information (Knudson and Morrison 2002). For example, the soldier preparing to jump a two-metre ditch needs to take into account that they have enough speed to jump the ditch, whether holding a rifle in the right position, or that the take-off area is wet and slippery. Internally, it is important for the soldier to have an awareness of joint position and balance.

In order to understand the types of tasks used in perception, Proctor and Dutta (1995) identified four types of tasks used in perception. These tasks include: detection, discrimination, recognition, and identification. For example, in detection tasks a soldier is trained to detect potential problems in the environment, for example slippery or uneven ground. In discrimination tasks the soldier is trained to distinguish between landings from a jump with straight legs as opposed to bending the legs. In recognition tasks a physical training instructor (PTI) may question the soldier on whether he or she has seen or felt the particular circumstance before. Identification tasks would require the soldier to respond in a particular way for a number of similar activities (important to recognise the movement task from PT to sport and onto the job). For example, identify that learning to decelerate quickly during PT is the same process during a game of touch, and the same process when decelerating during fire and movement combat training. The perception of beginners can often be very narrow and this impacts on their ability to notice clues that may assist in preventing injury across a broad range of movement patterns (Abernethy 1996).

Psychosocial training. Psychosocial training and motor control are related to motivation and attitude (Philipp and Wilkerson 1990). The interpretation a soldier has of the environment he or she is operating within forms a basis for their behaviour (Sherrard et al. 2002). For example, in an Army training environment there may be noise, smoke, shouting and reinforcement of vigorous physical action. This may encourage a soldier to be over confident and attempt an activity too quickly, which may lead to a movement error. There is also an attitude in many people, especially the young, of sensation seeking; which can lead to risk taking (Sherrard et al. 2002). The Monash Review (MR) maintains that it is common in young males to readily accept risk and this can lead to a ‘distorted risk perception’. This problem of risk perception points to the importance of detailed instruction and supervision of those undergoing PT and sport (Sherrard et al. 2002).

Education is a key part of psychosocial training and has been recognised by researchers as being an important feature in preventing injuries (Sherrard et al. 2002, Parkkari et al 2001). The MR (Sherrard et al. 2000) recommended that Defence should establish education and awareness in all areas of physical activity in order to encourage safe participation. Research has shown that training people to avoid high-risk behaviour (psychosocial), recognise potentially dangerous situations (perception) and to respond quickly and effectively to dangerous situations (physiological and biomechanical) can lead to a reduction of injury (Ettlinger et al. 1995). Saari et al. (1988) maintain that general awareness of an individual’s personal injury risk has been shown to play a significant role in preventing occupational accidents.

The Philipp and Wilkerson (1990) model is an integrated model and the four categories are of equal importance. For example, there is a close relationship between physiological
and biomechanical errors. Landing after the ditch and not bending the knees may be a lack of strength or biomechanical technique. Similarly, perception and psychosocial errors are related. A soldier may disregard a wet slippery take off area before jumping a ditch in training, which may mean over-confidence or a lack of the perceptual skills to detect or recognise the problem.

The next section will look at the current physical training system in light of the information above. As stated earlier, there may be a deficiency in the current physical training system.

**Current training approach**

It would appear that there is a discrepancy in the way Army conducts its physical training (PT). The investigation above maintains that injuries, of the kind detailed, are very likely to be caused by a lack of neuromuscular control. Furthermore, the movement error model put forward (Philipp and Wilkerson 1990), maintains that physiological, biomechanical, perceptive and psychosocial deficiencies produce movement error. The four classifications of the Philipp and Wilkerson (1990) model are reflected in the recommendations made by the Monash Review. The question is, does current Army physical training include NCT?

The Australian Defence Force policy on PT, from which the Army’s policy for PT is drawn, states that the components of physical fitness are: cardio respiratory (aerobic) endurance, muscular strength, muscular endurance, flexibility, body composition, and proprioceptive ability (Australian Defence Force Policy on Physical Training 1992). This policy document defines proprioceptive ability as motor fitness, including: speed agility, coordination and balance. Proprioceptive ability (neuromuscular control) is highlighted as one of the components of physical fitness in the Defence policy, but it does not appear to be taught as a module at the Australian Defence Force Physical Training School (Australian Defence Force Physical Training School Training Management Package 2000). Each of the other components, detailed in the ADF policy on PT, are represented by up to an average of 30 hours of instruction apiece.

The focus at the Australian Defence Force Physical Training School (ADFPS) appears to be very much on resistance, and cardio respiratory training. Whilst these components of training are important, they are ‘physical fitness’ applications. In contrast, NCT is predominately skill-based and is not concerned with ‘physical fitness’ as such. It is concerned with teaching the neuromuscular control required for dynamic activity. The main reasons for the distinction between fitness and skills training is because NCT is concerned with refining intermuscular coordination and ‘laying down’ movement patterns. Therefore, it is important for skills training to be conducted when participants are mentally and physically fresh (Bompa 1998). NCT should be conducted early in the weekly training cycle and before ‘fitness training’ (Bompa 1998). Furthermore, fitness-type training promotes fatigue which can affect muscle coordination (Psek & Cararelli 1993), reduce or alter neuromuscular response (Mair et al. 1996), and lessen the perception of movement sense (Pedersen et al. 1999).

The ADFPT does teach some rudimentary neuromuscular activities. For example, vaulting, agility, and balance activities are taught. But they lack the depth of training and underpinning knowledge recommended by this article. There is a module called ‘Conduct Human Movement’ which concentrates on vaulting and agility training, however, the module is used to rehearse

As a result, Army physical training instructors (PTIs) may leave the ADFPTS with little appreciation of the importance of NCT, and little if any underpinning knowledge in this area of conditioning. It is therefore reasonable to expect that soldiers within the broader Army who are trained by these PTIs are not trained to any degree in the specifics of neuromuscular control.

In light of a PTI fraternity not taught NCT, and the broader Army not trained, there is another problem that makes the issue worse. Because there are only 120 PTIs, approximately 300 combat fitness leaders, and 26,000 Army personnel, commanders of Army units, who do not have access to PTIs, maintain the fitness of their units by instructing platoon and section commanders to take their soldiers for fitness training. It stands to reason that if Army PTIs have a lack of appreciation and education in the skills required for Army training, then the untrained are going to have none.

The problem of a clear demarcation between fitness and skills, and a lack of education in the value of NCT is made worse by other ‘cultural norms’ of the Army. Mainstream physical training within the Army plays an active role as a reinforcer of discipline, control, and elementary punishment that are an important aspect of military schooling. Further, PT is also seen as a fundamental method of instructing the military traits of hardiness, self-discipline, toughness, and willpower. By virtue of this, PT lessons are generally conducted as distinct items and not as building blocks for a specific end or long-term goal. The type of PT applied

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**Figure 2: Neuromuscular control—pathway to training system**
(Adapted from Hewett et al. 2002)
in this environment is cardio-respiratory and endurance type training because it creates a hard and demanding atmosphere. A section commander is not likely to embrace taking his men through a balance, cutting and turning, training session that incorporates education in biomechanical techniques, as opposed to a demanding endurance run.

The way ahead

The fundamental goal of PT within the Army is to physically prepare the soldier for battle, and therefore optimise physical performance within the soldier’s job. At the heart of physical preparation is injury prevention: not only to prevent injury from occurring during training, but also to ensure that training is in the right physical domain. There are, however, competing influences on the priority that the components of physical training should take, for example should training be mainly strength or endurance and how much NCT should be included in the program. Some of these competing influences include: a military culture of over enthusiasm and unsafe participation; high levels of competitiveness; conflicting interests for training time; and low levels of education and understanding of physical training regimens.

The current methodology of physical training is not working as well as it should, and research demonstrates this (Rudzki 1994; Defence Health Services Branch 2000; Sherrard et al. 2002). Research and various controlled studies indicate that it is possible to prevent injuries to the lower limb relating to neuromuscular control. However, the intervention countermeasures prescribed by researchers are inconclusive and can only be described as promising rather than proven. Nonetheless, there is evidence that suggests a NCT system that specifically employs the characteristics of the body’s sensory systems, the levels of motor control and an extensive training model, may assist in lowering the current injury rates (Figure 2).

Strategies, such as balance, plyometric type training, technique training, planning strategies, and specific strength are important aspects in injury prevention (Griffin et al. 2000). Army should look at these prevention programs in respect to its own particular situation. Army should conduct its own randomised controlled trials of clinical populations, to demonstrate the efficacy to establish a causal relationship between NCT and a reduction in lower limb injury from slips, trips and falls. In the meantime, Army should raise the profile of NCT strategies within the ADFPTS, and also at recruit and initial trade training schools.

Conclusion

This article has sought to investigate the problem of lower limb non-contact injury that occurs through slips, trips, and falls, and results in sprains and strains, within the Australian Army. It is believed that this may be due to lack of neuromuscular control, planning strategies and specific lower body strength. Therefore, efforts to prevent, or at least reduce, the rate of these particular injuries seem sensible.

This article has reviewed the sensory systems and the levels of motor control that demonstrate the methodology of training must be specific. Furthermore, it has demonstrated the importance of including physiological, biomechanical, perceptual, and psychosocial skills within the training combination.
It can be expected that the current level of heightened preparedness required of the Army will continue. Meeting these demands, with the existing injury rate, will place an extra strain on already over-burdened economic and human resources. NCT is not the only answer to the injury problems of the Army, but it appears to be a noticeable shortfall in the current training methodology.

Captain Rod Goodall enlisted in the Australian Regular Army in April 1974. After initial training he served in the 8th/9th Battalion Royal Australian Regiment as a soldier and as a section commander. In 1983, after completing a sub unit Physical Training Instructors course, he was posted into the physical training stream and spent the next 18 years in various postings throughout Australia. In 2000 he was commissioned through the Warrant Officer Commissioning Scheme and has since served as a Training Development Officer and as the Second-in-Command at the Australian Defence Force Physical Training School. Captain Goodall is currently studying for a Doctorate in Human Movement with Charles Sturt University.
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Professional Research Notes

To enhance the Journal’s aim of informing and promoting discussion on important issues of national and international defence and security matters, we are introducing a section devoted to publicising current research on defence and related topics being undertaken around Australia. Each individual research note has four parts:

1. ADFJ Index Number comprising the relevant ADFJ Issue Number and the number assigned to each research note;
2. The title or brief description of the research;
3. Brief research notes; and
4. Contact details.

By the inclusion of researchers’ contact details, we hope that Professional Research Notes will become a forum for dialogue and debate. In this first issue, we are highlighting some of the research currently under way at ADFA. We encourage all those who wish to publicise their research to forward details to the Editor at: publications@defence.adc.edu.au or by mail to Australian Defence Force Journal, Australian Defence College (Weston), Department of Defence, Canberra ACT 2600 Australia.

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Executive Coaching Programs in the Development of Leadership Competencies

A/Prof Iain Densten from ADFA, together with collaborator A/Prof Judy Gray from Monash University, are working on a project that aims to examine, synthesise, and evaluate the current literature on the role of executive coaching programs in the development of leadership competencies. Executive coaching is the process of equipping leaders with the tools, knowledge, and opportunities they need for increasing effectiveness through development and thus is a cornerstone of leadership development. Specifically, the project will draw on military and non-military best practice literature and focus on how leaders can be developed to higher levels of effectiveness. The project will consider the theoretical and practical implications of the research for senior leader development, and evaluates (a) the effectiveness of executive coaching programs, (b) the degree to which senior military leaders benefit from executive coaching programs, (c) whether certain competencies are more amenable to training at higher levels, (d) whether current practices can be incorporated into senior leader development programs, and (e) which aspects of leadership require ‘coaching’ and which can be easily incorporated into ‘self-development’ programs.

A/Prof Iain Densten can be contacted via i.densten@adfa.edu.au
A/Prof Judy Gray can be contacted via j.gray@adfa.edu.au

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Managing the Money: A History of Army Finances

Dr Frances Miley from ADFA’s School of Business has been awarded an Army History Grant to write the chequered history of Army funding and financial management. Primarily based on archival research, she will be comparing her findings based on an historical analysis of Army to those in her recent report ‘Managing a Minefield’, a study of current financial management in the Department of Defence, which was funded by the Spitfire Association.
It may not seem like the most glamorous area of Army but the regularity with which Parliamentary committees comment on issues concerning financial management makes it a topical (if touchy) subject. Are the problems systemic? Are financial irregularities inevitable? Are there areas of Army's finances that are being well managed? Who have been the main players in determining the direction of Army spending over the years?

Dr Frances Miley can be contacted via f.miley@adfa.edu.au

Optical Telescope Imagery through a Turbulent Atmosphere.

Most of us are aware of the disturbing effect of atmospheric turbulence when viewing a scene on a hot day or over an open-air fire. The scene seems to 'swim around', becoming more or less blurred. With a telescope, the effect is almost always present and is the reason that Hubble Space Telescope exists and that most optical observatories are sited on high mountains.

For a number of years, Don Fraser and Andrew Lambert, their students and associates in IT&EE have been investigating methods to overcome such image distortions, with help from ARC Large grants. So far, these methods have been based on post-processing a movie sequence of distorted images to form a restored average result. Recently, the methods have been applied successfully to telescope images of objects on the earth's surface at a distance of several kilometres, which may be useful in surveillance applications. Restoration does not occur in real time, but requires several hours or days of computation after initial image capture. The restoration methods have been shown to improve the resolution of the telescope over and above its inherent, optical resolution, at least theoretically. In addition, a spin-off of the restoration is a striking visualisation of the intervening turbulence pattern. This led to a small project with DSTO, last year, to visualise the wakes left by jet aircraft.

Most large astronomical observatories now favour real-time adaptive optics as a means of correcting the effects of turbulence, and the team and PhD student, Murat Tahtali (of ACME) are investigating a piezo-electric plastic film as a controllable, distortable mirror for possible use in a low-cost adaptive optics system. Team members are also participants in two ARC Network proposal applications: 'Adaptive Optics for Australian Astronomy, Medicine, Industry, and Defence' and 'Research Network for a Secure Australia (RNSA)'.

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Murat Tahtali can be contacted via e-mail: m.tahtali@adfa.edu.au or via phone: 02 6268 8278

Eye In The Sky: Mini Helicopters to the Rescue

Like the human eye, coastal surveillance tools are limited in their range by the curve of the horizon. No one can see over the curve of the sea—unless they have help. Recent work underway by Matt Garratt is developing a technique to overcome this dilemma and other surveillance problems with mini helicopters.

A 100kg helicopter UAV platform is being developed that could be operated from coastal surveillance vessels used by Customs and the Navy. A scaled down prototype has already
demonstrated the preliminary generation of systems, which would allow a UAV to maintain a stable position above a ship, which is being tossed about, in high seas, and to land and launch from a heaving deck automatically.

The primary instruments onboard the UAV include gyroscopes, differential GPS, magnetometers and accelerometers, which measure the motion of the helicopter. The research also includes development of special sensors that can be used to determine the exact position of the helicopter relative to the deck. By integrating the helicopter sensor information with prediction of the ship’s motion, the autonomous helicopter can compensate for the ship’s motion whilst hovering above or landing on the deck. A special securing mechanism has been developed to lock the aircraft to the deck immediately after touchdown and before launch.

Matt Garratt and Himanshu Pota are the lead investigators for a 2004 Australian Research Council Linkage grant with an industry partner UAV Australia, which hopes to use the research to open up new roles for the RMAX (100kg) helicopter UAV, which it markets. The RMAX, manufactured by Yamaha, is employed in various roles worldwide including crop dusting, aerial photography and exploration.

Matt Garratt can be contacted via e-mail to m.garratt@adfa.edu.au or telephone on (02) 6268 8267.

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Military Geographies

Recently arrived as a Visiting Fellow at ADFA’s Defence Studies Forum* from the University of Newcastle, UK, Dr Rachel Woodward is researching a number of topics, including ‘military geographies’—looking at the ways in which military activities and militarism shape place, space and landscape. Dr Woodward has spent the last six years or so looking at issues such as the economic impacts of military bases, the consequences of the conversion of former military sites for the economic development potential of a locality, the politics of military environmentalism, civil–military relations in the use of contested military spaces, and the construction and representation of military landscapes. Much of this work has been brought together in her book *Military Geographies*, published by Blackwells earlier this year.

Dr Woodward also has a long-standing interest in gender and the Armed Forces, specifically how gender identities—what it means to be male or female in cultural terms—are constructed and maintained during military training. As a geographer, she is interested in how these processes of identity construction proceed with reference to the places and spaces in which they are carried out. The British Army, for example, makes much of the need for military training to take place on cold, wet, upland areas where it has some of its largest training areas.

During her time at the Defence Studies Forum, Dr. Woodward will be particularly concerned with two topics: firstly, developing some ideas on the contemporary cultures of militarism in the UK, in collaboration with a colleague in Britain. They are interested in the form and function of military ‘artefacts’ in civilian cultural activities, particularly popular culture.

Secondly, Dr Woodward will be doing some preliminary research (using secondary sources at present) on the issues and politics surrounding military land uses in the Australian context.
Dr Woodward can be contacted via r.woodward@adfa.edu.au

The UNSW Defence Studies Forum was created in 2004 through the merger of the Graduate Program in Defence Studies with the Australian Defence Studies Centre. The UNSW Defence Studies Forum provides a new organisational focus for promoting the academic study of defence issues at the Australian Defence Force Academy and within the wider defence and public communities. Further information on the UNSW Defence Studies Forum may be found at http://www.unsw.adfa.edu.au/adsf/

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Collecting Aircrew Behavioural Data

It has been determined through many years of accident investigation that human factors contribute to between 70 and 90 per cent of all aircraft accidents and incidents. The situation is common to both civil and military operations. In recent years, aircrew safety and accident prevention programs based on attitudinal and behavioural training have been introduced. The present method of collecting aircrew behavioural data involves the use of observers on the flight deck during normal passenger revenue raising flights. In civil aviation, the information is gathered across a series of predetermined behavioural markers. Although this method has only been employed for about four years, it is already providing rich data that can be fed back into the training continuum. However, security issues have arisen concerning the use of observers in cockpits, and smaller airlines claim that the substantial cost of the data gathering and analysis process is prohibitive.

Sue Burdekin, from the School of Aerospace, Civil and Mechanical Engineering at ADFA was invited by Airbus and one of its customer airlines to conduct a preliminary investigative study into the development of an alternative means of collecting this useful behavioural information. In an earlier research study, supported by the RAAF, Sue had achieved a high degree of correlation between trained independent observers and the self-reporting of Hornet pilots in the F/A-18 simulator at Williamtown.

Airbus was interested to see whether the same significant degree of correlation could be achieved in the commercial operational environment of a civil airline. If the use of self-reports on pilot performance can be validated, it has the potential to provide a valuable and cost-effective means of assessing crew performance. This information can be used to monitor ongoing performance, and to enhance the effectiveness of training programs. It can do this by focusing training on performance areas that are identified in normal operations as being in need of improvement.

After completing training with Airbus in Toulouse, Sue has spent over 70 hours of flying on the flight deck of Airbus’ A319 aircraft. In doing so, she visited a range of short haul destinations, recording structured observations of aircrew operating within the civil system. The self-report data that the pilots submitted on their own performance will be analysed and statistically compared with Sue’s observations to determine whether this innovative pilot study should progress to a major research project.

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EISENHOWER: Allied Supreme Commander

Carlo D’Este

Reviewed by Lieutenant Colonel Derek Roylance AM (Retired)

The name of the second section of this latest biography of Dwight Eisenhower, ‘The Reluctant Soldier,’ might well have been the title of the book because the thought of becoming a soldier was not on the young Eisenhower’s horizon as he grew up.

He was one of six sons of a poor family which struggled to send one of his brothers to college and made it plain that they could not do the same for those that followed. Young Ike decided that the only way to get a free higher education was to gain admission to either the US Navy Academy at Annapolis or to its Army equivalent at West Point. This was complicated by the fact that his parents were pacifists. He persevered, gained the sponsorship of a US Senator and passed the necessary exams which would have given him entry to either establishment. The senator used his nomination to enter Eisenhower to West Point.

He emerged from West Point in the Class of 1915 but despite his efforts he did not get to see active service in World War I. His lot seemed to be as a trainer and planner and this kept him posted away from the fighting in France. Between the wars he suffered a similar fate, serving in training and or planning postings. This included a stint in the Philippines as a staff officer to General Douglas MacArthur. But the ‘meat’ in this definitive biography as Eisenhower the soldier, lies in the period between his taking over Supreme Command of the Allied Invasion of North Africa—on to Sicily and Italy and further, to the pinnacle of his military career, as Supreme Commander of the Allied invasion of Europe in 1944 and the campaign that led to the end of the war in Europe. Through all this it seemed that Eisenhower was in a position in which he pleased no-one. His American commanders thought he was too easy on the British and the British who had much more experience thought, because he had never commanded troops in action, he was just not up to it.

The key to the differences lay in the two countries’ approach to war. Whereas the Americans strongly believed in the smash or smash through approach, the British, mindful of the terrible casualties endured 30 years earlier between 1914–18, were content to adopt what could be termed a more stealthy approach. It was a volatile mix with Ike in the middle. However he was appointed mainly because he was seen as a man who was a diplomat and had the qualities to smooth over the king-sized egos of top military men, from different nations, with different histories and attitudes, fighting a common enemy. It should be said that his ability to do this was Eisenhower’s strongest point. His legendary battles with Britain’s Montgomery have been well chronicled and are dealt with again in this book.
It appears to the reader, some 60 years later, that Eisenhower’s main sin was that he protected some ‘marginally competent’ American commanders. He certainly put up with the tantrums of his friend George Patton, more than a stronger commander would have and he was also guilty of protecting his West Point classmate, Omar Bradley for some noteworthy lapses of command.

For Australians all these years later, it is interesting in seeing how an early joint command worked. It was the forerunner of what today is commonplace where more than one nation and certainly more than one fighting Service is involved.

**MONASH: The Outsider Who Won a War**

Roland Perry

Reviewed by Roger Marchant

This is popular history, not to be compared with Geoffrey Serle’s 1982 *John Monash*, but a rattling good read nevertheless. The sub-title becomes meaningful well before the last line of the book proper. Monash fought two wars, one in the field against opposing armies and the other, as noted by Basil Liddell-Hart, a continuous battle against four huge handicaps: birth in a far-flung colony, race (Jewish), background (German descent) and the fact he was from the militia, not the regular army. His achievements leave no doubt he emerged triumphant.

This is not hagiography. Monash was no saint, although the reader does get the impression that Perry, and probably the whole of Australia in 1918, would rather have had it otherwise. The general’s successes are justly proclaimed whereas his shortcomings (perhaps the greatest being his unfaithfulness to his wife, although even that might have been *a la mode*) are not accentuated. He was a soldier’s soldier, thinking always of his men’s well being. It is debatable, though, whether this characteristic was altruism or pragmatism—the desire to keep the maximum number of troops available for the next battle. Perhaps it was a mixture of both.

The book takes us efficiently through Monash’s whole life and because his wartime exploits are so well known to those who are interested, it is his pre-WWI achievements as an engineer, advocate and entrepreneur, then his postwar work with the Victorian Electricity Commission that fascinate. For example, Yallourn in Victoria owes its existence to John Monash.

Military readers may be confused or annoyed throughout the book at the apparent interchangeability of the terms ‘strategy’ and ‘tactics’. Given that one of many definitions is that strategy is usually regarded as the prelude to the battlefield and tactics the action on the battlefield itself, Monash could qualify as a practitioner of both. But he was, after all, only a corps commander, needing to ask his boss for things as minor as three days’ leave (he was refused). This reviewer prefers to view him as a master of the art of tactics and allow WWI strategy to be mismanaged by other famous names.
Pedants may well query the assertion that 170,000 Diggers got back home (331,000 minus 60,000 killed looks more like 270,000 returned men). The Light Horse, rather than ‘would act as infantry’ surely were infantry who merely rode to war. Monash would not have presented King George V to the owner of the chateau on a royal visit; protocol dictates the opposite. The visit was to knight Monash in the field, at which ceremony the book alleges the new KCB started to rise from bowed knee before the King had touched his second shoulder with the royal sword. Surely the general, so keen to observe the minutiae of all endeavours, knew the drill. Immediately after the war Monash was lionised in Australia and after his wife died in 1920 he became the target of many would-be partners (as we would now say).

There are plenty of cheap shots too; some of which take the reader right out of the contemporary context of the story. A few examples are: (regarding the young John Monash’s problems with Latin but the need for him to pass the exam, however unwillingly) ‘at some point he couldn’t decline his declensions’. There is Hitler painting ‘third rate watercolours’ (of course redundant, everyone knows AH was no Joseph Turner). Kitchener is described as ‘ingenuous’. Well, maybe, maybe not. NZ Brigadier General Johnston ‘drunk’ on the morning of the battle of Sari Bair then ‘dithering’. Rosenthal at St Quentin being given ‘mission impossible’. Towards the end of the book, the assertion that an important part of Monash’s attraction to Lizette Bentwich, his longest and truest love, was her social acceptability, because ‘a scrubber wouldn’t do for dinners at Government House’.

The writer is a bit hard on British soldiers in France. By the time Monash was in the field they were acknowledged second-raters, many the product of an upbringing in disgraceful conditions amongst dark satanic mills. The BEF had been destroyed long before. Nor will Perry win too many American friends with his rather off-hand dismissal of the doughboys in France.

Perhaps the saddest thing about Monash as a whole man was his inability to come to terms with his relationship with Lizette. With the support he undeniably enjoyed from George V there is every chance he would have made Governor-General if only he could have changed his status from widower to newly-wed. The book merely observes that ‘(H)is family, led by Bertha, would not let him take that step’. There must surely have been something else preventing the battle-hardened conqueror of Ludendorff from marrying his paramour.

John Monash as a military leader stands by his record on the field of battle. But there are other things, too. One is the relationship he had with his men. The book records that on Anzac Day 1924 he attended a reception in his honour given by the RSL. ‘A complete microcosm of Australia was present in the packed hall’ and the general received prolonged and heartfelt applause. Rather as 25 years later, ‘Butcher’ Harris asked at a similar gathering of his ‘old lags’ from Bomber Command whether they would go back over Berlin for him. Every man present, albeit probably tired and emotional, put up his hand.

What this book does show is that successful general officers may not want to sacrifice their men in conflict or forego the culmination of a dearest personal relationship, but when the need arises they are perfectly capable of hardening their hearts to do just that.
DESSERT SANDS, JUNGLE LANDS: A Biography of Major General Ken Eather

Steve Eather

Reviewed by Colonel R. J. Breen

After the metaphorical bugle sounded in 1939, Ken Eather, a dental mechanic and militia officer, began a six-year journey from Australia to the desert sands of the Middle East and then back to Australia, and onto the jungle lands of the South West Pacific. He was promoted from Lieutenant Colonel to Major General along the way. With access to General Eather’s wartime diary and letters, as well as family members and friends, Steve Eather, a distant relative, provides unique insight into Ken Eather’s military service as well as his formative years and postwar private life and professional career.

Ken Eather had over seven years in command of an Infantry battalion before raising and taking 2/1st Battalion, Australian Imperial Force (AIF), to the Middle East in 1940. Promoted two ranks in just under a year, he took 25th Brigade to Papua New Guinea to lead a counter attack against Japanese forces on the Kokoda Track. Brigadier Eather’s campaign began with a tactical withdrawal that triggered controversial events. Senior officers above him were sacked for endorsing his decision and subsequently, in the opinion of Australian and American strategic commanders, not engaging the Japanese with sufficient vigour. Nonetheless, Eather’s decision to begin his campaign with a tactical withdrawal was vindicated. The Japanese forces, whose supply lines were over-extended, withdrew in front of him. He had won the initiative without a fight and went after them ready for a fight.

By the time Ken Eather led the 25th Brigade against the Japanese on the Kokoda Track he was a competent, capable and decisive tactical commander who had the respect of his troops. Unfortunately, Australian battle operating systems were less practiced and less capable. Unlike Eather who had honed his tactical skills for 18 months in the Middle East, the AIF remained dependent on British, and subsequently American, command, control and logistics systems. Through Ken Eather’s story, Steve Eather reveals Australia’s lack of capacity to project military force into the near region in 1942. The 25th Brigade’s 85 day counter-offensive along the Kokoda Track exposed an inefficient Australian logistics system. Despite the heroic and innovative work of members of the Australian Army’s Air Maintenance Company, who virtually invented aerial resupply with their famous ‘biscuit bombers’, systemic problems in Australian military logistics possibly indirectly killed and left more Australians incapacitated than did their Japanese opponents.

Eather and his men slogged after their withdrawing opponents in appalling conditions. Several savage close-quarter battles followed. Beating the Japanese in the Oivi–Goriari area is rated by one historian (Bergerund) as having a similar demoralising effect on Japanese land forces as the Battle of Midway had on Japanese maritime forces. Unfortunately, the 25th Brigade’s thrust to push their opponents back into the sea did not end in triumph. The
culminating battle of the campaign was to capture one of the last Japanese strongholds at Gona on the northern coast of Papua New Guinea. The Japanese, with their backs to the sea, received substantial reinforcement. Eather was not told, was not reinforced and was not resupplied. He and about 1,000 exhausted men (all that were left from the more than 2,000 he had begun with) were destined to fight and fail at Gona without firepower and supplies while their strategic masters disparaged their efforts behind their backs.

Despite this carping, Eather was not relieved of command, like some of those above him. He left for Australia with only 400 men remaining from his original brigade and returned after a period of leave and retraining with a reinvigorated, full strength 25th Brigade to participate in the final pursuit and defeat of the Japanese in New Guinea and subsequent operations further north. He completed his war service as a Major General, supervising the repatriation of Australian and Japanese troops from New Britain after the Japanese surrender in August 1945.

One of the ironies of Ken Eather’s postwar story was that General Douglas MacArthur, one of Eather’s strategic critics, bestowed on him the US Distinguished Service Cross. According to the author, this was ‘the very highest medal available for non-American personnel’. Unfortunately, the Australian nation did not express its gratitude with a knighthood or an Order of Australia despite Eather’s distinguished war record and many years subsequent service with the Water Research Foundation of Australia.

Steve Eather does a great service to the late Ken Eather and his family, as well as to the Australian nation by telling the story of an Australian patriot whose military service was characterised by a no-nonsense commitment to getting the job done, especially during the crucial Kokoda Track campaign. Ken Eather was an infantryman’s infantryman. He didn’t seek recognition and he did not suffer self-seekers gladly either. Men like Ken Eather saved Australia, rather than saving or embellishing their careers.

ATTACK AIRCRAFT AND BOMBERS OF THE WORLD

Anil Pustam

Reviewed by Air Commodore Mark Lax

This hardcover offering from Greenhill Books is intended as a handy reference guide to the main attack and bomber aircraft in service around the world. It is up to date (mid 2004) and a brief introduction by the author describes and clarifies the categorisation of attack and bomber aircraft. The book includes several ‘multi-role’ aircraft such as the Su-30 Flanker which might otherwise be categorised as fighters. Australia’s F-111s make the grade of course as do unusual inclusions such as the AC-130 Spectre gunship and the Serbian UTVA Orao. However, from an Australian perspective, missing are the F/A-18 and the BAe Hawk.

Aircraft fitting the title’s category are listed in alphabetical order by manufacturer’s name and designation. Each of the 43 types covered is described with history and operators. Each is illustrated with black and white photographs as well as a one or two page description. Operational specifications are included. The book ends with a two-page glossary to complete the 128 pages. Recommended for reference libraries.
The New Centre for Military and Veterans’ Health —an innovative approach to ADF health issues

Earlier this year, collaboration between the Departments of Defence and Veterans’ Affairs (DVA) saw the establishment of the Centre for Military and Veterans’ Health (CMVH). This new unit (officially opened on 6 April 2004) is supported by a service provision contract through a University of Queensland led consortium including the University of Adelaide and the Menzies School of Health Research (Darwin).

The CMVH aims to unite the health expertise within the academic, Defence and DVA communities. The intention is to enable these organisations to focus on the health issues pertinent to serving and ex-serving personnel by aligning academic programs with research initiatives. A major factor behind Defence’s involvement was its requirement for an academic focus to develop and maintain professional health-related skills, and as a means to both recruit and retain health staff in an increasingly competitive global health services market.

The CMVH has established the Deployed Health Studies Unit (DHSU) which represents the first tangible realisation of the academic/research alignment, providing the vehicle for researching the impact of deployments on ADF personnel. Also, the Centre has commenced addressing the academic component of DHSB personnel development through the introduction of a Master of Public Health (Defence) program for those staff providing health services to Defence and DVA. This academic program, designed by Defence and DVA personnel in collaboration with the University of Queensland, is designed to align ADF requirements and proposed career structures in an effort to increase recruitment and retention of health staffs.

In a recent media release, the Professional Development Officer of the CMVH, Lieutenant Commander Nigel Carlton, described the Master of Public Health (Defence) program in the following terms:

The program is based on the University of Queensland’s highly regarded Master of Public Health program and is informed by the collective knowledge and experience of the Defence and veterans’ community. Keeping the students’ interests at heart, the focus is on the training needs of these personnel. It was specifically designed to act in tandem with Defence career development and education funding systems, as well as taking into account the mobility of staff. Graduates will gain the scholastic, professional and management attributes to enable them to approach health issues from a population health perspective. Often, personnel are sent into a location where they need high-level management skills and knowledge to evaluate complex health environments and develop effective health care programs. The MPH (Defence) is designed to equip students with the skills to efficiently manage this environment.

The core of the MPH (Defence) program provides a platform of research, management and environmental and occupational health with a broad selection of electives building to specific streams. The program is designed to provide development opportunities for a range
of medical and allied health personnel, including medical professionals, scientific officers and laboratory assistants, environment health officers, preventative medicine personnel, health administration officers, medical assistants and other personnel with a public health interest.

The program is offered at the Masters, Graduate Diploma and Graduate Certificate levels, delivered externally, part-time or full-time. A Bachelor degree is required for entry to the Masters program. However, the university can offer entry to the Masters program via the Graduate Certificate program, for personnel without a degree, but with appropriate professional experience.

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NOTICE TO CONTRIBUTORS

Within its pages the Journal seeks to encourage discussion and debate across a range of Defence related topics and issues through stimulating and engaging articles for those with an interest in defence and security matters. The Journal has a diverse readership. The ADFJ does not seek to promote and/or comment on Defence policy.

The ADFJ is a refereed publication. It is published three times a year in March, July, and November. The format of the Journal can accommodate short and long articles. As a general rule, however, articles over 5,000 words will not normally be accepted.

Contributors are solely responsible for matters of fact and argument. They should take care to ensure that their work is balanced and supported by referenced argument. The Journal has a preference for articles that are accessible. Graphics, tables and diagrams should be kept to a minimum and will only be included if they directly support the argument made in the text. Contributors should arrange their submissions to include a clear introduction and conclusion. Subheadings are acceptable but should only be used to increase efficiency of argument and to assist the reader.

Although the ADFJ does not have a stipulated referencing system, contributors should conform to a consistent format that enables readers to check the veracity of their work. The use of op. cit. and loc. cit. should be eschewed in favour of an abbreviated title of the work being cited. Endnotes and a bibliography, as well as a brief biographical note, are required when submitting articles.

The production team welcomes discussion with potential contributors and from its readership alike on developing themes for future editions.